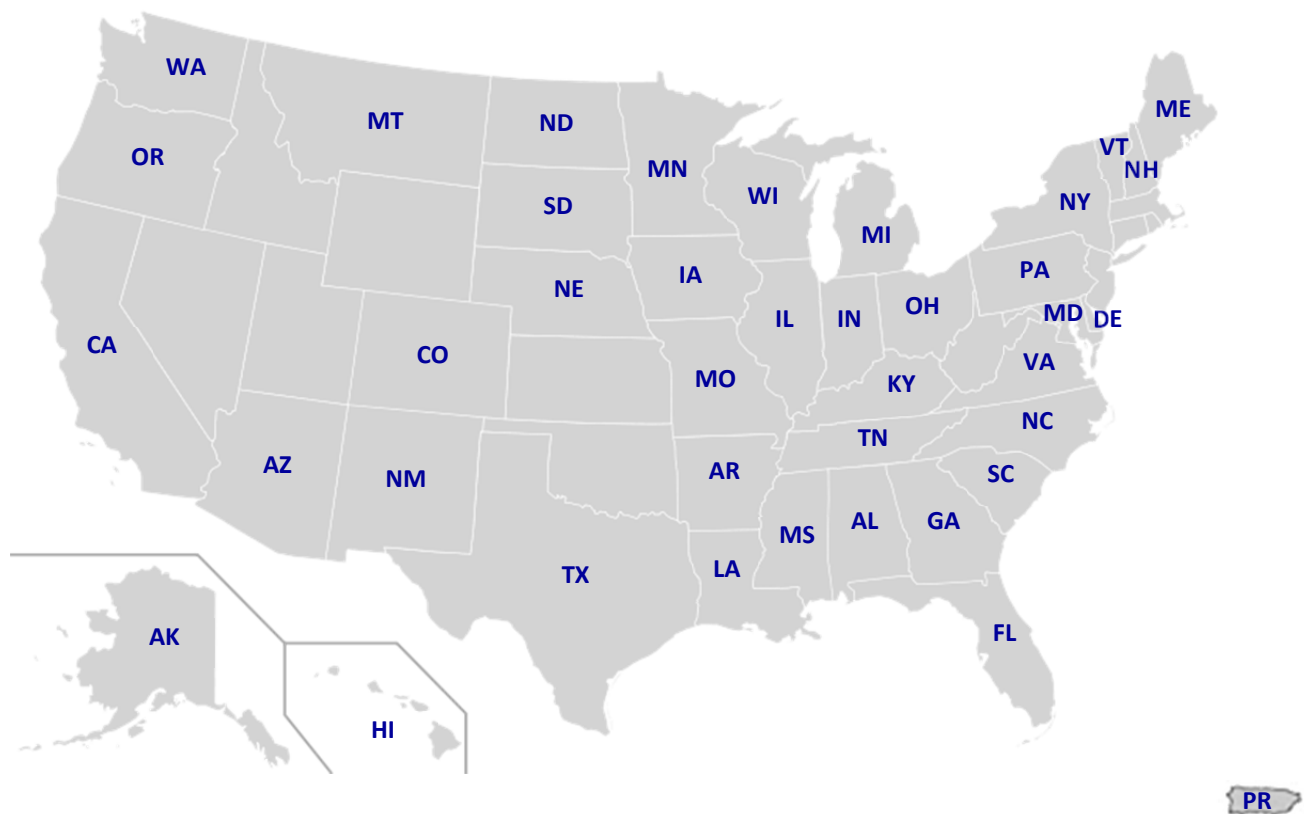


Source Book

Rural Health Care Services Outreach Grant Program 2009 - 2012





U.S. Department of Health and Human Services
Health Resources and Services Administration



Source Book

2009 Rural Health Care Services Outreach Grant Recipients

The Rural Health Care Services Outreach Program is authorized by Section 330A of the Public Health Service Act (42 U.S.C. 254c), as amended. The program supports projects that demonstrate creative or effective models of outreach and service delivery in rural communities. Funding can be used to meet a broad range of health care needs from health promotion and disease prevention to expanding oral and mental health services to case management for rural HIV patients. These projects address the needs of a wide range of population groups including, but not limited to, low-income populations, the elderly, pregnant women, infants, adolescents, rural minority populations and rural populations with special health care needs. The community being served must be involved in the development and ongoing operations of the program, to appropriately address the needs of the population. All projects are responsive to any unique cultural, social, religious and linguistic needs of the target population.

The emphasis of this grant program is on service delivery through collaboration, adoption of an evidence-based or promising practice model, demonstration of health outcomes, ability to be replicated, and sustainability. Proposed projects have an outcomes-oriented approach that will enhance and sustain the delivery of effective health care in rural communities by tracking specific health indicators that will demonstrate the impact of their project at the end of their grant period. Projects are based on evidence-based or promising practice models and demonstrate health status improvement in rural communities. Outreach projects can take the framework of an evidence-based or promising practice model and tailor it to their community's need and organization.

This Source Book provides a description of the 110 initiatives funded under the Rural Health Care Services Grant Program in the 2009 - 2012 funding cycle. The following information for each grantee is included: Organizational Information, Consortium Partners, Community Characteristics, Program Services, Outcomes, Challenges & Innovative Solutions, Sustainability, and Implications for other Communities.

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ALABAMA

Sylacauga Alliance for Family Enhancement, Inc.

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12673 |
| Grantee Organization | Sylacauga Alliance for Family Enhancement, Inc. |
| Organization Type | Non-profit organization |
| Address | 78 Betsy Ross Lane, Sylacauga, AL 35150 |
| Grantee organization website | safefamilyservicescenter.com |
| Primary Contact Information | Margaret Morton Executive Director Phone number: 256-245-4343 Fax number: 256-245-3675 mortonm@safesylacauga.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|--------------------|----------------------------|
| Alabama Dept. of Mental Health - Consultant | Sylacauga, AL | Social Services |
| Alabama Dept. of Public Health | Sylacauga, AL | Health Department |
| Baptist Citizens Medical Center BOD – Hugo Molliston | Lincoln, AL | Community Activist |
| Chamber of Commerce - Childersburg | Childersburg, AL | Chamber of Commerce |
| Chamber of Commerce - Sylacauga | Sylacauga, AL | Chamber of Commerce |
| Chamber of Commerce - Talladega | Talladega, AL | Chamber of Commerce |
| Chandler Network & Computer | Sylacauga, AL | Business |
| Cheaha Mental Health | Sylacauga, AL | Health Department |
| Childersburg Primary Care | Childersburg, AL | Physician's Office |
| Christ Point Community Church | Sylacauga, AL | Church |
| Community Volunteer - Mickey Orton | Sylacauga, AL | Community Activist |
| Coosa Valley Medical Center | Sylacauga, AL | Hospital |
| Dale Price | Sylacauga, AL | Attorney |
| East Alabama Congregational Health | Talladega, AL | Faith-based Organization |
| First Family Services Center | Talladega, AL | Social Services |
| Ida V. Moffett School of Nursing | Birmingham, AL | University |
| Joby O'Brien | Sylacauga | Dentist |
| Kiwanis | Sylacauga, AL | Service |
| Partners by Design | Sylacauga, AL | Business |
| Rockford Family Medicine | Rockford, AL | Medical |
| SAFE Family Services Center | Sylacauga, AL | Social Services |
| Schools - Sylacauga City | Sylacauga, AL | School |
| Schools - Talladega City | Physician's Office | Public Schools |
| Schools - Talladega County | Talladega, AL | Public School |
| State Farm Insurance | Sylacauga, AL | Business |

| Partner Organization | Location | Organizational Type |
|---|---------------|---------------------|
| Sylacauga Grows Community Gardens | Sylacauga, AL | Service |
| Sylacauga Pediatrics | Sylacauga, AL | Physician's Office |
| Sylacauga Police Department | Sylacauga, AL | Public Service |
| Talladega City Health Department | Talladega, AL | Social Services |
| Talladega County Dept. of Human Resources | Talladega, AL | Social Services |
| Talladega County District Court | Sylacauga, AL | Justice |
| Talladega County Extension Office | Talladega, AL | Government |
| The Institute for America's Health | Pelham, AL | Education |
| The Local Issue | Sylacauga, AL | Business |

Community Characteristics

Area:

The Outreach grant supports Talladega County in east-central Alabama.

Community description:

Poverty is the defining feature in Talladega County, Alabama with 18.7% of the population living below the poverty level. This rural county of 80,291 residents reports that 32.8% of the adult population is obese in a state (33.3%) that sadly ranks 2nd in the nation for adult obesity and 6th in the nation for childhood obesity. A random sampling of our county's second graders showed a 33% overweight/obesity rate. Talladega County reports a diabetes rate of 12.8% as compared to the state rate of 12.47%, placing the state 4th in the nation for percent of adults with diabetes. Talladega County reports an annual death rate from heart disease of 300.6/100,000 as compared to 235.10 for Alabama and 190.88 for the US. As in many rural communities, healthy foods are scarce as is access to full-service grocery stores and recreational facilities. Fast food restaurants are flourishing even in an economy that reports an 8.4% unemployment rate. Healthcare resources are limited as indicated by the fact that Talladega County is designated both HPSA and MUC/MUP. Talladega County reports that 29% of its adult population functions at level one literacy. These statistics confirm the seriousness of the challenges facing Talladega County leaving prevention and intervention responsibilities to community supporters.

Need:

Alabama ranks 2nd in the nation for obesity with a rate of 33.3%, while Talladega County residents are not far behind with a rate of 32.8%. (Robert Wood Johnson Foundation & Trust for America's Health, August, 2010) According to the Alabama Department of Public Health (ADPH) the proportion of Alabama citizens who are overweight or obese has increased to 29% of adults being obese and 36% are overweight, or 65% of adults in Alabama are overweight or obese. Physical activity is closely aligned with weight control and general good health. The BRFSS 2007 data indicated that Talladega County adults do not engage in adequate physical activity. Estimates of the three levels of moderate physical activity indicated that only 33% of adults meet the recommendation for physical activity. A total of 67% of adults do not meet the recommended level of moderate physical activity. Of these, 42.5% have insufficient activity to meet the moderate physical activity recommendations and 24.5% have no moderate physical activity at all. According to *Healthy Alabama* the statewide percent of adults who engage in regular physical activity was only 17%. According to the Alabama Department of Public Health, 68% of middle and high school students do not attend physical education classes on a daily basis. For example, the PRIDE Survey data for 2008 reports that 41.8% of eighth graders in Talladega County at the B.B. Comer School have never participated in team sports as compared to the state rate of 29.7%. Approximately 45.1% do not attend daily physical education classes and 68.2% do not meet current physical activity recommendations. Talladega County ranks 52nd of 67 counties for child well-being in a state that ranks 47th out of 50 (VOICES for Alabama's Children, *Kids County Data Book*, 2009).

Talladega County reports a diabetes rate of 12.8% as compared to the state rate of 12.47%, placing Alabama 4th in the nation for percent of adults with diabetes. Recently, the Alabama Cooperative Extension System conducted a study through a partnership with Alabama A&M University and Auburn University with findings that support the claim that Alabama leads the nation in diabetes with more than 440,000 citizens diagnosed with the disease. These numbers place Alabama 30% above the national average. The BRFSS 2004 reports an 8.1% prevalence rate for diabetes while Talladega County reports a 12.4% rate.

Focus Areas

Access: Primary Care
 Access: Specialty Care
 Children's Health
 Chronic Disease Management: Cardiovascular
 Chronic Disease Management: Diabetes
 Community Health Workers/Promotoras
 Coordination of Care Services
 Health Education and Promotion
 Health Information Technology
 Health Professions Recruitment and Retention/Workforce Development
 Integrated Systems of Care
 Pharmacy Assistance
 Physical Fitness and Nutrition
 School Health

Target Population

School aged children - elementary
 Adults
 Elderly
 Caucasians
 African Americans
 Latinos
 Uninsured
 Underinsured

Description:

In the first year of program implementation, the DOTCOM coalition expanded its membership to include the Alabama Department of Education, the three school districts in Talladega County (Sylacauga City Schools, Talladega City Schools and Talladega County Schools), the three Chambers of Commerce in the county (Sylacauga, Talladega and Childersburg), the Wellness, Academics & You through the Institute for America's Health, the *Prevention Partners* county-wide coalition, Sylacauga Pediatrics, Coosa Valley Senior Behavioral Program, and Partners By Design (marketing firm). The coalition met bi-monthly and established working committees to address identified needs and to develop research-based responses and strategies to address those needs.

Targeting second graders in five targeted schools across the county in each of the three school districts, the WAY (*Wellness, Academics & You*), research-based strategies for improving health outcomes, was implemented. Faculty and staff were trained at each of the targeted schools to implement the curriculum. In addition, school gardens were created through the Sylacauga GROWS Community Garden project to support healthy nutrition, gardening, farming and specialty crop cultivation.

Based upon the results of a Focus Group process conducted by Beverly Tyler, Georgia Health Policy Center, the DOTCOM coalition developed and implemented a *Get Healthy Talladega County- Body, Mind and Spirit* campaign. 2,500 participated in the kick-off in April, 2011. Three other events have been held in the county that included the promotion of *Get Healthy Talladega County- Body, Mind and Spirit*. Our website, www.gethealthytalladegacounty.org is a resource center of information and links to help Talladega Countians lead a healthier lifestyle.

Through our Family Health Advocacy program, DOTCOM has provided disease management to adults of the target population with obesity and related chronic diseases of diabetes, cardiovascular disease and hypertension. Paraprofessionals, Family Health Advocates, have provided education and access to resources to increase self -efficacy and self -management behaviors toward health, to provide access to regular physical fitness resources, to increase access to pharmaceuticals, to increase access to other necessary social and health services, to monitor compliance with medical regimes, to establish medical homes for participants and to increase coordination of care.

DOTOM linked community resources (medical, social and education) to assess existing resources available to the pediatric population diagnosed or at-risk for diabetes and/or obesity and has began the process of developing a county-wide referral process to assure access to disease management and related supportive services for identified families and children.

Role of Consortium Partners:

The DOTCOM Consortium membership is representative of virtually every stakeholder and/or provider from across the county and region with a shared vested interest in the health and social service challenges facing residents of Talladega County. The consortium members who represent these organizations and stakeholders themselves are at the highest level of decision making. Additional membership represent the consumer and direct service provider. This level of membership is the foundation for the strategic planning, decision making and service delivery that DOTCOM is charged to accomplish through its shared mission and goals. DOTCOM's capacity to transform the community by addressing social and environmental challenges is critical. DOTCOM partners have developed

the skills, instincts, abilities, processes and resources that are needed to create systemic change that is sustainable. This capacity and strength relates to every aspect of DOTCOM's work: governance; leadership; mission and strategy; administration (including human resources, financial management and legal matters), program development and implementation, which is a focus in this application; income generation, diversity; partnerships and collaboration; evaluation; advocacy and policy change; marketing; positioning; planning; etc. These aspects of growth and strength have created a sustained vision of a *Healthy Talladega County*. **Coosa Valley Medical Center/Baptist Citizens Medical Center** provides medical and surgical inpatient and outpatient care; **Talladega County Department of Public Health** provides professional services for the improvement and protection of the public's health through disease prevention and the assurance of public health services to residents and transient populations regardless of social circumstances or the ability to pay; **Cheaha Regional Mental Health Center** provides mental health outpatient care and inpatient drug/alcohol treatment, counseling and psychiatric as well as prevention and intervention mental health and mental retardation services; **SAFE**, the grantee organization, and **FIRST Family Services Center** are full service family resource centers providing a comprehensive array of community-based services to strengthen and support families; **Community Action Agency** assists low income residents in gaining access to fiscal resources and training for self-sufficiency; **Partners by Design** delivers publishing, marketing and web-based products; **Sylacauga City, Talladega County and Talladega City School Districts** provide K-12 educational opportunities for youth and families; **Talladega County Extension** offers technical assistance and resource development along with training through clinical and environmental programming; **Sylacauga Pediatrics** provides primary care to the pediatric population; and **Childersburg Primary Care** offers primary care physician and medical care to residents of Talladega County. The Consortium operates through committee assignments and work groups. Decision making occurs at bi-monthly meetings.

Outcomes

The outcome indicators for our goal to increase the quality and years of life for un-insured participants with chronic disease are:

- 109 unduplicated participants received social and health services
- 85% of participating adults improved their quality of life as demonstrated by pre and post testing
- 74% of participating adults achieved one or more of their goals within nine months of their participation
- \$934,160.06 worth of prescription medications was provided to residents of Talladega County

The outcome indicators for our goal to expand share, and link wellness strategies in targeted schools and afterschool programs to decrease the incidence and prevalence of diabetes, hypertension, and obesity for participating youth are:

120 faculty and staff were trained in the WAY (Wellness Academics and You) curriculum.

- 1,895 students participated in the implementation of the WAY curriculum.
- 87% of students who participated in the WAY curriculum implementation demonstrated knowledge gained and positive behavioral changes as indicated by pre-post testing.
- 165 youth participated in the First Annual Walk/Run sponsored by Sylacauga Pediatrics.
- 43 students participated in an after-hours health and wellness program sponsored by Sylacauga Pediatrics.
- 450 students in grades 2-8 have participated in the BRIDGES after-school programs serving five schools in two school districts in Talladega County.
- 94% of participating students demonstrated an increase in positive life and resiliency skills and pro-social behaviors.
- 1,701 students participated in the school garden experiential learning activities at the five pilot school sites.

Since 2009, the DOTCOM coalition has expanded its membership to include the three Chambers of Commerce and three school districts in the county, the Alabama Department of Education, the Institute for America's Health and the marketing firm, Partners by Design.

On average, the Sylacauga Alliance for Family Enhancement, Inc. has provided over 21,750 services to support a healthy Talladega County with a service value of \$2,427,010. Those services were provided through the expenditure of \$1,511,778 – a return on investment of \$915,232 just in the value of services provided. Additional outcomes are:

- From 2009-2011, the University of Alabama at Birmingham conducted a study to determine how changes within and across levels of influence may improve health literacy and effective self-management of multiple prescription medications in older adults. The study utilized senior adults being served through SAFE SeniorRx and Wellness and Rural Healthcare Family Health Advocates. Findings supported the effectiveness of community-based interventions to improve health literacy for the elderly as it relates to self-administration of daily prescribed medications. Over a period of two years, not a single participant in the study who had received support and education through the programs at SAFE experienced an adverse drug event that led to admittance to the ED or the hospital. This study has been utilized across the state to articulate the importance of prevention and the cost savings to

health care of community-based outpatient care. These findings have the potential to inform policy and create funding priorities to support.

- For 2009-2012, 81% of families/individuals receiving core services at SAFE reported improvements in goal ratings of one or more levels.
- For 2009-2012, 95% of respondents to the SAFE Consumer Satisfaction Survey administered semi-annually reported that they were treated with respect and were satisfied with the services provided through SAFE.
- The Sylacauga GROWS community garden was created based on an identified need within the community for affordable, healthy food sources. Since 2009, 5,291.05 lbs. of vegetables and fruits have been harvested from the production garden, with 3,454.06 lbs. of vegetables and fruits distributed to needy families at no cost to that family.
- The DOTCOM coalition developed and implemented a *Get Healthy Talladega County- Body, Mind and Spirit* campaign. 2,500 participated in the kick-off in April, 2011. Three other events have been held in the county that included the promotion of *Get Healthy Talladega County- Body, Mind and Spirit*. Our website, www.gethealthyalladegacounty.org is a resource center of information and links to help Talladega Countians lead a healthier lifestyle. The messaging for this initiative includes areas of focus such as "get moving", "get inspired", "get growing", "get sharp", "get lean", and "get out". Since 2011, 500 visits and 1,047 page views have been recorded on this website.
- Since 2009, 5,500 meals have been served to needy families throughout Talladega County at the Annual Community-wide Thanksgiving Dinner. These meals are free and either served on-site or delivered to homes of needy families across the county. Over 200 volunteers give of their time to make this project possible.
- Since 2009, 1,751 children have received book bags filled with school supplies donated from the community.

Challenges & Innovative Solutions

The greatest challenge faced during the grant period was related to staff turnover. One of the Family Health Advocates experienced serious health issues that resulted in extended leave and eventual separation. The Special Services Coordinator's position has been vacated twice over the course of the three year grant cycle. These challenges were addressed through shared job responsibilities and cross training of existing staff to temporarily assume additional job responsibilities.

An additional challenge relates to insufficient resources to address the unique needs of the pediatric population diagnosed with diabetes and/or obesity. Specialty care is not available in the county and patients are required to travel fifty miles to Birmingham for initial services. In order to address this challenge, an AdHoc Committee was established by the DOTCOM coalition to develop a referral process and recruit resources to the community to address these challenges. Progress has been made to develop a referral process through a tiered approach to services provision at every level of support from critical care to education. Training for Family Health Advocates in dealing with this population is a priority.

Sustainability

On-going Services and Activities:

The *Get Healthy Talladega County – Body, Mind and Spirit* campaign will be sustained beyond the grant period along with the following strategies/activities:

- Provide disease management to individuals with obesity and related chronic diseases of diabetes, cardiovascular disease and hypertension through the Family Health Advocate program utilizing a "Transitions in Care Model".
- Continue the development of a referral process model for the pediatric population at-risk for diabetes and obesity.
- Increase access to pharmaceuticals through the SeniorRx program.
- Continue implementation of the school-based wellness and school gardens programs. (WAY curriculum)
- Continue implementation of the Sylacauga GROWS community garden program.
- Continue implementation of the BRIDGES afterschool programs to promote wellness.
- Continue the promotion of *Get Healthy Talladega County – Body, Mind and Spirit*.

The DOTCOM consortium's approach to the issues of sustainability center on its ability to expand, share, and link resources across a broader geographic area and to leverage support from communities that are building their consortiums and service integration systems. A Return on Investment Study has been conducted and the results are being utilized to communicate the impact of the strategies and activities being implemented through this project. The intent of the DOTCOM consortium through its community, state and federal partnerships such as SAFE, FIRST and the Alabama Network of Family Resource Centers is to link users/providers across not only Talladega County but the entire state of Alabama to bridge the gaps, assure non-duplication and coordination of services and to

eliminate access barriers. The effectiveness of these partnerships will reduce costs and result in real financial savings, savings that can be utilized to assure sustainability while leveraging more comprehensive resources for project support.

A partnership with the Alabama Department of Education, the three county school districts, local pediatrician's offices, and the Institute of America's Health pilot initiative titled Wellness, Academics and You (WAY) has resulted in professional development training and standards based program to help teachers in our county incorporate nutrition education and physical activity into everyday classroom activities. Teachers and volunteers are being trained with the WAY curriculum.

School gardens are being developed at each of the five pilot school sites. Organic gardening and farming, nutrition and healthy eating concepts will be taught through the gardens.

Get Moving, a fitness and wellness exercise program for the pediatric population is being implemented through Sylacauga Pediatrics. Plans to expand this activity will be developed.

Get Healthy Talladega County – Body, Mind and Spirit was launched across the county in 2011. A marketing plan has been developed through the coalition and is being implemented with emphasis upon making healthy life choices. Through a partnership with *Partners By Design*, a marketing firm that is providing pro bono assistance to launch and sustain the initiative, a comprehensive marketing plan has been developed to include a website and social marketing techniques giving a brand to the county-wide initiative.

Sylacauga, including the surrounding communities, was named a five time designee by the America's Promise Alliance as one of the 100 Best Communities in the Nation for Young People. This award sends a message of a community and county working together to access resources and improves the quality of life for its residents. It supports the goals and objectives of *Get Healthy Talladega County – Body, Mind and Spirit*.

Sustained Impact:

The most significant long-term impact is the community's ability to work together to identify and develop solutions for identified challenges that are evidenced-based, accountable and sustainable as well as resulting increased coordination of care and service delivery. The DOTCOM coalition and the Sylacauga Alliance for Family Enhancement, Inc. are producing outcomes that have impacted virtually every segment of the county and the message that an integrated, balanced approach to problem solving is the most economically effective and efficient way to assure that we have livable and sustainable communities. This in turn leverages the resources needed to sustain successful models with increased capacity, innovative practices based on research findings and policy changes at the county and state level. Our voice is being heard because we have the documented outcomes to justify these innovative approaches and the results are being utilized to articulate the importance of community-based healthcare and education. These messages have the potential to inform policy at the state and federal level and conversations are underway at the present time that could have lasting impact in service delivery models. Recently, we have been invited to serve on a regional coalition to address similar challenges across the region of nine east Alabama counties. Over the course of the next two years, CLEAR Plan 2030 will be developed to created livable and sustainable communities. Our history of success in Talladega County has leveraged a voice at the table in the development of a regional approach to problem solving.

Implications for Other Communities

We have been providing technical assistance and support to other communities who are interested in implementing similar programs utilizing our experience and outcomes. Most recently, we have created a training manual for health and human services that serves as a road map for communities interested in integrated services. In addition, SAFE is a member of the Alabama Network of Family Resource Centers and strategies have been developed to promote, educate and expand this model. Standards of program operation and service delivery have been enacted into Alabama Code and also serve as a road map to implementation. Most recently discussions have begun related to utilizing this model at the state level and to define and articulate policy that promotes collaboration, partnership and integrated service delivery at the community level. We have the tools developed to assist in that process.

ALABAMA

Troy University

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12670 |
| Grantee Organization | Troy University |
| Organization Type | School |
| Address | 400 Pell Avenue Troy, AL 36089 |
| Grantee organization website | N/A |
| Primary Contact Information | Dr. Bernita Hamilton Director, School of Nursing Phone number: 334-570-3745 Fax number: 334-670-3744 bernitah@troy.edu |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-----------------------|----------------------------|-------------------------|
| Bullock County BOE | Union Springs, Bullock, AL | School |
| Cooperative Extension | Union Springs, Bullock, AL | Outreach Program |
| Southern Springs | Union Springs, Bullock, AL | Nursing Home |
| Child Policy Council | Union Springs, Bullock, AL | Non-profit organization |

Community Characteristics

Area:

The coverage area for the Outreach grant is a one-county area in Southwest Alabama. The Outreach grant serves an elementary school in Union Springs, Alabama, in Bullock County. Bullock County, AL is one of the Black Belt counties.

Community description:

The community is composed of rural constituencies where poverty and illiteracy are still not eradicated and access to cultural activities for young people is limited. Prior to the Civil War, Union Springs was very prosperous with factories, tanneries, and hotels. The economic conditions and thriving industries took a downward spin in the mid 1900's. Today, this rural county leads the state in poverty, unemployment, obesity, chronic disease, and diabetes. Bullock County was ranked 67th out of 67 counties by the University of Wisconsin's Population Health Institute in 2011. According to county health rankings, 38% of Bullock County adults are obese. The state average for obese adults is 32% and the National Average is 25%. The county health rankings also state that 40% of the children in Bullock County live in poverty. According to the 2010 census, 23% of the population is White, 70.2% is Black, and 21.9% is Hispanic. There is 1 pediatrician, 2 family practices, and 1 dentist in the county.

Need:

The first phase of Healthy Schools, Healthy Kids began 6 years ago. The project focused on underserved children and their parents at elementary schools in three counties in southeastern Alabama. This project served as a rural health model to identify health risk behaviors and target health interventions. The second phase focused on only two counties, but expanded the project and added a physical activity component and CATCH (Coordinated Approach to Child Health). The purpose of our project, Healthy Schools, Healthy Kids, Healthy Families was to enhance the school health initiatives that were established in Pike and Bullock counties for the formation of a comprehensive school model that focused on prevention and health promotion in one school in Bullock County, Alabama.

Focus Areas

Health Education and Promotion
Physical Fitness and Nutrition

Target Population

School aged children – elementary

Description:

The concept of this project was to place a full time, dedicated Wellness Nurse in an elementary school setting. The purpose of placing a nurse in the school was to promote and coordinate wellness based activities to promote healthy lifestyles in an effort to decrease future preventable diseases caused by childhood obesity.

Throughout our three year funding period we provided many services and activities through our Outreach grant program, Healthy Schools, Healthy Kids, Healthy Families. The main focus areas of our activity were nutrition education, physical activity, parents, teachers, and policy & practices. Once we assessed the school and its' activities, we initiated new programs and activities to address each of our focus areas.

One of our main focus areas for this project was nutrition education. The first activity that we started was a nutrition education class for the students. The students in grades K-3 were able to participate in these classes bimonthly. The classes were conducted by the Wellness Nurse. Troy University Nursing students also taught some classes. The majority of the lessons were taught from MyPyramid and Nutrition Expedition. Some of the additional resources utilized were Chef Solus, playnormous.com, kidshealth.org, and Disney Healthy Living. The children learned about the Foodpyramid, food groups, key nutrients, go foods, whoa foods, food labels, portion sizes, exercise, germs, asthma, diabetes, heart health, dental health, bullying, stranger danger, and summer safety. These activities were taught through lecture, hands on activities, cooking, games, computer activities, plays, reading stories, videos, songs, relay races, and more. We also helped the school start a garden program that is incorporated into library time. The students read and learn about vegetables, health, and gardening once a month in the library, then apply what they have learned by maintaining the school garden. With our program, the school started a "Week of Wellness" annually in February. Each year this week has a child friendly, fun theme to encourage excitement and participation. The students and teachers participate in many activities throughout the week celebrating health, nutrition, and physical activity. Some of these activities include; relay races, poster contests, nutrition knowledge contests, and dressing up. The students and faculty have celebrated with decorations in the cafeteria, nutrition fortunes at lunch, education from the Cooperative Extension, stories and movies that have a message about health while they enjoy themed, healthy lunches. To conclude this week, FOODPLAY, an Emmy Award winning production, performed at the school. The play teaches nutrition in a fun, interactive way to the students and teachers. They also provide resources for students, parents, teachers, child nutrition staff, and the school nurse. Additional ways that we incorporated nutrition education into the school is with Team Nutrition Cookbooks for the child nutrition staff, a cooking cart for classrooms, and parent nutrition classes taught by a member of the Advisory Committee (former health teacher) using the "We Can" curriculum. We also provided books about nutrition and health in the library. Finally, we provided educational materials to 5 local churches for Vacation Bible School. We also provided them with the "Body and Soul" program.

This program also changed the physical activity at the school. The PE classes had large student to teacher ratios resulting in a lot of sitting or little movement during PE. The school didn't have the funds for an additional teacher, so we purchased SPARK, a standards based, daily curriculum for PE to increase the amount of time the children spent in moderate to vigorous physical activity. We also purchased a Wii and exercise games for PE to encourage entire class participation using something that the students loved, video games. This established "Wii Wednesdays." The school had an additional Wii donated, so we moved ours to classrooms. We also started helping the school utilize the FITNESSGRAM biannually. We helped provide the school with additional playground equipment such as a balance beam, parallel bars, pull up bars, and a triple twist. The PE teacher created a biannual "Fitness is Fun Field Day," which enabled all students to participate in relay races. The school also began participating annually with "Exercise US." Our program also worked with the Advisory Committee and incorporated physical activity into annual special weeks. For example, during Red Ribbon Week there was a "Let's Move Dance." The principal used allocated funds from the grant to put in a basketball court. The teachers also began incorporating exercise into their classrooms using "Jammin' Minutes," AMSTI kits, and dance. We also helped the school start an annual Mileage Club.

The next focus area of our project was the parents of the elementary students. We provided them a monthly newsletter called "Nutrition Nuggets." Parents were invited to join the Advisory Council. They were provided with many educational materials. We provided information at key events such as Awards Day and May Day. We encouraged parent participation during our "Week of Wellness" with the parent/child poster contests. Parents were also encouraged to participate in our "Fitness is Fun Field Days" and the Mileage Club.

Our nutritionist on the project had a "Day with the Dietician" at the school and the local grocery store, and she gave a Grocery Store Tour. She also cooked a healthy meal for our Parent Luncheon. The purpose of the luncheon was to discuss childhood obesity and provide resources for the parents. The parents that had children with a BMI greater than the 85th percentile were given the chance to sign their children up for small group sessions with the Wellness Nurse, sessions with the school counselor if needed, or request referral to a Weight Loss Clinic if they felt like they had exhausted all options. They were provided information and handouts and were given a chance to ask a counselor, nurse, and nutritionist questions. We also accessed parents and community members through two community health fairs.

This program also provided services and activities to the teachers. We provided nutrition and physical activity games to the teachers for classroom use. We provided the teachers with "Fit Kids Classroom Workout" DVD's. We provided "Jammin' Minutes" and energizers to help them incorporate exercise into the classrooms. We established a cooking cart that included subject based cookbooks and a portable Wii gaming system that the teachers can check-out for classroom usage. Our program helped the teachers and faculty form teams to compete in the Scale Back Alabama program, where they lost over 300 pounds. During the program they received pedometers, handouts, and weight loss guides. A binder of nutrition or health based computer games was also placed in the computer lab. We also helped start an after school teacher/parent Zumba class using the Wii or a DVD.

The last main focus area that our project addressed was policy & practices. We helped the school improve their health score using the School Health Index. We encouraged child nutrition to follow all recommend food guidelines. We encouraged the school to reach for the nutrition goals in the "Healthier US School Challenge." Child Nutrition began to make nutritional changes, for example, the school began serving dark green vegetables twice a week, all grains became whole grains, all dairy became low-fat, beans were served at least weekly, ice cream was replaced with Sherbet, and nothing was fried. Also, thanks to a generous donation from Troy University, the school will have a functioning salad bar in place at the beginning of the 2012 school year. We encouraged the school to follow the state guidelines for vending. As a result, the fruit juice slushies that were being served changed from an 8 ounce serving to a 4 ounce serving. The school stopped selling potato chips. The school also embraced the idea of a "Wellness Committee" by changing the functions of the already established Advisory Committee. This committee took on the responsibility of incorporating nutrition, exercise, and health into all school activities.

Role of Consortium Partners:

The Bullock County Board of Education has been a positive consortium member throughout the duration of this project. They have provided office space for the Wellness Nurse that included internet, phone access, and usage of the school copy and fax machines as needed. The elementary school has also played an important role in the project. The principal and superintendent have supported our projects and activities.

The Bullock County Cooperative Extension has been a consortium member for this project. They provided an educator to teach 3rd graders about nutrition. They aided in the planning, construction, and implementation of a school garden. The Cooperative Extension also received donations for the school garden from a local business, Bonnie Plant Farms. The Cooperative Extension donated time and labor in creating the school garden.

Southern Springs has been an asset to this project allowing us to participate in their community health fairs. Our project was able to reach out into the community two years out of three to provide valuable health information for the adults and children of the community.

The Child Policy Council is a group of individuals from the community that attend quarterly meetings to discuss the children in the community. Members include, but are not limited to, the Mayor, the superintendant, lawyers, police officers, DHR, The Health Department, hospital representatives, East Central Mental Health, and more. The group is lead by the Judge. This group has been beneficial to our project because they are able to provide support, ideas, and feedback to the project. It was also a fantastic way for us to know about the needs and problems involving the children of the community. We were also able to provide a large group of people regular updates pertaining to our project.

Outcomes

BMI was analyzed using the CDC formula. In 2008, 54.5% of participants from the selected elementary school were at or above the 85th percentile for body mass index. In 2011, 39.2% of the participants from the same elementary school were at or above the 85th percentile for body mass index.

Using bioelectrical impedance analysis (Tanita BIA SC-331C scale computer) to assess body weight, BMI, and body fat composition baseline measure were established. In September, 2011, the mean fat mass was 15.59. The Tanita scale printout identifies four levels of percent body fat composition: below range, within range, + range, and ++range. According to the Tanita scale printouts, 52.6% of students were above the expected range. Follow up results will not be available until May 2012.

Nutrition Knowledge was assessed using a 23-item tool. In the fall, 2010, the mean score was 14.98. In the spring, 2011, the mean score was 18.16. In the fall, 2011, the students' knowledge of nutrition was assessed using a Nutrition Knowledge Survey developed by Gower et al (2010). Overall the students answered an average of 3.22 questions correctly. Follow up results will be available in May 2012.

Physical activity was measured using the FITNESSGRAM. In the fall 2010, the third graders were targeted for the FitnessGram assessments. The average number of laps completed in the Pacer test was 4.57. In the fall, 2011, the average number of laps completed was 12.33. In the fall, 2010, the average number of curl ups was 25.20. In the fall, 2011, the average number completed was 39.78.

In the fall, 2011, the second grade students wore Accelerometers during a PE class without any project interventions to measure the amount of time that was being spent in moderate to vigorous physical activity (MVPA). In the spring, 2012, the same second grade students will again wear Accelerometers during a PE class, but they will be participating in SPARK activities. Results will not be available until May 2012.

Challenges & Innovative Solutions

Like any new endeavor, we have had some challenges with this project. Some of our challenges included parent participation, cultural beliefs, resistance from administration, strength of our consortium, and sustaining grant funds.

The first challenge that we have encountered is parent participation. This is a challenge that the school faces on a regular basis, so we also were also initially faced with a lack of parent participation. The way that we overcame this challenge was to gradually gain the trust of the parents by gaining the trust of the children. We had to convince them that our project was focused on helping their children. We also had to find ways for the parents to participate without having to be present. We had a parent/child poster contests and dress up days, which allowed passive participation. Throughout the project, our parent participation did improve.

Our second challenge was cultural beliefs. The culture is very family and church oriented. There are frequent gatherings around food, where many people consume high-fat, fried foods and family favorites. We also come across the belief by many that it is healthy to be heavy and being skinny may indicate that you are poor. We also encountered the belief that it is attractive to be overweight if you are a female, and encouraged if you are a male so that you can be a football player. We slowly overcame these challenges through education. We continued to teach people the dangers and diseases associated with being overweight and obese. Our program provided handouts with healthy food choices, healthy snacks, and food substitution information. Changing a culture takes time and patience.

Our project did have some resistance from administration with a few activities. One example is initiating a school wide exercise program with morning announcements. We overcame this challenge by working with individual teachers, helping them incorporate exercise when it was convenient. Another example is the selling of unhealthy foods for fund raisers. We did not completely overcome this obstacle, but we did improve the situation by giving examples of healthy fund raising activities such as jump rope for heart and school dances.

We also had a challenge with our original consortium. They were involved very little after the first few months of the project, and many did not come to the school for meetings. We remedied this challenge by adding additional our consortium members. We focused on what the school needed and asked specific people or companies for assistance. Once they became involved they stayed involved and were committed. We also joined the Child Policy Council. Many of our consortium members were members of this program. The Child Policy Council members were dedicated to helping any project that was committed to children. It was a positive match for us.

The last challenge that we faced was establishing the funds to sustain a school wellness nurse. With the economy and budget cuts, finding funds for a permanent position was difficult. We were unable to establish the funds for the position, so we worked on integrating our project into the school.

On-going Services and Activities:

Our project will be sustained through school integration. The Advisory Council has taken the role of a school wellness committee. They will be incorporating wellness activities into the school throughout the year. They will encourage healthy fund raisers. This committee will also organize and implement the "Week of Wellness." The school councilor will continue to teach the students about health and wellness once per month using Nutrition Expedition and MyPyramid. The school librarian has agreed to teach the children about fruits, vegetables, and gardening once per month. The librarian and the students will also be maintaining the school garden during her classes. The Cooperative Extension has agreed to continue to help maintain the garden and teach 3rd graders. The PE teacher has agreed to continue to have "Wii Wednesdays." He is also going to continue to utilize FITNESSGRAM biannually, have field days biannually, and use SPARK. They are hiring an additional PE teacher next year and he has agreed to help. Parent newsletters are going to be sent home by the Reading Coaches. The child nutrition staff has agreed to continue to encourage participation in Scale Back Alabama.

Sustained Impact:

The Healthy Schools, Healthy Kids, Healthy Families project has many sustained impacts. The biggest sustained impact of this project is knowledge. We have educated hundreds of children, enabling them to have the ability to make healthy lifestyle choices. We have also provided education to many adults. We have created a Wellness Committee with a strong, dedicated leader. Other lasting impacts of this project are the basketball court, playground equipment, and school garden. This project has also had a tremendous impact on the food served in the cafeteria. They are now doing a better job at following mandated guidelines and they are striving to provide healthy meals to the students. Before the end of the school year we anticipate their being a salad bar that has been donated by Troy University in the cafeteria. The teachers will have a cooking cart and a Wii to incorporate nutrition and physical activity in classrooms.

Implications for Other Communities

In order to implement a project similar to ours a minimum of at least three years should be dedicated to the project. Start with the end in mind and have clear goals and objectives. Make your goals and objectives clear to your consortium in the beginning and engage them in the project with specific duties. Make sure you have the cooperation of the Mayor, school board, and principal. The project leaders must be committed, strong, and dedicated. Stick to one, clear project. It is also important to know exactly how you will be measuring your goals and what tools you will use at the beginning of your project. It is imperative that you gain the trust of the students, the parents, and the faculty members at the very beginning of the project. If they trust you, they are more likely to listen. Even though it may be difficult to do, don't force your project on the faculty, just gently persuade. We were working in a very resistant community. Every activity that we did with our project was on a volunteer basis. We had more participation every year with every activity that we held. Finally, have regular, consistent meetings with your project team members.

ALABAMA

Tuskegee Area Health Education Center, Inc.

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12671 |
| Grantee Organization | Tuskegee Area Health Education Center, Inc. |
| Organization Type | Non-profit organization |
| Address | 2400 Hospital Road Building 68, Tuskegee, AL 36083 |
| Grantee organization website | www.tahec.net |
| Primary Contact Information | Benjamin P. Rackley Executive Director Phone number: 334-727-0550 ext 3586 Fax number: (334) 725-2742 brackley@tahec.net |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,978 May 2010 to April 2011: \$145,651 May 2011 to April 2012: \$99,903 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|---|---------------------|
| Tuskegee Area Health Education Center, Inc. | 2400 Hospital Road Building 68 Tuskegee, AL 36083 | AHEC |
| Tuskegee University College of Veterinary Medicine, Nursing and Allied Health | A301 Patterson Hall Tuskegee University Tuskegee, Alabama 36088 | University/School |
| Macon County Health Department | 812 Hospital Road Tuskegee, Alabama 36083 | Health Department |
| Bullock County Health Department | 103 Conecuh Avenue West Union Springs, Alabama 36089 | Health Department |

Community Characteristics

Area:

The coverage area for the Outreach grant is a three-county area in South Central Alabama: Macon County, Dallas County, and Bullock County.

Community description:

The target population is located within Alabama's Black Belt that is the poorest region of the State and one of the poorest in the country. About 30% of its residents live below the poverty level. In addition, the residents have a median household income that is 31% below the State average, and 27% of residents over 25 years old have not completed high school. More specifically, the socioeconomic conditions such as: (1) the concentration of poor Blacks in the Region; (2) population of female-headed households; (3) high infant mortality rates; (4) low high school graduation rates; (5) low income levels; (6) high poverty rates; (7) high unemployment rates; and (8) a large health disparity gap, have an overall impact on the health of individuals in the target population. The highest prevalence of diabetes in the state occurred in the three counties served by the Rural Health Education Network (RHEN), which range from 11.5 percent in Bullock to 12.8 percent in Macon. Macon County has the second highest prevalence rate in the state and is among the 16 counties in Alabama with the highest diabetes mortality rate.

Need:

The need for establishing RHEN was to address the problems of high incidence, prevalence and mortality rates of diabetes and related conditions such as hypertension and obesity in the target service areas. Additionally, RHEN addresses unhealthy lifestyle behaviors that contribute to the high percentage of disparity in the target areas. Outside of shared demographics as it relates to race, location and socioeconomic status, the target populations share psychographics such as, lack of awareness of risk and protective factors for disease, distrust of health professionals and lack of transportation for utilizing needed preventative services and medical care. To those aims, RHEN made every effort to provide support for the target population with access to health education, resources and support services in settings that were conducive to the most optimal health outcomes, while concurrently increasing communication among collaborating agencies to ensure long-term sustainability of the project.

Program Services

Focus Areas

Access: Primary Care
Access: Specialty Care
Chronic Disease Management: Diabetes
Chronic Disease Management: Hypertension/Obesity
Coordination of Care Services
Health Education and Promotion

Target Population

School aged children - teens
Adults
Elderly
Caucasians
African Americans
Latinos
Uninsured
Underinsured

Description:

RHEN provided needed medical screenings, patient referral to healthcare providers, and health education using technological capabilities in the three highly rural counties –Bullock, Dallas and Macon. The Outreach grant supported the implementation of community health screenings for chronic diseases such as glucose testing, blood pressure and cholesterol. Health screenings were organized through collaboration between TAHEC, the local communities, and the health departments. The grant funds were also used to pay the participating clinic a negotiated discount rate for seeing patients who had problems identified during the screenings.

Role of Consortium Partners:

The grant program had a helpful consortium. This program provided an important opportunity for the consortium partners to develop stronger working relationships and jointly plan and implement multiple activities. Each consortium partner played an active role in the program:

- TAHEC served as the grantee and fiscal agent for the grant and staffed the program with a 1.00 FTE Rural Health Outreach Program Coordinator and .25 FTE Director. The Rural Health Outreach Program Coordinator helped to plan and staff the health screening events.
- Tuskegee University College of Veterinary Medicine, Nursing and Allied Health (TUCVMNH) provided the telehealth software, video recording and related training for use of equipment by volunteers in Bullock, Dallas, and Macon County. TUCVMNH also assisted in planning telehealth speakers in years 1, 2, and 3.
- Bullock and Macon County Health Departments served as the locations for the monthly community education outreach activities. Additionally, their staff did advertise RHEN services and recruit participants for the screenings and other activities.

Outcomes

RHEN staff collected evaluation data in three main areas: Below is a summary of evaluation findings.

- A total of 25 screening events were held over the course of two years in a variety of locations: work sites, churches, schools, and community centers.
- A total of 46 referrals were made during the first two years of the grant.
- A total of 487 of unique individuals were served by RHEN during years 1 and 2 via provision of clinical services, screenings and or distance learning telehealth workshops.

- A total of 737 service encounters across 420 unduplicated patients
- A total of 488 screenings were conducted. Screenings were for uninsured or undiagnosed and those diagnosed with high risk factors related to diabetes such as hypertension and obesity; 21% were referred to a health provider for care; 11% received a basic medical exam, which enabled individuals that revealed positive exams the opportunity to have access to follow-up exams provided by primary physicians at Community Hospital.
- Average level of knowledge among participants increased from 2.67 pre-training to 3.59 post-training. Only 43% of participants reported no knowledge of the topics related pre-training, but only 6.5% of those participants reported low level of knowledge post-training.

Challenges & Innovative Solutions

Staffing was one of the biggest challenges. Throughout the course of the project, the RHEN coordinator, employed to ensure that patients knew about their appointments, were able to arrive to appointments and fully understood their treatment regimen resigned within the middle of the third year of the grant period. Faced with the challenge of recruiting a replacement coordinator, the director of a volunteer medical society, the Black Belt Medical Reserve Corp, made up of doctors and nurses in the area, agreed to offer services to assist other staff members with the duties of the RHEN Coordinator as needed.

The second biggest challenge was reaching out to those participants who were in need of treatment beyond the scope of the screenings and services provided by RHEN. To address the problem, TAHEC utilized the access provided by Community Hospital, a collaborative partner that provided access to a network of physicians that would accept installment planned payments for services for the uninsured.

Sustainability

On-going Services and Activities:

The main components of the grant-funded program will continue after the grant period ends, though they will be much reduced in scope.

- The participating providers have committed to continuing to see a limited number of patients. They are willing to accept a lower payment rate from patients which can be paid in installments.
- The Health Department will continue to host periodic screening/health education events as part of their normal community outreach efforts. They anticipate holding 4 such events a year.
- The College of Veterinary Medicine, Nursing and Allied Health owns the license for the telehealth equipment (RT1TM) and will continue to support the software for the partners as well as continue the partnership. It is the desire of the Consortium to expand this project to other rural counties in future years. CVMNAH will provide technical support and training to partners and community education outreach moderators. All services provided to the project will be in-kind.

Sustained Impact:

Citizens are more conscious and overall health has improved. The RHEN project provided citizens with information on where to seek healthcare and other service provided in the target service area. Providing necessary services to communities that are clearly in need, established solid partnerships with organizations that support the mission of RHEN and promoting healthy living and disease prevention are a few of the undeniable strengths of RHEN.

Implications for Other Communities

Other communities might benefit by ensuring that they have a committed consortium. In the case of RHEN, the strong committed members of the consortium ensured that health screenings are staffed appropriately and that necessary supplies were available in instances when very large unexpected audiences were present for health screenings. It is necessary to have in place assessments and surveys used as an aid to assess the unmet needs after events. It most imperative to communicate to participants that health fairs are not a substitute for seeking comprehensive care with a physician. While there are strong partnerships, other communities would also benefit from expanding partnerships from private and public sector entities.

ALASKA

Cross Road Medical Center

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12768 |
| Grantee Organization | Cross Road Medical Center |
| Organization Type | FQHC, non-profit organization, faith based |
| Address | P.O. Box 345, Glennallen, AK 99588 |
| Grantee organization website | www.crossroadmc.org |
| Primary Contact Information | Joel Medendorp CEO 907-822-5686, ext. 23 907-822-5684 jmedendorp@crossroadmc.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$148,946 May 2010 to April 2011: \$122,300 May 2011 to April 2012: \$98,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-------------------------------------|----------------|---------------------------|
| Kenny Lake Community Chapel | Kenny Lake, AK | Faith based |
| Patty Ryan | Kenny Lake, AK | Restaurant/Business Owner |
| Kennicott McCarthy Community Church | McCarthy, AK | Faith based |

Community Characteristics

Area:

The coverage area for the Outreach grant covers two communities: McCarthy and Kenny Lake.

Community description:

Located in the southeast portion of the Copper River Basin, the area served by this grant is characterized by very sparse and scattered population. Kenny Lake is a community of 355 people located approximately 50 miles from the nearest primary health care facility, Cross Road Medical Center. McCarthy's population changes drastically from 28 permanent residents to a much higher number in the summer months due to National Park Service work projects and tourism. McCarthy is located 84 miles from Kenny Lake, 60 miles of which are on a dirt road maintained only during summer months. Formalized economic and social data is limited for both areas; however, it is clear that residents have extreme challenges getting basic primary care services. In addition, many of our residents are distrustful of the government and public services and reluctant to seek out care or aid.

Need:

Geographic isolation, transportation difficulties, and severe weather compound the health problems experienced by local residents. Unemployment, poverty, the harsh Alaskan lifestyle, and the impact of profound fluctuations in daylight hours contribute to a population that engages in high risk behavior. As a result, residents experience markedly high rates of illness, unintentional injuries and deaths, chronic disease, obesity, mental health conditions, drug and alcohol abuse, domestic violence and suicide. Thus, need for primary and preventive health care services is high, but transportation presents an enormous barrier for access to care for residents of these isolated communities as they have no primary care services of their own. The focus of the grant program was to provide access to primary and preventive health care for the isolated communities of Kenny Lake and McCarthy by removing the barrier of transportation. Travel in region can be challenging due to gasoline costs and weather conditions. Winter temperatures can range from 20-50 below zero resulting in limited ability to travel in these months. Airplane travel is possible but is extremely costly especially with fuel costs increasing. Communities such as McCarthy are difficult to access in the best of times -- in good weather and good road conditions the

drive takes 3-4 hours – and are all but entirely isolated during the winter months. By providing portable/mobile services, we were able to bring a provider, RN and social worker to each community in order to improve the health status and reduce health disparities in these communities.

Program Services

Focus Areas

Access: Primary Care
 Aging
 Behavioral/Mental Health
 Children's Health
 Chronic Disease Management: Cardiovascular
 Chronic Disease Management: Diabetes
 Coordination of Care Services
 Health Education and Promotion
 Maternal/Women's Health
 Pharmacy Assistance

Target Population

Infants
 Pre-school children
 School aged children - elementary
 School aged children - teens
 Adults
 Elderly
 Pregnant Women
 Caucasians
 Alaska Natives
 Uninsured
 Underinsured

Description:

The Outreach grant supported the implementation of the following services and activities:

1. Sports physicals clinics, flu shot clinics, Head Start clinics, immunization clinics, OB and well-child checks and general primary care clinics were provided during our McCarthy and Kenny Lake clinics.
2. Community Outreach Activities included: July 4th Parade and Picnic, Copper River Regional Health Fair, Kenny Lake Fair, Chitina Days Cabbage Festival. Tours, health screenings, and health information were available at the activities.

Role of Consortium Partners:

This three year program provided an important opportunity for the consortium partners to develop stronger working relationships and jointly plan and implement multiple activities. Each consortium partner played an active role in the program:

- Cross Road Medical Center acted as the grantee and fiscal agent for the grant and staffed the program with a .33 FTE provider, .50 FTE RN, and .33 FTE MHSA counselor who were dedicated to the Outreach program and .10 FTE each for an evaluator / administrative assistant. Cross Road was responsible for the coordination of the project, the evaluation of the project, quality improvement, and identification of patient needs and any gaps in service.
- Len and Brenda Richison, Pastor of the Kenny Lake Community Chapel, were instrumental in support of a location for mobile health services, both with and without the mobile unit. The extreme temperatures in the winters do not enable Cross Road to utilize the mobile unit. We were able to house the clinic in the basement of the Kenny Lake Chapel. The Richison's extended their courtesies by providing advertising by contacting area residents regarding upcoming clinic events.
- Patty Ryan, restaurant and business owner in Kenny Lake, was also invaluable to the success of the clinics. She not only spread the word regarding upcoming clinic events, she also opened her business as a parking spot for the mobile unit to park and made her facility available for use of restrooms, eating lunch, administering flu shots, and a community hang out spot.
- Rick and Bonnie Kenyon, Pastor of the Kennicott McCarthy Community Church, were instrumental in providing a location for the clinics in the basement of their church. Due to the isolated nature of McCarthy, we travel to the town via bush plane. This made the logistics of traveling and carrying supplies a challenge. We were most appreciative of the Kenyons because they provided transportation to and from their church and the isolated airstrip minimizing the logistical challenge.

Outcomes

Clinic Establishment:

- We have accomplished our goals of establishing regular portable/mobile clinic visits in 2 of the 3 areas, McCarthy and Kenny Lake. Our clinic in Kenny Lake is scheduled for one day in each month, whereas our clinic in McCarthy is scheduled for one day in each of the summer months due to the remoteness of the area and the decline of population during the remainder of the year. We have had challenges reaching the third area, Nelchina, due to staff turnover, provider retention, and lack of contacts in the community.

Health Care Access:

- We made progress during our grant period by increasing the total number of patients seen at our clinics. From May 2009 through April 2010 we saw a total of 43 patients; since May 2010, we have seen 63 patients, 9 of which are new.
- We also purchased a Protime monitor to check prothrombin time in patients on anticoagulant therapy. This saved patients time and money from traveling to and from Glennallen for routine monitoring of their status.
- Bed bound patients received home visits in our service areas.
- Medications for McCarthy patients were renewed annually resulting in continuity of prescription coverage.
- Provided immunizations for children in McCarthy.

Data Gathering:

- We are gathering data and working with our EMR to extract data for PIMS reporting and an analysis of costs and numbers.

Quality Improvement:

- Our Mobile Outreach Team and project are reviewed monthly at the Continuous Quality Improvement (CQI) Committee meeting.

Patient Satisfaction:

- Data is collected in narrative form which is then evaluated at the monthly CQI meetings.
- Informal verbal surveys in McCarthy were conducted to track interest in the clinics. The majority of those surveyed expressed interest in keeping the clinics available to the area.

Challenges & Innovative Solutions

Provider stability and lack of contacts are two challenges. It was not until 2 ½ years into the grant, August 2011, that the clinic was able to add a new permanent provider staff. Up to that point we utilized one permanent provider and some locums. Now that we do have a permanent provider team, we can advertise upcoming mobile health clinics with the provider name attending the clinic. This will enable patients to plan for continuity of care with their regular provider at clinics.

Challenges in McCarthy are logistical. Access to McCarthy is either by bush plane or a 4 hour drive with 60 miles of that drive on a dirt road. Bush plane access is optimal; however, the cost is high. We are researching options of flying into McCarthy from an airstrip located closer to McCarthy to see if cost is lowered.

The logistics of having mobile health charting integrated into our EMR has also been a challenge. Early in the grant period, the team completed scheduling and charting after returning from the clinics. Currently, our team is able to access our partner's wireless connection in order to log on to the Cross Road EMR directly and enter patients as they are seen; however, the wireless connection is not consistent. Work continues on this challenge.

Sustainability

On-going Services and Activities:

The main components of the grant-funded program will continue after the grant period ends, though they will be much reduced in scope.

Kenny Lake mobile health will continue and more home visits will be incorporated during our mobile health times.

McCarthy mobile health is a challenge cost-wise. With rising fuel costs, we are unable to sustain 4 clinics in the summer months. Our goal is to advertise 2 clinics over the summer to get patients in during those times and include a variety of health information, pamphlets, and brochures for patients' personal use.

We will continue our Sports physicals clinics, flu shot clinics, Head Start clinics, immunization clinics, OB and well-child checks, and general primary care clinics.

Sustained Impact:

The Outreach grant program has impacted both Cross Road Medical Center and the community. As a clinic, our team has learned to branch out and become more flexible in working with the needs of the community. We learned the health priorities of the service areas and built rapport and better working relationships with both communities but in particular McCarthy. With accessibility an issue with McCarthy, this was the first time McCarthy and Cross Road folks had the opportunity to work collaboratively.

Implications for Other Communities

The lessons we learned about how to recruit and retain physicians into our program are important ones that could be applicable in other communities, rural or otherwise. Also, involving local residents in the planning of mobile health clinics would work in other communities where agencies may have a difficult time establishing trust with local residents. Another practical lesson we learned once we had hired our permanent provider staff, is that we could increase our mobile clinic numbers by utilizing the time we had in the outreach community for clinic time and home visits. We had envisioned the mobile clinics as times when community members would come to the clinic for primary care but realized that some patients could not easily make it to the clinic and perhaps had more complex needs that could be met by visiting them at home. This could be a useful lesson for other extremely rural areas.

ALASKA

Kodiak Island Health Care Foundation

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH16320 |
| Grantee Organization | Kodiak Island Health Care Foundation |
| Organization Type | Community Health Center |
| Address | 1911 E Rezanof Dr, Kodiak, AK 99615-6602 |
| Grantee organization website | http://www.kodiakchc.org |
| Your Project Director | Brenda Friend Chief Executive Officer Phone number: 907-481-5005 Fax number: 907-481-5030 Email address: bfriend@kodiakchc.com |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$128,028 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|----------------------------------|-----------------------------------|--|
| Brother Francis Homeless Shelter | Kodiak, Kodiak Island Borough, AK | Non-Profit Social Service Organization |
| Kodiak Senior Center | Kodiak, Kodiak Island Borough, AK | Non-Profit Social Service Organization |

Community Characteristics

Area:

Kodiak Island Health Care Foundation's (aka Kodiak Community Health Center's) Rural Health Outreach Program served both seasonal and permanent residents of Kodiak Island, located in the Kodiak Island Borough of Alaska.

Community Description:

The Program's service area encompassed 7,500 square miles. Kodiak is a generally rural community in the Gulf of Alaska, approximately 250 southwest of Anchorage. The rich and bountiful marine waters, meadows and forest have provided all the ingredients needed for hunting and gathering among the Alutiiq Alaska Native's that have lived on the Island for over 7,000 years. Now, many Island residents continue with a complete or partial subsistence lifestyle.

Today's permanent residents are primarily Caucasian, Hispanic, Filipino and Alaska Natives. Because of this, linguistic and cultural barriers must be addressed provide truly accessible health care. The service area is defined by its separation from mainland Alaska. This means that anything that needs to get on Island or to the mainland is either transported by plane or barge. As a result, the cost of living on Kodiak Island is 40% higher than the average for Alaska and a full 65% higher than the average cost of living in the continental U.S.

Commercial fishing and related businesses (canneries, packing companies and fishing vessel repairs) are the primary industries on Kodiak Island. Commercial fishing is seasonal so there is a huge influx of low-income, highly mobile and mostly uninsured populations during the late spring. A portion of this population is foreign nationals that come to the Island on work visas and generally return home after the season. Typically, the earnings of a commercial fisherman are insufficient to support themselves and/or their families for the rest of the year.

The economy of the Island is dramatically affected by the fishing industry. When there is a poor fishing season, the economy suffers until the next year's season. This is particularly negative given the high cost of living. Even during good fishing years, the high rental home costs (the highest in Alaska) and limited year-round employment leave many residents living in poverty.

Need:

The Outreach Program was designed to provide life-style appropriate outreach and health screenings and limited clinical services (focused on chronic disease) because our consortium partners serve elderly and homeless populations who often have health needs related to diabetes, hypertension, high cholesterol, insufficient or poor nutrition, and inadequate activity.

In addition to providing these services at partnering sites, our Program expanded outreach activities to the broader Kodiak community, which includes many low-income, underserved, uninsured and underinsured residents: Filipino immigrants who do not have green cards and are unable to qualify for public insurances; commercial fisherman, cannery workers and other fishing companies which cannot afford to provide employees with health coverage; and uninsured family members of people in the Coast Guard on the Kodiak Island Base (the largest in the U.S.). Each group has a tendency to delay getting care because of the cost and the lack of information about where to go for culturally appropriate and affordable care. This delay in care or simply not getting care at all makes it common for new patients to come to the clinic with a number of health conditions.

The need for health care on the Island is great. Much of the demand is due to a lack of sliding fee scale family practice clinics – Kodiak Community Health Center being the only one. A small Providence/Kodiak Medical Center (and hospital) is in the city of Kodiak. It has 19 beds and limited (but critical) specialists. To round out the specialists treating patients on the Island, medical, dental and behavioral health specialists from Providence/Anchorage fly in on a rotating basis for a week or two to help address community needs. Unfortunately, even with these rotations there continues to be gaps in services with two year waiting lists.

When services are not available on Kodiak Island, residents must fly to Anchorage to receive care there, or who must then fly on to other treatment sites, such as the University of Washington Hospital & Medical Center in Seattle. The flights to Anchorage are costly but flight is the only viable way to get off the Island. This creates financial burdens for individuals and families. Due to these challenges, it is particularly important that residents get preventive care, early treatment of illnesses and injuries and help in managing chronic illnesses on Kodiak Island.

Program Services

Focus Areas

Access: Primary Care
Access: Specialty Care
Aging
Chronic Disease Management: Cardiovascular
Chronic Disease Management: Diabetes
Chronic Disease Management: Other
Community Health Workers/Promotoras
Coordination of Care Services
Health Education and Promotion
Integrated Systems of Care

Target Population

Adults
Elderly
Caucasians
African Americans
Latinos
Native Americans
Alaska Natives
Uninsured
Underinsured
Low-income

Description:

Our Outreach Program had a number of services and activities. They included:

1. Community outreach was the Program's primary service. 1.50 FTE Outreach Workers planned and implemented these sessions. Often a KCHC Physician Assistant would go along to help the Outreach Workers by presenting information on why it is important to receive preventive care. The Outreach Workers presented information regarding KCHC services, the sliding fee scale, and specifically how to access care. It was essential that we conducted outreach many times at the homeless shelter because the shelter stay is limited to 30 days. Similarly, the senior center has some scheduled participants and some individuals (60 and over) who "drop in." Repeated outreach assures that as many individuals as possible have information about the importance of preventive care. Through this Program we were able to gain access to the Coast Guard Base (presenting to non-benefited family members), Kodiak Island's three largest canneries' workers and commercial fisherman on the largest fishing vessel on the Island.

2. At outreach sessions health screenings went along with the education about the sliding scale program and KCHC. Generally these were for blood pressure and foot care for people with diabetes. These screenings can easily occur off-site and hypertension is a risk factor for several adult chronic illnesses. The foot care reduces the risk that people living with diabetes will develop foot lesions, which untreated can result in the loss of limb(s).
3. Health education was essential to this Program. The main message at every session was that preventive health care can eliminate or reduce the risks of preventable health conditions. Some outreach events received more general health education, while others focused on specific needs within the population. For example, homeless people who are not in shelters often experience minor cuts and bruises, respiratory problems, victimization and poor hygiene. So, when outreach occurred at the Brother Francis Shelter, specific attention was paid to discussing personal health and ways that they can be more healthy and hygiene improvements that were supported by the kits provided by KCHC.
4. Mass communication outreach was an additional tool to get the word out about KCHC, its history, the services provided and the availability of a sliding fee discount scale which makes healthcare for low-income individuals more affordable, and interesting health facts and population-based information about the patients served. These mass communications included two newspaper advertisements, two radio announcements a month and one mass mailing which went to every accessible household that can be reached by a letter carrier.
5. Community awareness activities were the final method of conducting outreach. Like many small isolated places, there are quite a number of annual health fairs, summer festivals and holiday specific events where people can get together, eat and have some fun. KCHC has a long history of participating in these events – sometimes manning a booth for the Health Center providing health information and handing out balloons to the kids; other times staff manned the first aid station at the event.

Role of Consortium Partners:

Brother Francis Homeless Shelter provides emergency shelter, three meals a day, showers and laundry facilities. The 30 day limit provides the individual with a month to do some of the following: find work, check their eligibility for Veterans benefits, attempt to rebuild relationships with family and friends and/or to find another place to stay. The Brother Francis shelter, through generous donations is also able to provide the homeless with hats, gloves, socks, person hygiene items and blankets.

Senior Citizens of Kodiak, Inc. runs the Kodiak Senior Center, which provides a safe, supervised place for elders to gather since 1996. In addition to the Senior Center, Senior Citizens of Kodiak provides a host of other services for people over 60, geared toward helping seniors to remain in their home safely and for as long as possible and to live with independence, honor and dignity. The Senior Center also operates the Kodiak Area Transit System (KATS) a coordinated transit system that serves 14 local non-profits, including KCHC.

The Kodiak Island Health Care Foundation, commonly known as Kodiak Community Health Center has been providing services for low-income uninsured and underinsured population and other underserved populations since 2004. Since that time the Health Center has continually served more people, provided more health care visits and increased their breadth of services. In 2011, the clinic provided 3,515 residents with 11,618 health care visits.

In addition to developing the Outreach Program together, the homeless shelter and senior center Executive Directors were tasked with advocating for the homeless and elderly, coordinating outreach/screening and care sessions with the Outreach Workers from KCHC and identifying essential health supplies necessary for their respective clients. All Partners had a role in identifying Program issues and actively participating in successfully addressing the problem and participated in the program evaluation.

Outcomes

Outreach 2009-2012:

- 28 outreach/screening and care sessions were provided. 15 of the 28 outreach events were provided at our Network Partner organization, the Brother Francis Homeless Shelter and the Kodiak Senior Center (54%).
- 31,176 community residents received either direct and/or mass media outreach, which discussed the importance of preventive care, about KCHC services, and the availability of a sliding fee scale to discount patient charges.
- The local canneries were visited for the first time, reaching 600 workers in their own languages (Tagalog and Spanish).
- KCHC's Program participated in the Coast Guard Expo, Career Fair, COMFish, Retro Monday (Crabfest Event), Newcomers Fair (Coast Guard) and Women's Business and Health Expo, reaching approximately 200 individuals per event.

- Four mass communication efforts were provided included two radio announcements, 2 newspaper advertisements and one direct mail to each household on the Island it reachable by road. These communications were language sensitive and were translated into Tagalog and Spanish. KCHC estimates the approximately 90% of the residents (11,500) received or heard the outreach methods.

Health Care Services Provided at Outreach Events:

- At Brother Francis Shelter there were seven outreach sessions visits focusing on personal health, hygiene and chronic disease, with participants receiving screens and health services ranging from 15-30 individuals at each session. At the Senior Center eight outreach sessions were held that primarily included diabetes education and providing foot care services. Again, 15-30 people attended each of these sessions.
- Health supplies were provided for all people at the Brother Francis Shelter who participated in outreach/screening and care activities. These supplies included: safety razors, socks, first aid kits, hygiene materials, pill boxes, tooth brushes, tooth paste and deodorant.

New Patient and Visit Outcomes (2009-2012)

- 1,114 new patients were seen as a result of the Outreach Program;
- 2,580 visits were provided for these new patients;
- 2.32 visits were provided (on average) for each patient;
- 345 of these individuals were uninsured and/or underinsured;
- 350 received case management (via case manager, provider or RN) for chronic illnesses

Challenges & Innovative Solutions

Surprisingly some of our greatest challenges occurred at the Brother Francis Homeless Shelter and the Kodiak Senior Center. The challenges were not related to poor coordination of Program, but rather were the result of characteristics of these special populations which had not been recognized during the Program planning or initial program implementation.

Brother Francis Homeless Shelter provides its residents with safety, protection from the elements, a place to sleep and three meals per day. However, the homeless are not permitted to stay at the Shelter all day. This created significant challenges in finding workable times to conduct outreach, screening and health care services. Early mornings didn't work because residents were concerned about missing breakfast, at lunch time there was no access because residents would go in, eat and go back outside. Shelter residents are allowed back in shortly before dinner and again residents worried about missing their meal. The residents' food insecurity drives their concern about getting all the food they can get. Over time, KCHC's Outreach personnel and Brother Francis's Executive Director determined that most residents were more accessible after dinner. 100% participation was never achieved, however, because many residents were too tired at the end of the day to stay up much past dinner.

The Kodiak Senior Center had two different challenges. First because of their age, providing services after lunch didn't work because many of the clients were used to having a nap in the afternoon. Morning hours worked better. Also, the "packaging" of outreach, screenings and clinical services weren't appealing to this population so the health services were presented differently. For example, foot care sessions were identified as "pedicures." During their pedicures, seniors were provided information about foot care and its importance. This was a far more successful approach.

Finally, the Outreach Program was challenged in gaining access to the workers who come by the thousands to work during the commercial fishing season. Gaining access to the low-income, uninsured and underserved populations was significantly challenging. The health needs among this population, however, drove KCHC's Chief Executive Officer to educate business owners about the importance of healthy workers. She pointed out that benefits of healthy employees include more productive workers, workers needing less time off for preventable illnesses, less leadership time recruiting workers and demonstration to their workers that the company is concerned about the health of its workers. The education worked and Outreach Program personnel have conducted outreach, screenings and limited clinical services in the canneries (600 employees) and the largest commercial fishing vessel on the Island (500 employees).

On-going Services and Activities:Continuation of Services Following the End of the Program Period

- The outreach, screening, medical services and health supplies will continue at the Homeless Shelter and the Senior Center, but will occur less frequently.
- Mass communication outreach to the general community will continue largely unchanged.
- KCHC has always been a part of community events, sometimes serving as the first aid station or conducting outreach through a booth that has staff conducting simple screenings.

Resources that will Support this Work

- Program income generated by health care reimbursements from public and private insurers and patient fees is currently averaging \$250/per patient (the actual average cost per patient is \$480). This reimbursement, however support just over half the cost for each new patient.
- Recently, KCHC converted to one practice management system, instead of using two unconnected systems. The new EHR and PMS will capture more program income because of the greater ease in billing and more expedient identification of denied claims (which can be corrected and resubmitted). The EPIC system can also generate recall lists for patient needing to return for preventive care or chronic disease management services, so schedulers can call and set up an appointment with the patient.
- KCHC, the Brother Francis Shelter and the Senior Center will continue to contribute to the activities through the use of organization' staff and administrative services for our partner organization, and the same with KCHC in addition to the contribution of medical supplies, hygiene kits, mileage and other incidental expenses.
- KCHC receives ongoing federal Community Health Center funding, which helps to support a portion of the costs of care for the low-income, uninsured and otherwise underserved populations, regardless of their ability to pay. In the last year, KCHC received an increase in the funds received through the program.
- Cost containment activities will naturally occur because we will provide some of these activities on a less frequent basis.
- Revenue may also increase over time through securing family, community and corporate foundations' contributions and obtaining useful products that can be distributed (such as those provided for residents of the Shelter).
- Finally, for the first time, the fishing vessel Leslie Lee provided KCHC with a \$12,000 check to support outreach to the fishing community.

Sustained Impact:

The Rural Health Outreach Program will have many long-term effects on residents of Kodiak Island.

- Experienced and informed outreach services will continue to reach residents about the importance of life-saving preventive care and how to access services at Kodiak Community Health Center. In turn the people who have participated in an outreach event will share the information with their families and friends, who will share this information, and so on. This is a critical benefit of community-based outreach.
- Community screening will be provided by staff that have experience in working in community setting and who will train other staff. This has a cascading effect as more and more staff are trained and become experience in community screening.
- Screening services will continue to be an "action process" (rather than sitting in a chair and listening to someone talk about it) and will inform people about health conditions that they may not have known about before – screenings can be and have been life-saving.
- Off-site clinical services will continue to make KCHC visible within the community and will provide a service for some individuals who may not have received the services before and didn't know that this service was critical to their health, for example getting regular foot care for people living with diabetes.

Other non-service delivery effects include:

- KCHC has learned to make its outreach model more effective by considering not just the language spoken and cultural heritage of its participants but to also consider the general characteristics of the populations so that events are more appropriately scheduled to help reach out to as many people as possible. This knowledge will help other KCHC community outreach efforts to be more effective.
- Off-site registration for services at KCHC worked well, informing consideration of doing this in the community more frequently. This knowledge supports the use of off-site registration as a method of getting residents into care.

- Participating in a sensitive issue on behalf of KCHC increases the experience that the health center has in advocacy and in supporting policies which improve community health. This is very useful because Kodiak Island is a small, isolated location with many long-term residents, a variety of different Councils and Programs all seeking funds and local governments at every level – there are plenty of opinions to go around. It is important that KCHC be the voice of the often voiceless low-income, uninsured or underinsured population and those with serious health care conditions.

Implications for Other Communities

The lessons learned about community outreach for the homeless and senior population – and likely other groups as well – encourages particular forethought about the way the population lives their everyday lives. This increased the effectiveness of outreach. Also, the perseverance of the CEO ultimately gained KCHC access to these new and needy populations. The lesson learned about building strong and enduring relationships with our consortium partners will be valuable in the years to come. The lessons learned about routinely providing culturally appropriate outreach, screening and off-site care helps to build a trusting relationship with minority groups in the community. Finally the lesson learned about the importance of ongoing community health education makes it continually possible for underserved populations to access high quality, affordable health care.

ARIZONA

El Centro For The Study of Primary & Secondary Education

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12676 |
| Grant Organization | El Centro For The Study of Primary & Secondary Education dba Adelante Juntos Coalition |
| Organization Type | Non-profit organization - community based |
| Address | 101 Avenue B, San Manuel, AZ 85631 |
| Grantee organization Website | www.luzsocialservices.org/AJC |
| Primary Contact Information | Betty Chavez Project Director Phone number: 520-385-3028 Fax number: 520-385-3029 bchavez@luzsocial.com |
| Project Period | 2009-2012 |
| Funding Levels | May 2009 – April 2010: \$150,000 May 2010 – April 2011: \$125,000 May 2011 – April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organization Type |
|--|-------------------------------------|------------------------------------|
| Adelante Juntos Coalition Lead Agency | San Manuel/Pinal/AZ | Non-Profit Community-based |
| Pinal County Sheriff's Office | San Manuel/Pinal/AZ | Law Enforcement Government |
| Mammoth/San Manuel Unified School District | San Manuel/Pinal/AZ | Public Education |
| Hayden/Winkelman Unified School District | Hayden/Gila/AZ Winkelman/Gila/AZ | Public Education |
| Sun Life Family Health Clinic | San Manuel/Pinal/AZ | Medical primary care clinic |
| Mountain Health and Wellness (formerly San Pedro Behavioral Health) | San Manuel/Pinal/AZ | Mental Healthcare Service provider |

Community Characteristics

Area:
El Centro for the Study of Primary & Secondary Education dba Adelante Juntos Coalition's the *STOP! Underage Drinking Project* served the communities of San Manuel and Mammoth in Pinal County, AZ; and communities of Hayden and Winkelman in Gila County, AZ.

Community description:
The factors that influence life in our rural communities are poverty, disproportionate rates of asthma, depression, substance abuse, domestic violence, and sexual assault. As is the case in most of the country, the recession and high unemployment over the past 3 years have caused stressors with which most families are having difficulty dealing. Self-medicating with illegal substances to forget or not think about the stressors appear to be impacting the health of our rural populations here even more severely than the rest of the counties as has historically been the case. It is well documented that geographically isolated communities are underserved and much disparity exists between our residents and the rest of the country in regards to access to healthcare.

Need:

The *STOP! Underage Drinking Project* is targeting students from four Latino-dominated middle and high schools, including San Manuel Junior and San Manuel Senior, Winkelman Middle School and Hayden-Winkelman High School, serving 200 students directly with the SEMBRANDO SALUD curriculum and indirectly through social norm campaigns at these schools. Project *STOP!* is using a three-prong approach to reducing underage alcohol abuse. First, we focus on achieving a school-wide systems change through the community and school collaborative. Secondly, we aim to change behavior to reduce underage drinking through implementing the SEMBRANDO SALUD best practice in a school-based setting. Thirdly we intend to focus on changing attitudes by increasing knowledge and disapproval of alcohol use by using culturally competent prevention strategies.

Program Services

Focus Areas

Behavioral/Mental Health
Children's Health
Health Education and Promotion

Target Population

School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
Latinos
Native Americans
Uninsured
Underinsured

Description:

The direct services provided through the *STOP! Project* are school and community based prevention education via the classroom based curriculum SEMBRANDO SALUD. Each year at each district in 10 one-hour sessions, the project coordinator and assistant engage students in grades 7-12 in lessons aimed at teaching them the negative health consequences of underage drinking. The curriculum also guides the participants through the process of examining their beliefs about the use of alcohol, their culture, local customs and traditions and their families' values surrounding their use of alcohol. In addition to the 10- week curriculum, after-school activities were scheduled to provide opportunities to use their newly acquired refusal skills and to continue to spend time with the positive peer group formed during implementation. A family component that enables entire family groups to spend the day together learning about alcohol use and abuse was another service our outreach grant was able to conduct. Referrals to mentoring programs and community enrichment events were also provided via the grant

Role of Consortium Partners:

Each consortium partner was responsible to identify a liaison from their organization to attend and participate in regular meetings. Each liaison was then responsible for taking information back to their respective agencies for dissemination, thereby providing for others in their organization to become involved. Adelante Juntos Coalition is the lead agency and applicant for *STOP!* so our responsibility and role was to assemble the consortium, provide qualified staff to implement the curriculum at the schools and facilitate community-based activities related to the program. AJC is responsible for the daily oversight of programming and all reporting to the funding office. Our Law enforcement consortium members (Sheriff's Office & Police Department) are to provide resource officers to co-facilitate specific components of the program and assist in community activities when requested. Both School Districts were responsible for providing classroom space at their respective schools in which implementation was conducted. Each school district also designated a liaison with which AJC staff would work closely. Also each school was responsible for providing report cards and other data necessary to monitor and/or evaluate effectiveness of staff and programming.

Outcomes

The *STOP! Underage Drinking Project* has been highly successful. Besides the efforts of the Project Director, the cooperation has been wonderful from the four participating schools facilitating and implementing facets of the program. Improvements were seen in all areas of the program.

Results from the curriculum associated survey and GPRA measures show that student participants improved in all the areas from age of onset, 30-day use, perceived harm, perceived risk and disapproval of the alcohol use. The SEMBRANDO SALUD curriculum proved to be very effective. Pre/post-test survey results show:

- 1) Students' attitudes about harmful drinking improved by 12% - from 44.8% of students in pre-test believing it is harmful to have an occasional drink of alcohol to 56.8% of students in post-test believing so.
- 2) More students do not believe alcohol helps people to relax or reduce tension from 69.1% in pre-test to 72.1% in post-test about relaxing, and from 61.3% in pre-test to 69.5% in post-test, which shows 8.2% more of students do not believe alcohol helps to reduce tension.
- 3) 30-day use: First, there is a good increase in the number of students who did not use alcohol from 125 in pre-test to 136 in the post-test, which increased by 11 participants, a 9% increase. Second, for those who did use alcohol during the past 30 days, the average days of using alcohol is decreased from 3.9% in pre-test down to 1.17% in post-test, which is a significant change due to the program implementation.
- 4) 30-day binge drinking is also a good indicator of program effectiveness, from an average 2.7% in pre-test down to average 1.4% in post-test, which is 92% decrease.

Challenges & Innovative Solutions

Parental participation in the program will increase the effort. In other words, *Project STOP!* needs to get more parents involved. Previous research studies conducted by Luz Social Services indicated that students with parents' participation showed better knowledge gains, attitude change and behavior improvement towards alcohol use. But it is difficult to ensure parental involvement without the ability to offer incentives of child care and food. However, site coordinators continue to make a concerted effort to engage parents in the program and will continue their efforts throughout the remaining months of this third year.

Sustainability

On-going Services and Activities:

The classroom based curriculum SEMBRANDO SALUD is paid for and will be sustained by way of our 'Train the Trainer' approach since implementation of *STOP!* The teachers, in whose classes our AJC staff facilitated the programs, are now trained to teach and facilitate the curriculum beyond the project period for many years to come. However, the incentive program which we found kept participants willing to do more activities with their families at home, and optional tutoring, will not be able to be sustained by the school districts because of their shrinking budgets. The community-based activities will still be available to participants and graduates of the program via the El Centro Youth Center which AJC is opening very soon. The opportunity for youth to be engaged in community service learning projects as well as to enjoy recreational activities that can keep them away from experimentation with alcohol and other drugs will finally be available to them!

AJC continues to write grants and to raise funds to sustain the 'incentive' and tutoring components of the program.

Sustained Impact:

The long term effect on our community as a result of our HRSA outreach grant is the meaningful partnerships that have evolved through the creation of our *STOP!* Consortium. An attitude of indifference had settled into the people of the communities that were served through our grant. Or perhaps it was denial on the part of parents and other adults. Unless a family's life had been forever changed in an instant because of a personal tragedy resulting from underage drinking, it was like the problem didn't exist in our community at all. The opportunity to educate and create public awareness about the problem was the best thing that has happened in a very long time. Our town hall meetings gave residents the opportunity to not only hear the facts, statistics and accurate information about youth and alcohol and the consequences of it, but to discuss it with each other and to brain storm, make recommendations, suggestions and present ideas on how to solve the problem. In that regard it is clear that the capacity of the community to identify, address and solve community problems has indeed been increased.

Implications for Other Communities

For Adelante Juntos Coalition (AJC), the biggest benefit resulting from our outreach grant is the community bonding that occurred during the project period. Although AJC community mobilization actions continued to grow since our creation in 1998, this year our

coalition has been able to accomplish more objectives that we had set out to do. We give the credit to the outreach grant that enabled us to have the staff (paid) to be able to do more interpersonal, one-on-one outreach to families. Community partners worked with the consortium members in a meaningful way. Perhaps because finally the goals and objectives of these programs seemed like it was realistic and doable. Perhaps drug-free communities programming in the past seemed overwhelming and just too large to tackle, but when our consortium zeroed in on underage drinking and the public health approach and how Project *STOP!* was going to use the protective factors of creating a strong and positive community domain to address the issue, residents exhibited interest and hope. Establishing opportunities in a community for positive participation using our classroom based curriculum SEMBRANDO SALUD, children are less likely to engage in substance use and other problem behaviors. Additionally, rewards for positive participation in activities helps children bond to the community, thus lowering their risk for substance use. The incentive program built into *STOP!* gave youth the experience of rewards for positive participation. Other benefits include: *Community Cooperation *, *A Sense of Safety *, *Resource Sharing *, *Healthier Youth *, and *Reduction in Alcohol Consumption by Minors*.

ARIZONA

Hardrock Council on Substance Abuse

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12675 |
| Grantee Organization | Hardrock Council on Substance Abuse |
| Organization Type | Non-Profit Organization |
| Address | P.O. Box 26 Kykotsmovi, AZ 86039 |
| Grantee organization website | N/A |
| Primary Contact Information | Angela Witherspoon Project Director Phone number: 928-637-3890 Fax number: 928-725-3731 aw2927@yahoo.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|------------------------------|-------------------------------|
| Rocky Ridge Boarding School | Dinnebito, Navajo County, AZ | School |
| University of Arizona - College of Public Health | Tucson, Penal County, AZ | University |
| Hardrock Chapter | Hardrock, Navajo County, AZ | Local Governance Organization |

Community Characteristics

Area:
The coverage area for the outreach grant is the Hardrock community, which is located in the heart of the 27,000 square-mile boundary of the Navajo Nation and is part of Navajo County in northeastern Arizona. Hardrock, known as the former Joint Use Area (JUA), is the site of one of 110 local government subdivisions, identified as "chapters", which are established across the Navajo Nation.

Community Description:
Health disparities, especially substance abuse and diabetes, are critical issues for the Hardrock community. Hardrock lacks a legal solid waste disposal system, and it lacks an adequate system of paved roads. Many Hardrock residents live in widely dispersed home sites and lack running water, sewers, electricity and adequate insulation. Only 45% of the homes have water and electricity; 14% have electricity only; and 10% have only running water. Most residents rely on firewood and coal for cooking and heating. The median household income in 2000 was \$21,135 and the per capita income was \$7,578. The Hardrock unemployed workforce was 25.2%, which was comparative to the Navajo Nation rate of 25%. At that same time, the state of Arizona unemployment rate was 3.9% while the United States overall rate was 4.0%. The two major employers in the area are the Bureau of Indian Education (BIE), who operates the Rocky Ridge Boarding School, and the Navajo Nation, who employs the Hardrock Chapter administration. Together, they employ over seventy community members.

Need:
The overarching need is to decrease substance abuse and to increase access to and participation in substance-abuse prevention, education, wellness/leadership activities and intervention/treatment programs. The consortium developed an integrated community-based partnership to address these issues. Consortium members include the Hardrock Council on Substance Abuse Inc. (HCOSA), Rocky Ridge Boarding School, and the Mel and Enid Zuckerman College of Public Health (MEZCOPH) Center for Health Equality at the University of Arizona. Together partners developed and implemented a comprehensive, culturally appropriate outreach and

education program. The intervention was targeted specifically to reach Hardrock youth and their families, while building stronger linkages to promote and increase the utilization of existing mental/behavioral health services within the Hardrock community.

Program Services

Focus Areas

Behavioral/Mental Health
Health Education and Promotion
Integrated Systems of Care
Physical Fitness and Nutrition

Target Population

School aged children - elementary
School aged children - teens
Adults
Elderly
Native Americans
Uninsured

Description:

The Behavioral Health Specialist conducted mental/behavioral health screenings, as well as collaborated with local Behavioral Health Programs to process clients to treatments facilities when necessary. The youth program provided educational opportunities for student to develop leadership skills, become environmentally aware, as well as become familiar with the Dine Philosophies of living. The youth have also been participating in an annual mountain biking trail ride, known as Tour De Rez. This event provided the kids with an opportunity to camp out and enjoy nature. The Youth Coordinator also provided tutoring and sports activities to the dorm students at Rocky Ridge Boarding School.

Role of Consortium Partners:

Rocky Ridge Boarding School provided the facility to hold outreach and educational activities for the youth and families. The school employees also participated in the sustainability work session conducted with the Georgia Health Policy Center Technical Assistant. The University of Arizona, College of Public Health assisted with evaluations, as well as research on the prospects of bringing telemedicine to Hardrock. The Hardrock Chapter was instrumental in dealing with program management details and providing office space.

Outcomes

Outcomes data was unavailable at time of submission

Challenges & Innovative Solutions

The number of students coming to the programs varied day to day. Therefore, all the activities had to be flexible with back-up plans. Back-up plans are good solutions to this problem. The curriculum also had to be culturally relevant so each facilitator had to build his/her own curriculum, using ideas from similar programs, as they moved forward into the program. A solution to this would be to have required each facilitator to write down the curriculum they developed, as they worked it. A challenge for any program director in this community is to help people stay organized, to be accountable and responsible. This is because programs like this have never been available in our community before. A solution to this may be to teach people to take on more responsibility gradually rather than expect them to take on all responsibilities immediately. The Behavioral Health Specialist became overloaded with too many court ordered clients. A solution to this problem would be to hire more certified counselors.

Sustainability

On-going Services and Activities:

Two areas for sustainability are the youth program and the substance abuse client services. The organization has secured two additional grants to keep these programs happening. The youth leadership program has been an important part of the sustainability of this program, since the youth leaders are now trained to work with their peers. Having the youth serve as facilitators has been a very effective model for this community versus having adults in that role. Through a focus on youth development, the program has helped build capacity for more youth leaders in the community. For the substance abuse counseling program, the organization will expand the geographic area for services and solicit those communities to provide resources to support the service. Also, another grant was

obtained by the organization to build infrastructures and telecommunications for telemedicine services at the Hardrock Chapter. This will help in the sustainability of the programs.

Sustained Impact:

Some of the long-term effects will include impacts on youth, on relationships between the organization and the communities it serves, and on interpersonal relationships. Those youth who have been trained in the Hardrock Youth Leadership program will have the skills to keep training other youth in their leadership aspects. Clients in the substance abuse counseling program will be supported by their local community resources, building those ties back to their home community. Individual young people who have been impacted by the activities of the youth program are using their skills today. For instance, one young woman who took part in the micro-business creation training is now marketing her cakes and cupcakes locally and making money for her college expenses. Because of the struggles that many people experienced and the obstacles that many people faced in working together to bring about positive change in the community, this type of experiential education has resulted in building successful relationships among community members and helped them apply their learning in other jobs in the community. In a community that has been oppressed for so long, people can lose hope. However by working together toward a common goal, hope can be restored.

Implications for Other Communities

For other communities, we might be able to share some of our successes and frustrations, but collaboration with like communities was initially difficult, since there were no other individual small Native American communities active in the grant program. We had unique problems and questions. For instance, how did other programs find ways to not seem competitive with government health facilities and build collaborative ventures? The local government services responded to our initiatives as competition and were not supportive. Also, our community does not have resources from other organizations to ask for help and we may be unique in these ways. Therefore our implications may have limited helpfulness for other communities, unless they are located on Native American tribal reservation lands. We may be perceived as a model for such communities. Some implications for these communities may be to address the immediate crisis needs of the people in a small scale, one at a time, and also to investigate the history of the community to begin to resolve the effects of historic oppression and start the healing process.

ARKANSAS

Conway Regional Medical Center

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH16368 |
| Grantee Organization | Conway Regional Medical Center |
| Organization Type | Non-profit organization |
| Address | 2302 College Avenue, Conway, AR 72034 |
| Grantee organization website | www.conwayregional.org |
| Primary Contact Information | Kathy Bright, R.N. Program Director Phone number: 501-513-5904 Fax number: 501-932-0106 kathy.bright@conwayregional.org |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$149,998 May 2010 to April 2011: \$124,926 May 2011 to April 2012: \$99,995 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|-----------------------------|------------------------------------|
| Faulkner County Council on Aging, Inc. | Conway, Faulkner County, AR | quasi-state government entity |
| Unity Adult Care Center, Inc. | Conway, Faulkner County, AR | for-profit |
| Home Instead Senior Care | Conway, Faulkner County, AR | for-profit |
| Conway Regional Medical Center | Conway, Faulkner County, AR | hospital (the grant administrator) |

Community Characteristics

Area:

The target service area for this Outreach grant was a five-county area in north central Arkansas: Cleburne, Conway, Faulkner, Perry and Van Buren. The town of Conway, where the grantee is located, is in Faulkner County.

Community description:

Many pertinent factors impact people throughout Arkansas and those who reside in the Outreach service area. Arkansas has the second highest (worst) poverty level (17.3%) among all 50 states. It also has the ninth highest state ranking (14.3%) for resident population of 65 years and older. The America's Health Rankings™ - 2007 Edition, prepared by the United Health Foundation, showed that Arkansas ranked 48th out of 50 for overall health, and for mental health, it ranked 43rd. While almost 30% of Americans (age 25 and above) have a bachelor's degree or higher, only 19% of Arkansans in the same age group have attained this education level. The five-county Outreach service area has a population of 188,220 (2010 U.S. Census). Between 2000 and 2010, the population in Conway, the largest town in our service area, increased by 30.23% to 56,218. However, the remaining service area continues to be quite rural and faces many barriers to healthcare access.

Need:

This Outreach program focused on the need for mental health services for seniors and the lack of public transportation for them to reach a mental healthcare service center. All five counties are designated as Health Professional Shortage Areas (HPSAs) for Mental Health and as county-wide Medically Underserved Areas (MUAs). The United Way of Faulkner County (which includes the town of Conway) conducted a countywide needs assessment in 2007. The top two issues among the responders were lack of affordable healthcare and lack of public transportation. Still, today, no public transportation services are available in any part of the five-county service area. A major factor to overcome is the public stigma and public's limited understanding of mental health issues.

Program Services

Focus Areas

Aging
Behavioral/Mental Health
Health Education and Promotion

Target Population

Adults
Elderly
Caucasians
African Americans
Latinos
Native Americans
Uninsured
Underinsured

Description:

Conway Regional Medical Center administered and provided fiscal management for the Outreach grant program. Our consortium partners (two transportation providers and the Council on Aging) and our advisory board (representatives from AARP, Conway Regional Health System, Arkansas Hospice, and several other individuals) provided resources and expertise. The program services and activities were:

1. Establishing a mental health outpatient clinic for seniors: The Senior Evaluation and Counseling Center (SECC) opened in March 2010. Services include: neuropsychological testing (testing of memory and thinking skills), mental health evaluation and counseling, a personalized plan of care, medication evaluation and management, individual and family therapy, case management by a registered nurse, and referral sources of senior services and information about nonprofit agencies that provide social services for seniors. The SECC website is: <http://www.conwayregional.org/body.cfm?id=570>
2. Launching a public awareness campaign on mental health issues: The campaign began in April 2010 and continued throughout the outreach grant program. We distributed our SECC brochures at health fairs, community events, and CRMC meetings. It included a live broadcast from the SECC on Today's THV, a statewide television station and articles in newspapers. Our SECC neuropsychologist spoke at several large events.
3. Presenting the Savvy Care-Giver Seminar on multiple occasions: These one-day workshops provided practical "how-to's" and resources for persons (loved ones as well as healthcare professionals) who provide care to seniors.
4. Presenting "Meet and Eat" programs on multiple occasions: Each of these one-hour programs addressed a different mental health topic. Attendees were healthcare professionals and other interested persons.
5. Promoting the new mental health clinic and its services to potential referral sources and groups of seniors: The SECC staff made presentations to groups of healthcare providers and met individually with primary care physicians and others. They also presented short after-lunch programs to seniors who gathered at the Council on Aging's senior centers for congregate meals. The CRMC Marketing Department created a brochure about the clinic. It continues to be distributed.
6. Evaluating the program: A formative evaluation by an external well-qualified team involved a combination of quantitative and qualitative measurement approaches. It was scrutinized by the Institutional Review Board at Arkansas State University.

Role of Consortium Partners:

- Conway Regional Health System provided subsidizing and backing of salaries, benefits, administrative overhead, maintenance, meeting space for consortium meetings, and medical director's stipend.
- The Faulkner County Council on Aging, Inc., operates six senior services centers in the Outreach target service area. It serves congregate meals to seniors each week day at these centers and it also delivers meals to the homes of other seniors. Its role in the Outreach program was to refer seniors and their caregivers to the SECC, to host several 30-minute presentations by SECC personnel to the seniors after their congregate meal, and to distribute SECC information to other seniors when delivering meals to them at their homes.
- Unity Adult Care Center and Home Instead Senior Care already provided transport services for their clients offered to expand it to include the Outreach program application. As the project evolved their services became unnecessary and as such they served as advisory rather than service delivery partners.

Outcomes

The Outreach grant had many successful outcomes.
As of March 2012:

- 516 non-duplicated patients have made 1,869 visits to the SECC. (The clinic opened in March 2010 which was near the end of year one of the grant period.) Also, the number of returning patients has demonstrated consistent growth.
- We have held 6 "Meet & Eat" programs with a total attendance of more than 115 healthcare professionals and other interested persons.
- We have presented the Savvy Care-Giver Seminar on 10 occasions to a total of 63 participants. For each presentation, the maximum was seven participants.

In 2010, the external evaluation team conducted a focus group study with 12 patients/caregivers. In the group, 75% were currently in treatment at the SECC and 25% were caregivers. They were between 62 and 85 years of age. The patients appeared to have slight to moderate symptoms of Alzheimer's disease. The procedure for evaluating the data was content analysis. The participants verbalized overwhelming support and enthusiasm for the center. The aggregate evaluation results from this focus group project were presented in May 2011 at the Intellectbase International Consortium Conference in Nashville, Tennessee. A paper based on this presentation was accepted by the International Journal of Social Health Information Management and published in the July 2011 issue.

In 2011, the external evaluation team conducted electronic interviews with consortium and advisory board members. Overall, they were positive and very complimentary about the services and personnel associated with the SECC. In addition they indicated their needs and verbalized appreciation and enthusiasm for the programs, the center and staff. They emphasized the uniqueness of services and desire for the program to continue to serve patients from the Conway community and surrounding counties. They also recommended semi-annual presentations from SECC personnel regarding activities and outcomes of the SECC.

At the close of the grant funding, the evaluation team and the staff will evaluate the program as a whole, its educational components, and the patient services. The team will also be evaluating the third year data for pre and post- test survey differences in Quality of Life variables at the time of service delivery and data submission.

Challenges & Innovative Solutions

We faced several issues in the early stages of the Outreach program, but the solution for each provided us with a much stronger program.

- A major decision that required attention throughout the 3 years of the grant was CRMC's determination about whether the center would be provider-based or free-standing. We elected to make it a free-standing entity. This has fewer restrictions.
- Our original plan was to hire an Advance Practical Nurse with Emphasis in Mental Health when the clinic opened. We did not find a qualified APN, but we were more than pleased to hire a highly qualified, experienced neuropsychologist. Having a neuropsychologist on staff elevated the capacity and reputation of the SECC. A neuropsychologist can provide services that an APN is not qualified to do. These include cognitive testing, follow-up, and diagnosing mental health conditions. These services have a much higher reimbursement rate than the services of an APN. For these reasons, we adjusted our plan for year one to focus on promoting our neuropsychologist and our psychiatrist and we delayed promoting the services of our LCSW. This provided us, early on, with an excellent patient load and a revenue stream of reimbursements. Also, when our patient load expanded more than we anticipated, we added a second geriatric psychiatrist.
- Shortly after the program began, we found it difficult to maintain strong communication and exchange ideas between the advisory board and the consortium partners. Our solution was to merge these entities. Rather than quarterly meetings as planned, the group met each month. They discussed patient transport issues, exchanged ideas, suggested referral sources, and provided resources to enhance the program. They also discussed other common issues and developed a five-county resource list.
- We overestimated the patients' need for transportation to and from the SECC. Transportation issues never materialized. Many of these patients had their own personal transportation resources and many Conway-based residential senior care centers provide transport service.

Sustainability

On-going Services and Activities:

- The SECC will continue providing mental health services for seniors without our making any major changes. The main source of funding will continue to be reimbursements for medical services.
- The promotion of the SECC to referral sources will continue as needed.
- The mental health public awareness campaign will move from a marketing focus to a community education mode. The need to reduce the stigma surrounding mental health must never be minimized and is the foundation that determines the very

acceptance of the evaluation and counseling clinic. Normalizing and demonstrating that mental health is a part of any person's health will be central to our Advisory Board's efforts and philosophy.

- Meet and Eat luncheon sessions will be scheduled as needed. The staff of the Senior Evaluation and Counseling Center continue to be available to speak to groups and to participate in Health fairs and speaking engagements
- The Savvy Care-Giver Seminars will be customized to have more specific target participants. Our hope is to reach and educate more caregivers by offering more convenient attendance times. We have observed the very positive benefit of peer sharing and support that the participants naturally exhibit in these classes and will continue to foster this added benefit. The attendees will continue to pay a nominal participation fee, and Conway Regional Medical Center will continue to provide some in-kind support.

Sustained Impact:

The opening of the first outpatient mental health clinic for seniors, combined with our first public awareness campaign on mental health issues, has brought new discussions on mental health to the fore. The SECC neuropsychologist has engaged groups of all sizes in open dialogue on mental health concerns.

An unexpected long-lasting impact of our Outreach program has been from the five-county resource list that was created by our advisory board and consortium partners. Nonprofits that serve seniors will continue to share and update the list and make referrals to one another to benefit our seniors and their caregivers.

The advisory board and consortium partners acknowledged the benefit of strong supportive relationships that evolved through the entire grant process, and we as a group have elected to continue as a group and focus on improving the senior health services for our five-county catchment area. We have developed terms of reference and broadened our membership to include community stakeholders with a vested interest in senior care. We now include an Elder Lawyer, the Medical Director of the SECC, and a member of the University of Central Arkansas Nursing Department as members of the Conway Regional Senior Health Advisory Board. We plan to add a member of Law Enforcement as well. Our focus will be to move the Senior Health Care Needs forward and to strive to continue to develop services that will meet the needs of our growing senior sector. An integrated approach to wrap-around care has limitless possibilities when we are committed and focused to achieve our goals. There is much work to be done and a group of very committed stakeholders willing to do that work collectively and purposefully. The benefits of the grant-funded Senior Evaluation and Counseling Center will launch continued networking and health care improvement. Our goal is to utilize best practices and evidence-based approaches as we continue to develop the senior mental health services in our five-county catchment area. We are an eager group of Champions for the increasing care needs of our sector!

Implications for Other Communities

Communities interested in providing mental health services for seniors with dementia will want to promote the importance of early diagnosis and treatment. Our SECC Geriatric Psychiatrist has explained, "You can have dementia and feel very miserable in a family that is suffering, trying to cope with the disease and not understanding it, or you can have dementia, and through education and support, improve the quality of life for everybody." In many instances, the whole family is "treated" in family counseling sessions by the SECC staff. Aging may be the number 1 risk factor for Alzheimer's, but it is not a natural part of aging, according to our SECC Neuropsychologist. The prevalence increases every five years after age 65. Yet if one is beginning to experience mild symptoms, it does not mean that the patient cannot do tasks and even work. It also has been found that a patient in the aftermath of evaluation became less anxious after a diagnosis of dementia — and so did his/her family.

Our program's success can be attributed, in part, to the location and setup of our outpatient clinic. We placed it away from the medical center campus and on a main thoroughfare. This provided easy access, name recognition, and presence. Also, the location may be part of the reason we did not need to provide patient transportation. Moreover, the clinic is in a modest stand-alone facility with adjacent parking.

The trend of increasing numbers of Alzheimer Disease and Dementia Diagnosis, along with the Baby Boomer tsunami of soon-to-be seniors, substantiates the urgent need for community services to meet the needs.

ARKANSAS

Corning Area Healthcare, Inc.

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12734 |
| Grantee Organization | Corning Area Healthcare, Inc. |
| Organization Type | Non-profit |
| Address | 1300 Creason Road, Corning, AR 72422 |
| Grantee organization website | N/A |
| Primary Contact Information | Brigitte McDonald Executive Director Phone number: 870-857-3399 Fax number: 870-857-9934 brigmcdonald@yahoo.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$134,983 May 2010 to April 2011: \$124,724 May 2011 to April 2012: \$99,946 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|------------------------------|--------------------------|--------------------------------|
| Mid South Health Systems | Jonesboro, Craighead, AR | Community Mental Health Center |
| Black River Area Development | Pocahontas, Randolph, AR | Community Action Agency |

Community Characteristics

Area:

The service area includes the entirety of Clay, Lawrence and Randolph Counties Northeast Arkansas.

Community description:

Northeast Arkansas is an almost entirely rural area covering 2,528 square miles. The major industries are agricultural, manufacturing, retail, food service and service related such as education, health services and social services. The service areas are Clay County, Lawrence County, and Randolph County. Approximately 20% of all children live in single parent households. The factors that lead to high number of single parent households are high rates of birth to single mothers and high divorce rates. According to 2000 U.S. Census results and subsequent data analysis, grandparent headed households is the fastest growing household type in the U.S. and Arkansas is one of the fastest growing states. There are 50,286 children in Arkansas living in grandparent-headed households and 22% of these families live in poverty.

Need:

Project REACH is driven by a recognition that the health care system often fails to address the needs of children in poverty. Consequently, children, and their parents, lack understanding of and access to appropriate health services. Poverty, residence in a rural area and lack of health insurance are associated with poor health outcomes for children. Project REACH addressed those issues by providing avenues for children to receive quality physical and mental health care, and for parents to receive education and support for their own well-being and the long-term health of their children. All three counties are designated as "Medically Underserved Area" and "Health Professional Shortage Area" by the U.S. Department of Health and Human Services, Health Resources and Services Administration.

Focus Areas

Access: Primary Care
 Behavioral/Mental Health
 Children's Health
 Health Education and Promotion

Target Population

Infants
 Pre-school children
 School aged children - elementary
 School aged children - teens
 Adults
 Elderly
 Pregnant Women
 Caucasians
 African Americans
 Latinos
 Uninsured
 Underinsured

Description:

- Hired technical consultant to assist in identification of barrier that exist for parents in seeking medical and mental health assessment and treatment for their children. Conducted 3 focus groups to identify barriers to child healthcare and possible solutions to those barriers. The consultant provided a written report on focus groups. The consortium collaborated to implement ideas identified from interviews and focus groups.
- Identified gaps in the existing Early Periodic Screening, Diagnosis, and Treatment (EPSDT) screening forms and procedures. Arkansas does not have an organized or mandated process or form system for EPSDT screenings. Produced a finalized EPDST form.
- Developed and distributed community specific brochures, posters, table displays, media ads, radio, and newspaper articles about EPSDT screenings and how parents can access the services. Educated Black River Area Development Head Start teachers, staff, and parents about EPSDT. Educated clinic staff about EPSDT. Collaborated with local schools to provide EPSDT information. Project REACH partnered with educational and community based programs to further encourage children's health. Expanded the membership of consortium with public school nurses.
- Project REACH relied heavily on the ability of the physicians and mental health professionals to meet parents and children, relate to parents and children, and build trust with parents and children. Project REACH increased screening rates for children age 0 – 18 in the target area from year 2 to year 3 (with a projected increase of 23% from year 2 to year 3). Received monthly data and brief periodic reports on progress (comparing to previous years).
- Substantially increased the proportion of children with mental health problems who receive treatment. Similarly, dramatically increased the proportion of children who received medical treatment through a primary health care clinic. A full time LCSW was located within the three primary health care clinics. A part time LCSW was located in primary health care clinic. Provided individual and family therapy at the Corning and Walnut Ridge Head Start.
- Developed an infrastructure to enable continuation of program gains and to ensure continued progress. Developed a written sustainability plan.

Role of Consortium Partners:

The grant program had a very active consortium. This opportunity provided consortium partners to develop stronger working relationships and jointly plan and implement multiple activities. Each consortium member played an active role in the project.

- **Corning Area Healthcare, Inc. (CAHI)** acted as the grantee and fiscal agent for the grant and staffed the program with a project director at 10% effort and provided the day to day management needed for program implementation and oversight.
- **Mid South Health Systems (MSHS)** provided two mental health professionals (MHP) for Project REACH. Both MHP's were housed in each of the community health center clinics located in the three county target area (integrating mental health and primary care services).
- **Black River Area Development (BRAD) Head Start** family service worker worked with CAHI and MSHS to make referrals and provide access to families. The agency provided technological equipment and office space.
- **Arkansas State University Office of Behavioral Research and Evaluation (OBRE)** served as the contract evaluators for Project REACH. Developed evaluation materials, developed and implemented methods for gathering data at numerous locations, development and training for focus groups and interviews.

Outcomes

The program resulted in a more efficient referrals and coordinated system of care with better access to mental health and medical services. The model of the integration between mental health and primary care decreased the stigma associated with receiving mental health services. These changes of the practice care model have led to better efficiency, ease of access and greater flexibility.

Improvement in the awareness of preventative/behavioral care in the community and by providers was due to:

- Over 5000 brochures were distributed; displays were set up at over 30 various health fairs, schools events, etc; and at least 9 media advertisements were placed.
- Nearly 4000 children have received well child screenings over the 3 year grant period.
- The number of children receiving medical treatment through a primary healthcare clinic has increased dramatically; less than 4000 children were given treatment in year 1, with over 10,000 receiving treatment in each of years 2 and 3 of the grant period.
- The existing EPSDT screening forms and procedures were revised so that they are more comprehensive and effective.

Challenges & Innovative Solutions

Project REACH was challenged with engaging middle and high school parents and teens. We looked at effective ways to raise their awareness and gain participation in our program by the provision of age appropriate flyers on subjects of interest for teens for dissemination at schools and community events.

Another challenge was access to services because of working parents, transportation issues, and the increasing cost of fuel. CAHI provided Saturday hours at all locations. Kids Night Out was another solution, providing weekday services (with EPSDT screening available) from 5-7 p.m.

A barrier to the project was in educating parents to think about preventive well child exams, especially children over age 5. Health Fairs and educating the public of need of preventive services were provided throughout project period.

It was also challenging to gain provider buy-in to integrating Mental Health Professionals in primary care. Primary care physicians lack the understanding of Crisis intervention vs. providing routine services. Project REACH improved the referral process, built rapport, identified flows in billing process, improved miscommunication of services, and provided provider luncheon for the mental health professional and primary care where we discussed our vision and discussed barriers. Openness in discussions about issues, meetings collectively with behavioral health and primary care to promote teamwork. The brief initial assessments, interventions, and therapy sessions have been adjusted to accommodate needs better within the community health clinics.

Sustainability

On-going Services and Activities:

Project REACH is sustainable. The grant funds served as seed money to hire the necessary mental health professionals and consultants to bring Project REACH from concept to reality. Because the target populations are low-income children and their parents, sustainability comes mainly from Medicaid, state funds i.e. Title 20 ADAP Medicare, reimbursement. As the mental health professionals provide assessment and therapeutic services to an increasing number of clients each year, the number of anticipated encounters will be more than sufficient to continue the salaries.

The main components of the grant-funded program will continue after the grant period ends.

- We will continue to increase access to and participation in healthcare for children in Randolph, Lawrence and Clay counties
- Serve Head Start with a therapist in place for all 3 locations for observations and mental health services.
- Administer EDSDT screenings (well child exams)
- Offer mental health services at all 3 community health center clinics with the implementation of the Cherokee model where possible. Services will include the REACH brief assessment, diagnostic assessment, and individual and family therapy.

Sustained Impact:

More than just specific services, the grant program initiated collaborations that have already born fruit, such as the development of new grant proposal, continued discussions of integration of services, and collaborative longer-term plans. Thus, this project has

strengthened the relationship among partners. Without the grant, such events would not have taken place. Each such event can be expected to have a positive impact on the community population in many ways.

We have successfully retained two mental health professionals in the 3 CAHI health centers. The collaborations efforts were strengthened between CAHI, MSHS and BRAD. Ultimately, we have taken one giant step forward toward integrated care.

Overall, the project has raised awareness and the need for improved outcomes.

Implications for Other Communities

Other communities might benefit with increased mental health services. Project REACH provided more mental health services because patients were present at the medical clinic for services. The stigma of services is addressed by integrating mental health services into primary care setting. Increased awareness and the provision of services for underinsured on mental health is expanded through the identification of diversified, financial resources.

Communities should begin by getting the medical staff to buy in to working collaboratively with mental health professionals. The brief initial assessments, interventions, and therapy sessions may have to be adjusted to better accommodate needs within community health clinics. Provide avenues for children to receive quality physical and mental health care and parents to receive education and support for their own well being and the long term health of their children.

ARKANSAS

White River Health System

Organizational Information

| | |
|---|--|
| Grant Number Grantee Organization Organization Type Address Grantee organization website Primary Contact Information | D04RH12736 White River Health System Hospital 1710 Harrison St., Batesville, AR 72501 http://www.whiteriverhealthsystem.com/ Angela Dugger Program Director Phone number: 870-262-1927 Fax number: 870-262-3248 adugger1@wrmc.com |
| Project Period Funding Levels | 2009 – 2012 May 2009 to April 2010: \$147,608 May 2010 to April 2011: \$116,238 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|--|--|
| UAMS Area Health Education Center North Central White River Planning and Development District | Batesville/Independence/AR Batesville/Independence/AR | AHEC Economic planning organization |

Community Characteristics

Area:
 The target population for the Wellness Works Program focuses on adults who live and work North Central Arkansas including: Cleburne (population 25,485), Fulton (population 11,756), Independence (population 34,909), Izard (population 13,356), Jackson (population 17,426), Lawrence (population 16,899), Sharp (population 17,963), Stone (population 11,981), and Van Buren (population 16,718) U.S. Census.

Community description:
 The rugged terrain of these exceptionally rural counties and geographically dispersed, underserved and underinsured populations create current barriers to efficient healthcare and chronic disease prevention efforts. These counties are characteristically uninsured and underserved. All target counties are federally designated as Medically Underserved Populations (MUP) and all except for Cleburne are also designated as a Healthcare Professional Shortage Area (HPSA). Other factors that influence life in this part of rural Arkansas include low socioeconomic and educational status, low health literacy and the burden of chronic diseases, including diabetes, stroke, heart disease and cancer is higher in Arkansas than in the nation generally.

Need:
 Arkansas is one of the least healthy states in the country. Heart disease and stroke continue to be the leading cause of death in Arkansas and the nation. The burden of chronic disease in Arkansas and the increased risk of citizens in the state to chronic diseases are directly linked to a lack of physical activity, poor eating habits and poor lifestyle choices, including the use of tobacco products. This region is included in an area of North Central Arkansas that has been designated as long-term economically deteriorated by the U.S. Department of Commerce, Economic Development Administration. This has a significant health impact and a peripheral economic development impact on the Region. Accordingly, the overarching need addressed by this network chronic disease prevention for employees and community health stakeholders in North Central Arkansas.

Focus Areas

Health Education and Promotion
 Worksite Wellness

Target Population

Adults
 Caucasians
 African Americans
 Latinos
 Uninsured
 Underinsured
 Employees of local businesses

Description:

Preventative health screenings are on-going chronic disease prevention services offered to worksites and communities where they live and work.

Services include: flu shots and screenings for blood pressure, cholesterol, glucose, body fat, and body mass index measurements in order to determine individual risk for stroke, heart disease, diabetes, and cancer among the exceptionally rural and underinsured.

The Wellness Works Program offers chronic disease screening services on-site for a fee of \$30 per person and flu shots for \$20 each. Employers are provided valuable aggregate data in the form of an Executive Data Report regarding which health risk factors they are most vulnerable to as a group. This valuable information can be used to determine future benefit needs, health education needs and worksite wellness program focus. In the community, data driven preventative health screening opportunities generate aggregate data and are shared with local health departments and other community health stakeholders. All individual health information is protected by HIPAA.

Health Education

Linguistically and culturally appropriate health education and health literacy materials are provided to a population with high health disparities, as they relate to socioeconomic status. Materials included brochures at all worksite wellness events and poster displays in five counties located in 36 different businesses. Individuals receive one-on-one counseling from a healthcare provider and are encouraged to set short-term wellness goals. Many individuals also participate in follow up health screenings after they have engaged in an intervention activity for at least 90 days. Wall mounted educational displays are used in 36 different business and community locations to help focus attention on specific preventable chronic diseases that are prevalent among this population. Each quarter all posters and brochures are changed to create a fresh look.

Organizational and Behavioral Support - The organizations referred to here are local businesses, and this Outreach Program supported their efforts to create a healthier workforce by first giving them valuable feedback about the health of their employees through health screenings. Second, the Outreach Program supported healthy behavior changes by employees by helping them make the healthy choice the easy choice. Several pilot projects were initiated to determine what kinds of activities motivated employees to decide to make and sustain a healthy change.

Pedometer Project – 230 individuals participated in a 90-day walking project called 10K a Day Is the Way that resulted in more people physically moving throughout the day more often. Each person carried a GOsmart pedometer each day in order to accurately count each of their steps. These digital “smart pedometers” come with software that allows the user to download their step information on to a computer and then generate individual reports based on their level of physical activity. The goal was taken from CDC’s recommendation that healthy people should take 10,000 steps each day. The GOsmart software also allows individuals to submit step reports to the Program Coordinator so that individual and group progress can be tracked. Incentives were used to encourage participants to keep moving and awards were given at the conclusion of the project for specific achievements. Project Communication was an on-going. Participants received a weekly newsletter via email. The objective of the newsletter was to motivate participants, provide safety and health tips, and reminders of upcoming submission deadlines for step reports. Project evaluation was an on-going aspect of measuring success. Participants were encouraged to respond to weekly emails with questions and concerns and they submitted responses to two different surveys (mid-point & post project).

Diabetes Education Project: UAMS / AHEC – North Central Diabetes Education Project

The overarching goal was to educate the population at large to help individuals self identify as “at risk” for diabetes. In an effort to provide services to individuals at risk or already suffering from diabetes, a three prong approach was taken to identify individuals who could benefit from project services: direct mail campaign, DSME brochure was created, outreach event conducted. Direct mail cards and project brochures were created to provide an easy to read and understand listing of diabetic signs and symptoms. Individuals who

felt they may be at risk for diabetes were asked to call and schedule an appointment to be screened at the upcoming Outreach Event. There were 7,200 direct mail pieces distributed. The goal was to increase by 20% enrollment of individuals into the UAMS / AHEC Project who had already been diagnosed with diabetes. This was equal to six new participants in a three month period. A minority health screening was conducted in Batesville for the Hispanic population and approximately 10 DSME brochures were distributed. Promotion of the UAMS / AHEC - DSME Project was thru radio advertisements on local radio stations. 160 radio spots aired on four radio stations.

Community Garden Project – The overarching goal of this project was to encourage individuals to eat more fruits and vegetables more often. The purpose of the White River Community Garden (WRCG) Project is to provide a place where locals can participate in an activity that will promote a healthier lifestyle through increased nutrition and can be shared with others who do not directly participate in the project. The garden was initially started by the Master Gardeners group and had 12 raised gardening beds filled with topsoil. The pilot project added 14 additional garden beds, each with its own water access. A tool shed to house community garden implements was completed and a deck was added with rails and an ADA ramp. Curbing and a fence was also added around the property to deter deer and other animals from eating the plants. Soil tests were conducted by the County Extension Office and extra nutrients were added to each bed to enrich the soil.

Breast Cancer Screening Project– The overarching goal of this project was to provide low income, uninsured or underinsured women living in Jackson County access to a free clinical breast exam and screening mammogram. Free clinical breast exams were offered with the opportunity to qualify for a free screening mammogram. Screening mammogram costs were covered by a grant from the Susan G. Komen Foundation for eligible women 40-64 years of age and 20-39 years of age with a family history or clinical risk as determined by a physician, and who had not had a mammogram in the last 12 months. Advertisements were placed in two different local newspapers and direct mail was sent to 3,148 women ages 30-64 living in Jackson County. Flyers were posted in various places throughout the county including beauty shops and local grocery stores.

Role of Consortium Partners:

White River Health System:

- Administrative and programmatic direction for grant project;
- Coordination of preventative health screenings in the worksite and community setting
- Coordination of data mining, analysis and dissemination
- Coordination of health education materials and dissemination of information

AHEC:

- Promote cooperation and coordination among communities, health care providers, educational institutions, and health related organizations
- Create systems for learning and networks for information dissemination in support of health care providers in underserved communities
- Promote improved health, disease prevention, primary health care services and cost containment through educational interventions

White River Planning and Development District: is this region's economic planning organization and has enjoyed a working relationship with White River Health System since 1972.

They have engaged in strengthening this outreach effort by:

- Providing invaluable expertise and networking connections locally, statewide, as well as nationally to move forward the Consortium's efforts
- Visiting with other model networks
- Compiling community resource data
- Compiling worksite and community health risk data
- Disseminating data to community health stakeholders
- Mapping outreach activities offered throughout the region
- Implementing measures to sustain efforts at a level acceptable to this region and its resources.

Outcomes

Preventative Health Screenings Outcomes- This data driven chronic disease prevention effort has been worksite and community focused. During the past three year grant cycle ten businesses have added this service as a reoccurring line item in their operations budget. Services fees continue to be \$30 per person for a full service event that include screenings for blood pressure, cholesterol, glucose, body fat, and body mass index measurements in order to determine individual risk for stroke, heart disease, diabetes, and cancer among the exceptionally rural and underserved. Over the past three years:

- 131 separate events were conducted at community locations and worksites
- 5,027 lives were touched by this program
- 4,127 individuals received full service event services
- 918 flu shots were administered

Health Education Outcomes- Individualized health education supported by White River Health System clinicians is provided to participants of preventative health screenings. Clinicians review and explain to participants what the diagnostic results mean for them and their current health status. Risk factors are identified and participants are encouraged to set short-term goals to improve their overall health outcomes and increase their quality of life. Overall health of those retested during the past three years was determined to be improved and sustainable with continued attention to physical exercise and proper nutrition. Over the past three years:

- 5,027 individuals received appropriate health education materials
- 4,127 individuals received one-on-one health education with a healthcare professional and were provided materials corresponding to their identified risk factors.
- 90% of participants set short term goals over the past three year period

Pedometer Project Outcomes - The participants reported over 116,288,550 steps or approximately 49,427 miles during the eighty-nine reporting days of the program. The average daily steps per participant were 5,680. Participants reported 5,870 days of achieving at least 10,000 steps. Based on this data it would appear that the goal of achieving 10,000 steps a day was not achieved, but the true objective was to get participants to increase their physical activity. Based on participant feedback and walking reports, it is evident that the program was a tremendous success. Since the completion of the program, numerous participants have inquired about having another similar program. Participants for the most part liked having themselves held accountable. The prizes were a great motivator. As the program neared completion, it was amazing to see the competitiveness and ambition to achieve greater step levels beyond the 750,000 step level. Twenty-four participants achieved 1,000,000 steps or more.

Diabetes Education Project Outcomes - 16 referrals were made to the project, 14 individuals actually enrolled. This exceeded the goal by more than double.

Community Garden Project Outcomes- All 14 beds are currently rented to local families and individuals. The location of the garden lends itself to a special camaraderie among gardeners and the opportunity to create a unique support network throughout the community. Many gardeners share and trade their produce with other gardeners and their families throughout the growing season. The fence serves as a new attraction to the garden while keeping crops safe from animals. The new ADA ramp allows the facility to be accessible to all individuals. The added attractiveness and productivity seen from the street by passersby, attracted more interest in the garden itself, and all beds are currently rented for the current growing season.

Breast Cancer Screening Project Outcomes - Outreach Grant funding was used to leverage additional grant funding to provide 30 screening mammograms to women who otherwise would not have received this service. A total of 43 women registered for the event and 32 actually participated. All participants received a free clinical breast exam and a physician's order for a screening mammogram. Of the 32 mammograms ordered, five of those were diagnostic, indicating an abnormal finding by the physician during the clinical breast exam, 27 women were uninsured and three were underinsured. Of those participating, nine women received an order for their first screening mammogram, only two had received mammograms in the past year, seven women in the past two years, eleven women had skipped having a mammogram in 9 years and for three participants it had been 10 plus years since their last mammogram. This event will be expanded into two more counties during the next twelve months.

Challenges & Innovative Solutions

Local healthcare providers did not play as an integral role in this program as originally hoped, however Program outcomes have been tremendous in their impact on worksites and individual pilot project participants. Anticipating these challenges, the Program Director

and board members took proactive steps to include stakeholders in the planning process and implementation process of the Wellness Works Program, ensuring their needs were met and they had continuous motivation to participate.

Reaching an exceptionally rural and vulnerable population has been one of the largest challenges of this Program. Year One's first challenge was to transition the pilot worksite wellness program currently in Independence County into the surrounding more rural counties. The Wellness Works Project Manager and the Wellness Coordinator worked proactively to establish inroads with the local chambers of commerce, school districts, and business leaders to identify individuals and businesses who would have interest in hosting a worksite wellness event for their employees. Making these initial contacts to explain the beneficial aspects of the program was very important. As the program became more known outside of Independence County, a larger volume of businesses have desired to participate. The established long term relationships the Consortium members have with the leadership throughout the rural communities has provided an avenue of introduction and promotion of the benefits of the preventative health screenings.

Commitment of time and resources are stretched thin for most businesses and individuals who work. The third challenge has been to include the appropriate blend of stakeholders to devote precious time to joining the Consortium and participating in its discussions once per month. The core Consortium members have established long term relationships within the community and healthcare arena and have been able to identify stakeholders and make personal contacts to ensure the representatives of the community as a whole were invited to participate. Late in 2011, the Consortium venue and meeting style was refreshed. Ten new professionals that represent businesses from around the area have joined in regular discussions and a resurgence of energy and enthusiasm have come into play.

Sustainability

On-going Services and Activities:

1. Worksite Wellness Event services provided by the Wellness Works Program will continue with a revenue stream generated by fees for services. This program has been able to sustain at an acceptable level of revenue (\$12,000) that can be used to leverage additional financial support from White River Health System in order to continue to support a full service program. A line item budget has been established by White River Health System to provide for staffing, office space and equipment. Many of the area businesses have also set up line items in their budget to accommodate annual wellness events.
2. The Pedometer Project is a self-sustaining effort that receives revenue from individuals or their employer when they sign up to participate for the annual walking project called 10K a Day Is The Way. Participants pay \$40 to receive their pedometer and access to weekly information and special incentives. Local employers also reap the benefits when their employees are physically active so many of them have agreed to provide funding for incentive prizes and a contact person at their facility to help trouble shoot any problems participants may have with their pedometer. White River Health System will continue to fund staffing to support the coordination of the project in various locations throughout the region.
3. The Diabetes Education Project now has two locations (Batesville and Mountain View). One is supported for the next two years with grant funding and will soon have revenue from service reimbursements and the other is already billing for services.
4. The Community Garden Project is self-sustaining with revenue generated by water fees from individuals who rent a garden space for one year. The City of Batesville maintains the equipment, landscape, fence and tool shed within their budget.
5. The Breast Cancer Screening Project expenses will be picked up by the rural health clinics where the events are conducted. Expenses include event advertisement and clinical and clerical staffing. The Susan G. Komen Foundation has awarded a grant to cover all diagnostic screening expenses and pay the radiology physician's fee. In the future, costs for the event will be covered by local rural health clinics and White River Health System.

Sustained Impact:

Long lasting effects from the HRSA Outreach Grant on this rural area will include:

- Greater capacity to partner with multiple organizations over a larger geographic area that weren't previously considered as viable choices, including: area schools as worksites, Master Gardeners and City and County governments as worksites.
- The Outreach Grant has sparked an enthusiasm for more people to walk more often through its pedometer project. Even if the consortium doesn't sponsor it in the following years, another entity will likely decide to copy the model as a best practice for encouraging healthy living choices. Many businesses are already initiating physical activity and nutrition projects for their employees that didn't exist prior to this grant funded pilot project.
- Many people have been exposed to the benefits of health screenings and health education that otherwise would not have had access or inclination to seek services. Now that they have had the experience, they will be more likely to repeat the screenings.
- Many people who were previously undiagnosed with a chronic disease will now have the opportunity to manage their disease, living a higher quality of life.

- Many businesses that previously did not budget for employee health and wellness activities now have included this type of expense as a line item in their annual budget planning.
- The efforts of those working to conduct the activities and record the data from the projects supported by this grant opportunity have resulted in better informed and motivated citizens. For example, the Batesville community has recently passed a tax to build a community physical activity center that will ultimately benefit thousands of area residents for years to come.
- Healthcare professionals from the hospital who have not previously been exposed to the prevention side of healthcare are now better informed and motivated to support chronic disease management with their patients and not just treat the symptoms.

Implications for Other Communities

Worksite wellness is becoming a more common element of the rural American workforce experience as employers carry more and more of the burden of employee healthcare expenses. It's imperative that employers find ways to strengthen their workforce by improving their employee's health. A healthy workforce also strengthens the economy. The benefits of the Wellness Works Program and the collaboration of the White River Health Consortium will ultimately include a significant improvement in the health and quality of life for the local workforce and residents of the service area.

The one thing a large number of people can do is walk for good health. This was the thinking that escalated the implementation of the 10K is The Way walking project. The model described here could be modified to include a less sophisticated pedometer and rely more on self-report from participants. Regular and meaningful communication is the key to keeping this project on target and moving forward. I would not recommend trying this project across a large community without the availability and regular use of email among participants.

The Community Garden Project has the capacity to serve as a model nutrition, physical activity and human relations support network project for other communities not only in Arkansas, but throughout the nation.

CALIFORNIA

Lake County Tribal Health Consortium

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12677 |
| Grantee Organization | Lake County Tribal Health Consortium |
| Organization Type | Non-profit organization |
| Address | 925 Bevins Ct., Lakeport, CA 95453 |
| Grantee organization website | www.lcthc.org |
| Primary Contact Information | Patricia Hubbard Program Director Phone number: 707-263-8382 X110 Fax number: 707-263-0329 phubbard@lcthc.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--------------------|---|
| Health Leadership Network | Lakeport, CA 95453 | Non-profit organization (professional membership association) |
| Lake County Public Health Department | Lakeport, CA 95453 | Health Department (government agency) |
| Lake County Alcohol & Other Drug Services | Lakeport, CA 95453 | Non-profit organization (state government agency) |
| Lake County Mental Health Department | Lakeport, CA 95453 | Health Department (government agency) |
| Easter Seals of Northern California | Lakeport, CA 95453 | Non-profit organization (state government agency) |
| Lake County Healthy Start | Lakeport, CA 95453 | Non-profit organization (state government agency) |

Community Characteristics

Area:

The coverage area for the Outreach grant is all of Lake County, California.

Community description:

Lake County is located about 100 miles north of San Francisco and 50 miles east of the Pacific Ocean. It is ringed by mountains and divided by Clear Lake, one of the largest natural lakes in North America. Over one-third of the County's 1,258 miles is held in public trust by the U.S. Forest Services and the Bureau of Land Management. The county's 64,665 residents (2010) are scattered around the lake and in the mountains in about 12 small towns, three Rancherias and an Indian Colony, and two incorporated cities: Clearlake (about 15,000 residents) and Lakeport (about 5,000 residents). The total Native American population around the lake is about 4,000, including members of six federally recognized Pomo Tribes, as well as members of at least 111 different Tribes from Navajo to Hoopa, living on and off the Rancherias. The local economy is based on agriculture, grape growing and wine making, tourism, and small and large retail business. The national economic collapse of late 2008 strongly affected Lake County. From 2008-2009, poverty rose to 22.1% of all residents, with unemployment reaching 18.2% in 2011. Lake County has the thirteenth worst economy in the 3,414 counties nationwide with 25,000 or more residents. One in five residents in Lake County is receiving aid. Adult health issues have been correlated with adverse childhood experiences (ACE); and the behavioral health of the local Native American population, as well as other adults in Lake County, is highly affected by this high incidence of ACE.

Need:

The primary health focus for this project is prenatal care, which helps women and providers to identify and mitigate potential risks during pregnancy and birth, while providing an opportunity for ongoing support to help women maintain healthy behaviors. Prenatal care is more effective if it starts in the first trimester of pregnancy. Between 2004 and 2006, Lake County ranked 46th in California for U.S.-born mothers receiving early prenatal care. Only 65.7% received such care, well-below the HP 2010 objective of 90%. Lake County also falls below California's rate of 87% of U.S.-born mothers receiving early prenatal care. Only 37% of Native American women started prenatal care in the first trimester in 2006; 34% had late or no care at all. Local women, including Native Americans, avoid prenatal care for a variety of reasons: (1) poverty, as prenatal care must compete with basic needs, such as food and fuel; (2) lack of knowledge about the importance of prenatal care and the effects of drugs and alcohol on their unborn child; (3) fear of being judged, shamed, punished, incarcerated, or deported; (4) fear and distrust of authority in general; and (5) lack of health access and/or medical insurance.

The overall project goal is to infuse cultural wellness into a comprehensive, multi-disciplinary circle of care centered on pregnant and parenting women with young children, and their immediate family members. Native American populations have a high incidence of intergenerational substance abuse. Incidence of early prenatal care is low, and occurrence of Fetal Alcohol Exposure (FAE) is relatively high among children born to Native American mothers. Mainstream medicine and mental health services without the addition of cultural practices very often do not meet the needs of these Native American populations. Under the HRSA Grant which began May 1, 2009, a Cultural Wellness Center (CWC) through Lake County Tribal Health was developed to incorporate children, spouses, partners, and other family members into this circle of care, offering traditional practices; parenting education; information about the effects of substance abuse; incentives for accessing early and adequate prenatal care; counseling needed to overcome obstacles to recovery; and referrals to community agencies per client need.

Program Services

Focus Areas

Behavioral/Mental Health
Children's Health
Chronic Disease Management: Substance Abuse/ FASD
Coordination of Care Services
Health Education and Promotion
Integrated Systems of Care
Maternal/Women's Health

Target Population

Infants
Adults
Pregnant Women
Native Americans

Description:

Pregnancy tests and referrals to prenatal care are provided at LCTHC. Women who come to the Medical Clinic at LCTHC and have a positive pregnancy test are offered the opportunity to participate in the cultural wellness project, including pregnancy and Human Service support. Recruitment into the program is facilitated through close communication with women's health services. At intake, project staff help women to identify their needs, encourage them to obtain early/adequate prenatal care, and enroll them in pregnancy support activities. Participants take a substance abuse screening (using the 4Ps Plus Screen) and receive counseling, referrals, and other interventions to help them refrain from alcohol and other drugs when pregnant and after delivery. A Women's Pregnancy Support Group and individual counseling, and Nurturing Parenting classes for women and their partners, are provided in support of positive choices and outcomes during and after their pregnancy. A child development program is offered for young children while parents are attending educational activities, such as GED classes and Relapse Prevention Groups. Referrals are provided for project participants for additional services through Lake County AODS and Mental Health as needed. Post-partum support is offered to mothers who give birth during the project. The Clinical Director, Project Director and the group facilitators meet to review participant intake and tracking data and case conference on project participants' engagement in the program services, use of prenatal care, abstinence of alcohol and other drugs, and on the status of their overall social, emotional and physical well-being.

Role of Consortium Partners:

Lake County Tribal Health built a network of Consortium members that welcomed the opportunity to reduce prenatal substance abuse in a high-risk, hard-to-reach Native American community. Each Consortium member has multiple years of experience and a proven ability to provide assistance and support for health care management when given a participant referral. These community organizations have worked together successfully to provide services, and maintain the grant's objectives and goals. The Consortium

has developed a strong working relationship with ongoing meetings where services were reviewed and new ideas were encouraged to better serve all participants in program.

Consortium Partners and roles and responsibilities included the following:

- Health Leadership Network (HLN) of Lake County has provided strategies, ideas and direction for the CWC and other Consortium members working to reduce prenatal substance abuse and to encourage use of prenatal care. The HLN sponsored county-wide seminars and presentations, such as Dr. Ira J. Chasnoff, MD., "I Am Concerned". CWC staff members attended the regular HLN meetings in support of community activities that generally helped support shared goals and objectives.
- Lake County Public Health Services held monthly meetings in support of the countywide implementation of Dr. Chasnoff's "I Am Concerned," and provided the assessment form (4P's Plus Screening for Substance Abuse Among Pregnant Women) which is linked to Dr. Chasnoff's program and used by LCTHC to track use and reduction of substance abuse during pregnancy.
- Lake County Mental Health Services is on-call and assisted LCTHC with any mental health concerns that might arise with the clients we serve. LCTHC has on staff a child and family counselor, one substance abuse counselor, one Human Service Counselor, and one Licensed Clinician who provided services and support for any mental health issues on a daily basis.
- Easter Seals of Northern California provided technical assistance with early intervention, children health & safety, and child development, and collaborated with families that attend the CWC and its program.
- Lake County Healthy Start assisted families of the CWC with community resources and referral networks.
- Lake County Alcohol and Other Drug Services offered services and interventions to clients who are court ordered to attend a Relapse Prevention Group.
- Lake County Tribal Health Consortium received the HRSA Grant May 1, 2009. LCTHC has developed a Cultural Wellness Center providing professional services and interventions with pregnant women, mothers, and supporting family members to reduce or eliminate alcohol and drug use during pregnancy. Services provided are weekly programs such as: 4P's Pregnancy Group, Cultural Wellness Class which offers Native American crafts and discussions of Pomo history, Relapse Prevention and Nurturing Parenting groups, GED and Job Search class, and a Child Development Group which offers preschool activities while the mother's and family members participate in CWC groups and classes.

Outcomes

The main desired outcomes for the project were to increase the percentage of Native American women whose infants are born healthy and free of exposure and who:

- Received early and adequate prenatal care; and
- Reduced or stopped their substance abuse during the prenatal period.

Of the 97 women who were referred from Medical with a positive pregnancy test during the three years of the project (as of February 2012), and then were recruited and interviewed for the project, 67 (69%) participated in receiving prenatal support through home visits, group activities or individual counseling. Of the babies born to these women during this time period, 92% were of normal birth weight and 65% were born free of exposure to any tobacco, alcohol or drugs. Overall, 75% of the women participants received at least 13 prenatal visits during their pregnancy, with 82% receiving early prenatal care beginning in the first trimester. This compares with the baseline indicated previously of about 34-37%.

In addition, there was a 38% drop in the number of women who smoked during their pregnancy; 65% drop in the number of women who drank alcohol; 65% drop in the number of women using marijuana; 20% drop in the number of women using cocaine, meth, or heroin; and 77% drop in number of women taking prescription medications.

Challenges & Innovative Solutions

- 1) One of our biggest challenges has been maintaining the participation of the pregnant substance abuse clients and the family members we served until their recovery and need for services decline. Most of our participants had financial and transportation needs which at times prevented them from attending the classes and groups they would have liked to have attended. Having the Cultural Wellness Center with a co-existing Child Development Center helped maintain the participation of most clients and other family members.
- 2) Some clients also had past and present issues with continued drug and alcohol use, resulting in relapse. Restarting their participation and regaining self-control was accomplished by offering home visitation as feasible, individual counseling sessions, and incentives for completing prenatal visits.

To overcome these challenges, staff worked very hard to build trust with each client they served, realizing it would take time to resolve each concern or problem they presented. Today, trust has been built and many families are living different lives due to the interventions from all Consortium and staff members.

Sustainability

On-going Services and Activities:

All Consortium members continue to work together providing services, referrals between agencies, and providing professional consultations concerning any outstanding needs or concerns with the programs developed at the Cultural Wellness Center. Due to the implemented programs at the Cultural Wellness Center, LCTHC has obtained new patients signing up to receive Medical, Dental, Human Service and Outreach Services, increasing revenue and services in each department at the LCTHC clinic. As a result, LCTHC was recently able to hire a new Licensed Clinician to provide additional mental health counseling services and a new Relapse Prevention Counselor to meet the increased patient flow.

After the HRSA Grant ends on April 31, 2012, many of the group and individual services will continue as follows:

- Children will continue to be able to attend free preschool activities, and their parents and other family members can continue to attend group activities, including Relapse Prevention, Nurturing Parenting, and GED & Job Search activities. The Child Development Center will continue due to funding through another smaller grant.
- LCTHC Medical will continue to provide referrals for women who have a positive pregnancy test, and Human Services staff will continue to provide the 4P's Plus Screening for Substance Abuse for Pregnant Women and one-on-one prenatal counseling services. These women will also be offered the opportunity to participate in the newly funded home visiting project through HRSA/ACF.

LCTHC will continue searching for appropriate new grants to maintain the CWC cultural programs and meet the increased interest of new clients.

Sustained Impact:

Lake County Tribal Health Consortium and the Native American community it serves have been impacted significantly since the program was funded as evidenced by:

- The increase of early and adequate prenatal visits by pregnant women and the reduction in the exposure to drugs and alcohol of infants born during the project to participating women. This will have a long term impact on these children's health as well as the community.
- The increase in LCTHC patient care throughout all departments: Medical, Dental, Human Service, Outreach, and Administrative Services, which includes medical insurance sign-up and assistance.
- Building capacity in the program services and systems, and growing staffing, in LCTHC Human Services to serve pregnant and parenting women, and their partners, children and other family members.
- The ongoing partnerships, collaboration, professional assistance, and client support by each community-based Consortium member.

Throughout the HRSA Grant funding, the lessons we have learned about beginning a Cultural Wellness Center at LCTHC have been extremely beneficial to begin other smaller, but no less important programs at LCTHC. Client interventions (keeping the confidentiality of the client), program interventions and goals, new ideas, and the program outcomes are shared with all Consortium members in monthly meetings.

Lake County Tribal Health has had other clinic personnel who visit LCTHC and request information concerning programs and the outcomes of each program. The HRSA Grant has allowed us to share its success with other Native American clinics and Administrative Directors throughout California to further and advance client interventions throughout the state of California.

CALIFORNIA

The Sierra Institute for Community and Environment

Organizational Information

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|------------------------------|---|
| Grant Number | D04RH12752 |
| Grantee Organization | The Sierra Institute for Community and Environment |
| Organization Type | Non-profit Research and Education Organization |
| Address | 4438 Arlington Rd., Taylorsville, CA 95983 |
| Grantee organization website | www.sierrainstitute.us |
| Primary Contact Information | Jonathan P. Kusel, Ph.D. Executive Director Phone number: 530-284-1022 Fax number: 530-284-1023 JKusel@SierraInstitute.us |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|------------------------------------|----------------|---------------------------|
| Plumas County Public Health Agency | Quincy, CA | Local Health Department |
| Plumas District Hospital | Quincy, CA | Hospital District |
| Eastern Plumas Health Care | Portola, CA | Hospital District |
| Greenville Rancheria | Greenville, CA | Tribal Clinic-FQHC by MOA |
| Seneca Healthcare District | Chester, CA | Hospital District |

Community Characteristics

Area:

The Outreach project served all of Plumas County

Community description:

Roughly the size of Delaware, Plumas County is sparsely populated and has been designated as one of the fifteen "frontier counties" of California due to its small population, self-sufficient pioneer attitudes, and geographic isolation. Population has declined over the past decade and the majority of the county's 20,007 residents live in or near the four small communities of Portola, the county's only incorporated city; Quincy, the county seat; Greenville; and Chester. The county population is 86.2% Caucasian, 5.7% Hispanic/Latino, 2.5% Native American, 0.6% Black, 0.5% Asian, 0.1% Hawaiian/ Pacific Islander, 1.8% identified as members of other ethnicities, and 2.6% multiracial. Although the county is ethnically less diverse than the state as a whole, the Latino population is growing and nearly doubled over the past 20 years. The school district's Hispanic/Latino population is nearing 10%, with a higher concentration in eastern portions of the county. The Native American student population is 3%, with most of these students living in the poorer Greenville and Indian Valley communities. The county's ranching, forest services and timber-based economy is seasonal and workers are traditionally laid off in winter due to winter weather and snow in the mountains. Unemployment rate is extremely high, averaging 16.8% in 2010. Distance creates challenges for patients with driving time between most communities 30-45 minutes on mountain roads, which increases dramatically (or is simply impossible) in the winter due to storms. The dispersed population means that numerous residents reside more than 30 miles from a clinic or hospital. In addition, access to specialty care and advanced medical technology often involves traveling several hours and can include accessing care in another state. Lack of local transportation services can be a significant barrier to accessing medical care. This is particularly acute in the winter when route, road conditions, and weather are the first considerations when initiating any activity, including accessing medical care. Public transportation is very limited in the region, and

consists of a countywide shuttle bus service that runs between the population centers of Plumas County once, and sometimes twice a day.

Need:

Plumas County's Outreach Grant is increasing patient access to health care services, increasing coordination and planning through partnerships, and implementing telehealth services to reduce patient out of county travel for specialty services. In addition to poor socio-economic conditions, Plumas County residents have poor health outcomes and experience a fragmented health care continuum. Only 58.6% of Plumas County residents have job-based or other health coverage year round. A total of 21.6% of residents have Medi-Cal coverage or Healthy Families insurance, exceeding the state average of 16.3%. In 2009, 29.7% of the county's population was uninsured for part or all of the year, exceeding the state average by 5.4%. Poor health outcomes are directly related to a lack of preventative services, lack of access and to numbers of uninsured, underinsured, and those eligible but not enrolled in public benefit programs. The uninsured consistently encounter the most barriers to care, have the worst health outcomes compared to other groups, and are most likely to be without a medical home. Access problems have been most acute in Greenville and Indian Valley as a result of the clinic and hospital closure in 2006. Over-full medical practices elsewhere in the county have resulted in patients having to wait or seek care elsewhere. Until the re-opening of the clinic in Indian Valley by Eastern Plumas Health Care in November of 2007, access issues disproportionately affected seniors, disabled, and patients lacking reliable transportation. Indian Valley residents no longer have local emergency medical services and have to travel at least 25 miles to the nearest public hospital. The high rate of uninsured residents poses challenges for individuals seeking care and for the health system itself. Patients without insurance typically do not seek care until absolutely necessary or forego follow-up care, and limit their and their children's care. In many instances, delaying needed care results in patients requiring more intervention or more expensive interventions than if they sought care sooner.

The Sierra Institute conducted interviews with school administrators, teachers, rural healthcare providers, parents, youth, and other key community members in recent years. One of the results of this community engagement process is the identification of the most prevalent healthcare needs of children. Due to a shortage of pediatric specialists, families often drive hundreds of miles, missing work and school, to get care. Behavioral health is another unmet need. Teachers lack expertise to identify issues in the classroom, resources to conduct behavioral health assessments, and referrals are scarce. Community members identified the need to improve children's behavioral services as a priority because of its impact on academic performance for the affected children and others in the classroom. There is also significant concern from the Limited English Proficient (LEP) population about the lack of language access and cultural competency offered by the local provider organizations. Community members in general support the use of telehealth to coordinate resources and increase access.

Program Services

Focus Areas

- Access: Primary Care
- Access: Specialty Care
- Behavioral/Mental Health
- Children's Health
- Coordination of Care Services
- Integrated Systems of Care
- Oral Health

Target Population

- School aged children - elementary
- School aged children - teens
- Adults
- Pregnant Women
- Caucasians
- African Americans
- Latinos
- Native Americans
- Alaska Natives
- Uninsured
- Underinsured

Description:

Services provided and activities conducted are described below.

| Programs | Funded services and activities |
|---------------------------|---|
| School-based telehealth | Nurses at Greenville and Quincy elementary schools conduct assessment and referral |
| Hospital-based telehealth | <ul style="list-style-type: none"> • Equipment at Plumas District Hospital and Eastern Plumas Health Care (2010 and 7/2011) • Proposal development resulting in 2 Model eHealth Communities grants involving Plumas hospitals (Spring 2011) |
| Local Health Coalition | Collaborative partner for grant development and implementation in Express Enrollment, Oral Health |

| | |
|---|---|
| | Collaborative, proposal for County Medical Services Program |
| Portola Women's Group/ Proyecto Salud | <ul style="list-style-type: none"> Working with hospital patient navigator/assistants to identify language translation needs Exploring translation of Cancer Resource Manual for countywide dissemination Facilitation of Women, Infant and Children's (WIC) focus group as part of alcohol and drug strategic planning |
| UCSF, Division of Adolescent Medicine, Department of Pediatrics | <ul style="list-style-type: none"> Trainings, grand rounds, workshops (Fall 2010/2011) Power of Prevention Health Summit Dec 2011 Proposal submitted on Tobacco Related Disease Research |
| Plumas Crisis Intervention and Resource Center | Family advocates in Greenville and Portola to increase outreach, enrollment, utilization and referral to support services |
| Youth Development | <ul style="list-style-type: none"> Leadership, teambuilding and communications skills development were provided for the Associated Student Body class at Greenville High School up to 4 classes monthly/up to 15 students (Fall 2010/Spring2011) Facilitation of youth focus groups to address alcohol, tobacco and drugs Youth Summit activities in UCSF Health Summit on Dec 7, 2011 YEAH (Youth Empowerment for Access to Health) program development and activities in conjunction with grant from The California Endowment |
| Northern Sierra Collaborative Health Network (NSCHN) | Sierra Institute and the health agency are co-leaders in bringing together all hospital districts, Greenville Rancheria and Sierra County Human Services to work collaboratively, development a network and leverage each other's strengths |
| Community Health Assessment and Improvement Plan | <ul style="list-style-type: none"> The hospital consortium agreed to conduct a joint countywide assessment in April In May, Sierra Institute worked with the health agency to submit a proposal to the National City and County Health Officials Plumas was awarded one of the 12 national grants Sierra Institute is playing a key role in data gathering, community engagement and project management |
| Strategic Planning | <ul style="list-style-type: none"> Northern Sierra Collaborative Health Network and partners conducted a Strategic Planning facilitated by HRSA TA in Nov 2011 County Alcohol and Drug Services -Prevention committee member; facilitator for focus groups |

Role of Consortium Partners:

Plumas County Public Health Agency, Plumas Unified School District, Plumas Crisis Intervention and Resource Center, community-base organizations, and hospital partners participated in the planning. They are involved in the implementation and as summarized in the Table above are committed to an ongoing Hospital Collaborative Network, training, and participation in the annual Health Prevention and Youth Summit.

Outcomes

Project outcomes include increased outreach, enrollment and utilization of insurance programs for underserved children and families; ease of enrollment due to Express Enrollment capacity in all schools in the county; more than 1200 screenings and varnishes for children through the school system over 3-year period. The health delivery system is improving through increased coordination and referral efforts among all three Plumas County district hospitals, the tribal clinic and the Plumas County Public Health Agency. The Northern Sierra Health Collaborative Network is meeting monthly and in process of reaping benefit of the Medi-Cal Application Assistance reimbursement through the Public Health Agency and are increasing Medi-Cal outreach efforts. Other outcomes include training and education for providers in the Health Prevention and Youth Summit through the partnership with UCSF Division of Adolescent Medicine (continuing education units provided for nursing in 2011). The project is sustaining the partnership with UCSF for grand rounds at all the hospitals, suicide prevention/depression expertise, and tobacco use reduction/prevention efforts targeting youth. A key outcome is the countywide community health assessment, a collaborative effort of all the hospitals, the tribal clinic, and Plumas County Health Agency with leadership from Sierra Institute and PCPHA.

Challenges & Innovative Solutions

Challenges with our initial partner, the Plumas Unified School District, continued and we had to sever the contract for their non-compliance. We also did not re-new a contract with the Plumas Crisis Intervention and Resource Center because of a re-focus on their part – we continue to work with them collaboratively, particularly to address teen suicide in Greenville. Changes in Project Directorship halfway through the project impacted the completion of outcomes in the original timeline.

Sustainability

On-going Services and Activities:

We completed a Strategic Planning Session in November 2011 and are committed to continuing all programs as described above. In addition, the partners are committed to the community health improvement plan that will be based on the collaborative county health assessment.

Sustained Impact:

We anticipate the improvement in the health care delivery system through coordination and referral through the Northern Sierra Collaborative Health Network a lasting, sustainable accomplishment. It is a long process that will have a lasting impact to ensure health care services for all Plumas County residents. The partnerships are the sustainable outcome of the Outreach project overall and partners are committed to working together and improving outcomes for the County.

Implications for Other Communities

We feel that the Outreach grant provided the impetus for mobilizing stakeholders and partnerships in the Plumas County health arena. Working on the community health assessment in particular has convened disparate partners with the same end goal in mind of increasing access and improving health outcomes. We have a strong base to work from and a lasting process of inclusion. We feel that our project is a model for bringing together public and private partners, especially in rural communities.

CALIFORNIA

Woodlake Family Resource Center

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12648 |
| Grantee Organization | Woodlake Family Resource Center |
| Organization Type | School District Affiliate |
| Address | 168 N. Valencia, Woodlake, CA 93286 |
| Grantee organization website | Under reconstruction |
| Primary Contact Information | Irma Rangel Program Director Phone number: 559-564-5212 Fax number: 559-564-5301 irangel@woodlakepublicschools.org |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$149,585 May 2010 to April 2011: \$124,937 May 2011 to April 2012: \$99,943 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---------------------------------|---------------------------|---------------------------|
| Woodlake Family Resource Center | Woodlake/Tulare County/CA | School District Affiliate |
| Family Healthcare Network | Woodlake/Tulare County/CA | Health Clinic |
| Woodlake Police Department | Woodlake/Tulare County/CA | Police Department |
| Woodlake Public Schools | Woodlake/Tulare County/CA | School District |

Community Characteristics

Area:
The *REACH Project – Restoring Every Adult & Child to Health* of the Woodlake Family Resource Center serves a 700 square mile area of rural Tulare County, CA.

Community description:
Woodlake is a California town of 8,000 people located in the citrus and olive groves of the Sierra Nevada Foothills. We are a community united in striving to face and overcome our challenges and forge a bright and hopeful future for all of our children. Woodlake is the hub of a surrounding 700 square mile agricultural area characterized by small, isolated, and intensely populated farm labor settlements, which are home to as many as 30,000 laborers and their families during peak harvest times. We are predominately Hispanic, poor, and possess little formal education. Most of us speak Spanish, and many of our residents are foreign-born, although many more, including our community's children, are United States citizens. Our people access few health services, due to the intersection of various barriers including geography, lack of transportation, fear, cultural prejudice, language barriers, lack of access to health insurance, and poverty. These barriers combined with the challenges of farm laborer life have resulted in both the town of Woodlake and the outlying worker settlements experiencing aggravated rates of pathologies manifesting underlying mental health issues, including alcoholism, depression, domestic violence, child abuse, and suicide. In addition, there has existed historically strong cultural prejudice in the Hispanic community against seeking mental health treatment. And, when individuals do come forward and ask for help, waiting lists are long, facilities have been remote, and treatment has required some form of cost-covering device.

Need:
The Woodlake Family Resource Center and its consortium partners had worked together informally since 1998 to improve the lives and futures of Woodlake's children and their families. We came to realize that many of the challenges facing our community are manifestations of underlying, treatable mental health issues. This simple idea allowed us to identify and work to remove the barriers

that prevented effective mental health treatment for every member of our community who may need it. Through our ten years of clinical experience, field study, and collaborative qualitative research, we identified three primary obstacles to mental health treatment: lack of cost-covering devices, lack of culturally competent, linguistically appropriate mental health care professionals, and cultural stigma against seeking mental health treatment.

The *REACH Project* was our collaborative response to these obstacles. REACH stands for Restoring Every Adult and Child to Health. It is comprised of three primary components: (1) Supporting families in health insurance eligibility assistance through culturally sensitive home visits or “platicas.” (2) Providing direct mental health treatment through the services of an experienced, professional, bilingual, bi-cultural mental health therapist. (3) Conducting a community outreach and education campaign at every possible contact point of all consortium and supporting partners to attack the stigma that keeps mental health issues hidden in darkness where they thrive, and instead to expose them as without shame, without culpability, and readily treatable.

Finally, the REACH Project created an exciting opportunity to meet an underlying need in the Woodlake Community. Our consortium partners when brought together represented a true foundation for building a new future: our schools, our law enforcement, our health care, and our social service agency. Although we had worked together informally for ten years every day in multiple capacities, the REACH Project gave us the means to formalize our working partnership, and thereby refined, streamlined, and focused our coordinated vision and effort to improve the lives and futures of our entire community.

Program Services

Focus Areas

Behavioral/Mental Health
Migrant/Farm Worker Health
Health Education and Promotion
Coordination of Care Services

Target Population

School aged children – teens
Adults
Elderly
Pregnant Women
Caucasians
Latinos
Uninsured
Underinsured

Description:

The HRSA Outreach Grant provided staff funding for one full time mental health therapist, one full-time certified application assistor, and clerical and administrative support.

1. Community Education and Outreach: WFRC and Consortium partner staff focused on disseminating literature and speaking one-on-one with the community about mental health issues, to remove stigma and shame, and to raise awareness about the treatability of mental disease and its manifestations. We estimate that between the four consortium partners, and the numerous supporting partners consisting primarily of churches and social service providers, that most members of our community received our message multiple times per year. For example, our home visit team carried the *REACH Project* message into homes at least two hundred homes per month, planting a seed of hope and wellness with every visit.

2. Health Care Access: the *REACH Project* funds a full-time Certified Application Assistor (CAA). Our CAA is fully bilingual and bicultural. She has provided support to thousands of families accessing every kind of service, with a focus on health care cost-covering devices. She has conducted approximately 3,000 home visits, and in this trust-building environment of these “platicas” has been able to discuss and address the multiple needs of each individual family. Additionally, she has worked intensively with our various case managers, mental health therapists, public health nurse, and consortium site staff to provide linkage to services for families and individuals referred for every kind of need.

3. Direct Mental Health Services: The REACH Project funds one full-time mental health therapist to provide direct mental health therapy to individuals and families, to process referrals from and to partner agencies, and to conduct group therapies as appropriate. Our REACH Project therapist has carried a full-case load averaging 30 clients per week, in addition to providing her professional support for multiple support groups, most of which focus on young mothers and perinatal mental health issues. She has also worked intensively with case managers and other partner staff to address multiple issues presented by her families, and attends weekly multidisciplinary team meetings (MDTs) conducted at WFRC by all stakeholders, including a police detectives specializing in child abuse, school site counselors, and health care professionals.

Role of Consortium Partners:

The REACH Project Consortium partners were active from the very beginning in the design and implementation of the REACH Project. For over ten years, we have all worked hard together to address the obstacles to health in our community, which at times seemed insurmountable. The WFRC itself was created out of the consensus that many families need and want help facing the debilitating mental health issues that stand in the way of making healthy choices. All partners played vital roles in supporting the project, finally sensing a way that real change can happen in the lives of individuals and their families, so that other kinds of services can be made even more effective.

1. The Family Healthcare Network: the FHN represents the only health care facility in Woodlake, other than the WFRC public health nurse. The FHN has provided multiple supports for the project, including professional psychiatric consultation and referrals where necessary, medication assistance, referrals, outreach support, and funded representatives to attend the weekly MDT meetings at WFRC.

2. The Woodlake Police Department has supported the REACH Project in multiple, vital capacities. The WPS has provided a fulltime time detective specializing in child abuse and domestic violence to support the project and attend the weekly MDTs. The department has devoted staff time and space to education and outreach at the station, and through their various youth mentoring and support programs. As important, the officers bring with them an awareness of mental health issues and their treatability to their daily heroic work in our community, thereby making solutions possible where there would otherwise be hopelessness, particularly in their dealing with domestic violence of all kinds which have plagued our community in the past.

3. Woodlake Public Schools is both our LEA and a consortium partner, representing hundreds of site staff that work in coordination with the WFRC staff to provide support to our children and their families. Specific supports for the REACH project include administrative assistance, professional referrals for mental health services, eligibility access assistance, outreach and education about mental health issues and treatment, and multiple site staff funded to attend the weekly MDTs.

Finally, the REACH Project has provided a forum for regularizing communication among all consortium partners at our regular meetings, giving us a chance to step back and raise "big picture" questions about our vision for the future of our Woodlake community.

Outcomes

We believe that the first measure of our success should ever remain our professional clinical data, which continues to show growth among all long term clients. This measurement depends on the individual assessment tool employed: Beck Depression Inventory (BDI-II), Global Assessment of Functioning (GAF), Beck Youth Inventory (BYI), or Beck Anxiety Inventory (BAI), under the professional assessment of our licensed clinical therapist.

At the beginning of the REACH Project, we also sought to establish measures to gauge the indirect impact of our efforts, based on availability of data:

1. Enrollment of students who qualify for public plans: this figure more than tripled in the third year of the project, from 3 per school year month to over 9. We believe this success reflects a combined growing expertise among school site staff with increased receptiveness and reduced fear in the community due to the REACH Project's community education campaign.
2. Total number of children and adults who received mental health services, including total women screened through EPDS and/or referred for treatment: this figure increased by 9% in the final funding year, from 91 to 100 total cases, with a demographic shift toward perinatal women representing 38% to 50% of our clientele. This fact has led to the creation of a new project aimed entirely at treating the epidemic of perinatal dysfunction that the REACH project revealed in our community.
3. Total number of walk-ins for mental health services: we established this figure as one indicator of our message reaching into the wider community. This figure has remained statistically constant, at approximately 30 per year.
4. Total number of school referrals: this figure represents the number of students referred by school site professionals for assessment and treatment, and has increased from an average of 6 per school month to 10 in this last year alone. We believe this represents a growing awareness that mental health issues are treatable and that treatment is preventative of destructive behaviors and long-term pathologies.

(Please note: due to the timing of this report, some monthly data has been extrapolated to predict a full year for purposes of comparison. The final data will be available in June, 2012).

Challenges & Innovative Solutions

(1) Sustainability: Many funding streams in California that were previously earmarked for support of children in poverty (from whence has come the majority of our funding) have been diverted to other priorities. We have struggled to find new and creative ways to serve our community while maintaining fidelity to the mission of our project. We gratefully have received support from HRSA Technical Assistance through the Georgia Health Policy Center. As a result, we have made headway, such as becoming billable providers for the state crime victims program, and have forged a new partnership with the County Health Department. We continue to seek out new sources of support and partners that share our vision and can help us to continue to provide the same levels of professional services.

(2) Evaluation: Mental health is vital to every other area of healthy decision making and healthy communities, yet we find it difficult to monitor its impact quantitatively. Professional, university level academic evaluation that we initially hoped to bring back to the WFRC to continue field study, did not prove feasible during the grant period. We have direct measures of improved functioning of individuals based on the professional assessments used by our mental health therapist, and these are consistently positive and hopeful. But secondary and tertiary indicators, such as changes in attitudes toward mental illness or reduction in rates of child abuse reports, have proved difficult to track. We continue to seek way to monitor and ensure that our efforts are serving our families and communities in the most efficacious and efficient ways.

Sustainability

On-going Services and Activities:

The *REACH Project* has sought to continue to provide the same levels of services to our community after the grant period. We are cautiously hopeful that we can continue to staff a full time mental health therapist, through creative combining of funding streams and partnering with other agencies who can absorb referrals because they have been recently funded to treat specific mental disorders such as substance abuse or post partum depression or teen suicide prevention.

The *REACH Project* eligibility access assistance will be reduced, but supplemented in effort by a new and complimentary WFRC project aimed at perinatal mental health and wellness, growing out of this successful model of home visits, community outreach and education, and direct mental health treatment.

The community education and outreach will continue as during the grant period, with the enthusiastic support of the consortium partners. The *REACH Consortium* partners will continue to meet and collaborate, probably under a new name which reflects all of our myriad activities and with a new partner: during this project the County Health Department increasingly became a partner in numerous activities and we welcome them as a full collaborator in the consortium.

Sustained Impact:

The *REACH Project* has caused sustained, positive change in the lives of hundreds of Woodlake families. Although we have found it difficult to quantify, it is not difficult to describe: for example, the home visitation team has made on average 200 home visits per months, where each one of those families was positively impacted through linkage to desperately needed services of every kind, and whose children were provided with safety nets and supports never before imagined. Meanwhile, the mental health therapist successfully treated, as measured through professional assessment tools, hundreds of individuals who have since returned to their families happier and more competent community members, capable of healthier choices and behaviors. The real positive ripple effects of these efforts are enormous. We experience them in referrals between neighbors, in mothers for the first time taking an active role in school readiness programs for their children, in children with special needs receiving time-critical services and supports. As noted above in our challenges of evaluation, these defy quantitative measurement but not qualitative impact.

The relationships between consortium partners have been strengthened and deepened. Our consortium, with the new addition of the County Health Department, is starting new projects undreamt of before the *REACH Project*. This level of collaboration impacts nearly every facet of service delivery in Woodlake, for the betterment of our entire community.

Implications for Other Communities

We believe that the REACH Project is fully replicable and valuable to any community facing similar challenges. We believe that one of our most vital contributions in this field is our model of intensive collaboration between consortium partners, which grew out of mutual respect and seeking to support each other in whatever ways best served our community. We have been asked to present to numerous

panels and conferences, particularly with the Woodlake Police Department, who has been a ceaseless advocate for treating the roots of family disorders while protecting innocent victims, and whose support and understanding with this Project has been immeasurable.

COLORADO

High Plains Community Health Center

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12669 |
| Grantee Organization | High Plains Community Health Center |
| Organization Type | FQHC |
| Address | 201 Kendall Drive, Lamar, CO 81052 |
| Grantee organization website | http://www.highplainschc.net/ |
| Primary Contact Information | Jay Brooke Executive Director Phone number: 719-336-0261 Fax number: 719-336-0265 jay.brooke@highplainschc.net |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$123,230 May 2010 to April 2011: \$109,920 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|------------------------------|------------------------|-----------------------|
| Lamar Parks & Recreation | Lamar/Prowers/Colorado | city government |
| Lamar Community College | Lamar/Prowers/Colorado | community college |
| Prowers County Public Health | Lamar/Prowers/Colorado | county government |
| Lamar Re-2 School District | Lamar/Prowers/Colorado | local school district |

Community Characteristics

Area:
Prowers County, Colorado

Community description:

Located on the Great Plains in southeastern Colorado, Prowers County is home to a total population of 12,551. The county's poverty rate of 23.1% is nearly double the rate for the state of Colorado. Median household income and levels of adult educational attainment in Prowers County also fall far below state and national averages. The rates of obesity and cardiovascular disease in Prowers County exceed comparable figures for Colorado and the U.S.

Need:

Prowers County has high rates of its population classified as either overweight or obese. Substantial medical research has linked obesity to an increased risk for several chronic conditions including heart disease, type 2 diabetes, stroke, asthma, hypertension, osteoarthritis, dyslipidemia, sleep apnea, and some types of cancer.

For several of these chronic diseases, the percentage of High Plains Community Health Center patients diagnosed with these conditions exceeds comparable prevalence rates for the state and the nation.

Vital statistics for Prowers County also indicate that cardiovascular diseases and cancers, conditions associated with the overweight and obesity, have been the county's two leading causes of death in every year since 1996.

Focus Areas

Chronic Disease Management: Cardiovascular
 Chronic Disease Management: Diabetes
 Health Education and Promotion
 Physical Fitness and Nutrition
 Obesity Prevention

Target Population

Pre-school children
 School aged children - elementary
 School aged children - teens
 Adults
 Elderly
 Pregnant Women
 Caucasians
 African Americans
 Latinos
 Native Americans
 Alaska Natives
 Uninsured
 Underinsured

Description:

Health coaching: Health coaching was provided to patients at High Plains Community Health Center. Culturally competent, brief education was provided as needed regarding self-management and strategies for healthy eating and active living. During health coach interactions, the health coach worked to collaborate with the patient to establish a patient-directed goal and action plan to achieve the goal. Health coaching also included a discussion about barriers and strategies to overcome barriers. Referrals to clinic and community resources to assist the patient in achieving their health goal were also included in health coaching services. Follow-up, which was key for health coaching, was completed at a future clinic visit or over the telephone. All health coach interactions were based on motivational interviewing.

Self-Management Support: Throughout funding period, activities and trainings focused on building a comprehensive system of self-management support in the clinical setting. Self-management support was built into routine primary care appointments. A system of connecting patients and community members to healthy eating, active living, and chronic disease self-management resources was developed. Based on data collected on patient barriers to improved health, resources were developed or improved to meet community and patient needs. Some examples of resources developed and improved during grant period: diabetes education and nutrition classes taught by dietitian and certified diabetes educator, *Silver Sneakers* exercise class for seniors, and Stanford University's chronic disease self-management classes.

Increased access to opportunities for exercise: We created many programs to address this need in our community. We offered free pedometers to patients who set walking goals, created a weekly walking group called *Saturday Stroll*, created *Maintain; Don't Gain* and *Get Lean Lamar* (our free, weekly weight management classes), compiled and distributed the weekly *Best Buys* and *Activity Calendar* which showed healthy foods on sale for the week as well as the opportunities for exercise in the community. We created an exercise voucher program for indigent patients, who needed help to afford exercise passes at two local exercise facilities. To encourage families to exercise together, we created a program with our partners that allowed free gym admission with activities for children and adults called *Family Fun and Fitness*. We also created a DVD/VHS library of fitness videos for our patients who live far out of town or reported transportation barriers, so that they could check them out for free and exercise at home.

Outreach: We focused on outreach to health fairs, resource nights at schools and Head Start, community events, and school-based education.

Professional development: Our professional development efforts focused on motivational interviewing to help empower patients to better self-manage their health; focused on health disparities to help address the discrepancy of health outcomes between 38% Hispanic population and that of the rest of our county, focused on cultural competency to help healthcare providers better serve our diverse population.

Role of Consortium Partners:

High Plains Community Health Center- administered the HRSA grant funds; employed and supervised grant staff; sent a representative to participate in NewMe Coalition meetings; integrated health coaching into routine primary care for weight loss, chronic disease, and prevention; developed and implemented physical activity and healthy eating programs to support patient self-management support;

organized and hosted professional development for self-management support skills for area health and allied health providers; collected, tracked, and shared patient data related to BMI, overweight, obesity, and chronic diseases; and promoted and implemented community events focused on healthy eating, active living, and wellness.

Prowers County Public Health and Environment- participated in NewMe Coalition meetings; referred community members to health coaching and related programs; supported the implementation of worksite wellness programs that encourage healthy eating and active living; implemented a social marketing campaign in Prowers County that promotes active living and healthy eating; supported and advocated built environment improvements and policies to increase active living; screened students and compiled data on BMI for students in county served by county nursing service; shared student BMI data at NewMe Coalition meeting to inform decisions of coalition; designed and conducted a thorough evaluation of NewMe Coalition program; organized and promoted community events focused on healthy eating and active living.

Lamar Community College- participated in NewMe Coalition meetings; collaborated on developing physical activity and wellness education programs to be delivered at LCC and other sites within the community; hosted certified personal trainer who provided free services to individuals referred to the LCC Wellness Center; referred community members to health coach services; encouraged LCC Nursing students to participate in professional development trainings sponsored by NewMe Coalition; collaborated to develop and promote community events focused on healthy eating and active living.

Lamar Parks and Recreation- participated in NewMe Coalition meetings; collaborated on developing physical activity and wellness education programs; hosted a certified personal trainer to provide free services for individuals referred by health coaches; referred community members to health coaching services; and hosted professional trainings, self-management support classes, and community events focused on healthy eating and active living.

Lamar School District- participated in NewMe Coalition meetings; collaborated on developing, implementing, hosting, and evaluating programs focusing on healthy eating and active living; referred community members to health coach services; provided opportunities health coaches to teach about healthy eating and active living in schools; referred students, staff, and parents to health coach services; and sent school nursing staff to participate in professional development.

Outcomes

Of our High Plains Community Health Center's patient population of 6,116, we have seen our percentage of patients who are classified as overweight go from 34.1% to 29.2% over the course of the grant and the percentage of patients who are classified as obese go from 40.9% to 40.1%. Our percentage of patients with a BMI greater than 25 with counseling on healthy weight went from 23% to 58%. Our percentage of adults with diabetes with an A1C greater than 9 dropped from 21% to 13%. Our percentage of adults with hypertension whose blood pressure is under control increased from 58% to 73%. Our program evaluations consistently showed an increased in awareness, knowledge, and self-efficacy concerning healthy eating, active living, and self-management of chronic conditions. The return on investment (ROI) of our childhood obesity work was \$30.17 per dollar spent, of heart disease programs was \$11.93 per dollar spent, and diabetes was \$4.57 per dollar spent.

Challenges & Innovative Solutions

In an effort to be responsive to community needs, we began collecting information on the barriers our patients faced in trying to improve in healthy eating and active living. The information we received helped to open our eyes to what was making positive change hard for our community. We saw that in our county, more than one third of those wanting to exercise reported that it was either too expensive or they lacked the resources to do so. We shared this information with the Lamar Parks and Recreation Department and LCC Wellness Center, who were both surprised. They had both felt that their prices were reasonable, compared with gym memberships on Colorado's urban corridor on the Front Range. However, our high poverty rate and smaller per capita income still translates into exercise facility usage being out of financial reach for many in our community. We worked with these two exercise facilities to establish a free month exercise voucher program, and to create discounted vouchers for those working with a health coach. As a result, the usage of both facilities has increased significantly, and we have formed a solid basis for a partnership that will live on past our funding period. We have created a system where all of the involved organizations benefit, along with those in our community that we serve.

On-going Services and Activities:

We see our Outreach Grant as being tremendously successful for our community. We will be continuing with virtually all of the programs we implemented as a part of the grant.

Health Coaching has been an overwhelming success for our community. Our host site, High Plains Community Health Center, has expanded upon the program by hiring three other health coaches. Our clinic plans on hiring one more, so that each healthcare provider team has its own health coach. We have integrated health coaches into routine primary care visits for patients. This arrangement has resulted in several thousand unique patients having been served by a health coach and a noticeable improvement in patient outcomes, especially concerning blood pressure and blood sugar control.

The Self-Management Support Resources we have put in place since the inception of the grant have nearly all been very successful. We plan on continuing as many as is reasonable, considering their success.

Programs to be continued as is, and administered by High Plains Community Health Center staff: Diabetes Education classes, Nutrition classes, all of the Stanford University chronic disease self-management classed for which we are currently trained, *Best Buys* list and Weekly Community Activity calendar, and the exercise vouchers and discounted passes for the Lamar Community Building and the Lamar Community College Wellness Center.

Programs that will continue, but will be absorbed or partially absorbed by partner organizations: Silver Sneakers, Saturday Stroll, Maintain; Don't Gain and Get Lean, Lamar, and the DVD/VHS Exercise Video Library.

Programs that will be discontinued are the pedometer giveaway, because we ran out of pedometers. We will also be discontinuing Family Fun and Fitness, due to low turnout.

Sustained Impact:

Our Outreach grant has changed our community in several important ways. We have created partnerships between organizations which saw one another as competitors or had no contact with one another. We now are using a collaborative model to address how we can help one another, while helping ourselves. We see this as the best possible scenario for our community. Other groups are taking notice and are asking to join in our efforts. Our coalition will continue to meet quarterly with more frequent communications.

Our self-management support resources have given health care providers additional tools to use to aid patients in their medical care. Our providers frequently refer patients to health coaches and the numerous classes that we provide. Providers report that they are relieved that they may have allies to help address healthy eating and active living as a part of our patients' health.

Our Outreach grant has increased our capacity for providing self-management support classes, by training nearly one dozen people in our community to facilitate the Stanford University chronic disease self-management courses and many times this number in using motivational interviewing to help patients move toward positive behavior change.

Between our social marketing and our development and implementation of so many new programs, we have created thousands of encounters and interactions around self-management support that were simply not possible three years ago in this community. We have seen the beginnings of a change in the norms in certain groups in our community. Worksite wellness has begun to take off, and exercise facility usage has increased. We also have more people proactively attending active living events and advocating for healthy options in our community.

Implications for Other Communities

We are excited about the success of our grant, and believe that it is easily replicable in other communities. Some important points that we feel merit consideration for the design of similar programs include offer tangible incentives, such as our free month exercise voucher, work with your community partners to assure that all parties will benefit from the partnership, and interview the people of the community to discover what their barriers are to healthy eating and active living. We believe that these steps led to our success. We felt some frustration with our lack of progress at times, until we committed to these changes. Those points accelerated our progress.

DELAWARE

La Red Health Center, Inc.

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12674 |
| Grantee Organization | La Red Health Center, Inc. |
| Organization Type | Federally Qualified Health Center |
| Address | 21444 Carmean Way, Georgetown DE 19947 |
| Grantee organization website | www.laredhealthcenter.org |
| Primary Contact Information | Brian Olson Chief Executive Officer Phone number: 302-855-2020 ext. 1116 Fax number: 302-855-2025 bolson@laredhealthcenter.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--|--|
| La Red Health Center, Inc. Mental Health Association in DE | Georgetown/Sussex/DE Wilmington/New Castle County/DE (base for statewide services) | FQHC Mental health advocacy organization |
| Delaware Ecumenical Council | New Castle County base- statewide services | Faith-based professional association |
| Delaware Division of Substance Abuse and Mental Health | New Castle/New Castle/DE (base for statewide services) | State agency- community mental health services |
| Delaware Division of Services for the Aging and Physically Disabled | New Castle/New Castle/DE (base for statewide services) | State agency-waiver services of personal assistance services and other home-based supports |
| Brandywine Counseling & Community Services | Wilmington/New Castle County/DE (base for statewide services) | Non-profit substance abuse provider |
| Delaware Rural Health Initiative | Dover/Kent County/DE | Access to Rural Healthcare; advocacy organization |
| DE State Office of Rural Health Mid-Atlantic Association of Community Health Centers | Dover/Kent/DE Georgetown, Sussex/DE | State Office of Rural Health Regional office Association of Community Health Centers |
| CHEER | Sussex County/DE | County network of senior centers, onsite services, transportation, and meals |

Community Characteristics

Area:
Grantee La Red Health Center, Inc. and the *Southern Delaware Healthy Seniors Program* focused services in Sussex County, DE, the state's single federally designated "rural" county.

Community Description:

Sussex is the southernmost of three counties in Delaware and is federally designated as a rural county, a Medically Underserved Area (MUA), a low-income Health Professional Shortage Area (HPSA), a dental HPSA, and a partial mental health HPSA. In the service area, small businesses, service occupations and agricultural concerns predominate. The farming, poultry and service industries account for the majority of employment opportunities—many service jobs are part-time and/or seasonal to accommodate tourism in the eastern coastal side of the County. The County has been especially affected by immigration, largely drawn from Caribbean countries, southern Mexico and Guatemala, to poultry, farming, and landscaping jobs. The top barriers impacting access to care and unmet need for primary health care in the target population are poverty and lack of insurance. Approximately 30% of the population lives under 200% of the federal poverty level, and another approximate 15% below 100% of the federal poverty level. There is an increase in the number of uninsured, underinsured, and food stamp eligible in the service area. The County has the lowest median household income of Delaware's three counties. The County is large in land mass containing areas that are remote and less commercially developed. Sussex County has worse health outcomes for major chronic diseases such as heart disease, asthma, diabetes, HIV, infant mortality, and cancer than the rest of the State and, in many cases, the nation.

Need:

The elderly population makes up 28% of the Sussex population and is projected to increase to 34% of the population by 2020. The continuous influx of retirees to the region is a major contributor to the growth of the senior population. Sussex County has the highest proportion of senior citizens of Delaware's three counties. The service area has significantly higher mortality rates from suicide than the other two Delaware counties. A portion of the County is designated as a Mental Health HPSA; with most critical shortages of mental health practitioners in Western and Southern Sussex County. The proportion of psychiatrists to all mental health professionals (10%) is the lowest in the state. Sussex County has the highest ratio statewide of psychiatrist to population at 1:22,983 persons served by each FTE psychiatrist (the state ratio is 1:7,075 persons, 1:5,146 for Kent County and 1:6,253 for New Castle County). There are no inpatient treatment services in Sussex County.

Program Services

Focus Areas

Aging
Behavioral/Mental Health
Community Health Workers/Promotoras
"Train the Trainer" Best Practice Outreach (Gatekeeper)

Target Population

Elderly
Caucasians
African Americans
Latinos
Uninsured
Underinsured

Description:

The project focused on the following: a) completion of targeted senior outreach through the use of trained "gatekeepers" in the community, b) provision of direct mental health clinical services thereby increasing capacity in the County, c) utilization of volunteer caregivers and other community resources to supplement the Gatekeeper model; e.g., companionship and transportation, and d) evaluation of the outcomes of the project and result sharing for replication and sustainability.

Role of Consortium Partners:

- The Division of Substance Abuse and Mental Health collaborate for service delivery coordination between the health center and the Community Mental Health Centers.
- The Division of Services for the Aging & Physically Disabled provides subject matter expertise on the senior community.
- The Delaware Rural Health Initiative completes advocacy for systems development, workforce, and resources in rural Delaware.
- The Mental Health Association provides subject matter expertise on mental health and serves as a repository of information on available resources.
- The Delaware Ecumenical Council completes training and outreach via the faith community.
- The Cheer Center at onset assisted with consumer outreach and education through their County wide network of senior centers.
- Brandywine Counseling and Community Services provides specialty consultation services for complex cases.

Outcomes

Each year of the program period the number of unduplicated patients served by the program increased by 75% for a total estimated number served of 278 by the end of the program period on April 30, 2012. Of this total, 60 individuals were above the age of 65 years and the other 218 were between the ages of 50-64 years of age. These individuals have generated over 1100 encounters. The racial/ethnic breakdown of these patients was as follows; Caucasian 74%, African American 12%, and Hispanic 14%. (*Final numbers are being tallied for grant closing reports on May 1, 2012*).

Consumer focus groups were conducted by mental health subject matter experts from the Muskie School of Public Service to learn jargon and perceptual issues experienced by seniors in the service area. Outreach and educational materials were appropriately constructed and/or modified to use terminology and word choice identified through the focus groups and pervasive to all cultures. The demographic blend of individuals served is diverse and is different from that of the health center's primary care operation which has led us to anecdotally determine that the outreach message was correct for the diverse members of the target audience. Gatekeeper outreach presentations have been completed at over 75 organizational sites including businesses, churches, senior centers, law enforcement agencies, and more. The program estimates that during the project period it has completed over 30,000 face to face encounters with seniors throughout the County at numerous events and locations.

At a clinical quality level, the organization has appended its clinical plan for the overall organization to monitor compliance with scheduled appointments for all patients scheduled for mental health services. This overarching quality criteria decision from the Chief Medical Officer was a direct result of the observation of appointment compliance rates amongst the seniors scheduled for mental health services. Early in the project period it was determined that the seniors had a 50% rate of compliance with scheduled appointments; by April 2011 that rate had improved to 70% as a result of the implementation of follow-up administrative procedures. The goal for appointment compliance by the end of the grant period is 75%.

Challenges & Innovative Solutions

Challenges were minimal during the project period but some did present. The issue that had the most recurrence, yet not disruption was that of the need for homebound services for the elderly. Our Consortium partner, the Cheer Center, has a County-wide "Meals on Wheels" program, and also has a small case management program staffed by nurses. During the planning period we had envisioned that the Meals on Wheels volunteers could be trained in the Gatekeeper method of problem detection and referral. At a practical level, based on demands already on the volunteers, the volume of their work, and a shifting economy, that was not possible. We also had preliminarily anticipated that the Cheer case management staff would make service referrals. The Cheer staff was trained in the Gatekeeper method at the launch of the program, but the referrals for service did not prove as robust as anticipated. The reason cited for this phenomenon was the case manager/nurse assessment that services were needed in the home setting versus the ambulatory setting. The program was not structured or budgeted to be able to provide home-based services, moreover the provision of home-based services would have required federal approval for La Red (as this type of service is not within the organization's federally approved clinical scope of service). The Geriatric Outreach Worker job description was modified to be responsible for transport of any patient for which that need was identified at the time of scheduling, but the resource of transportation did not necessarily address the provision of home-based service as was identified as a priority for some organizations within the senior service industry. This notwithstanding, the program continued to target seniors from throughout the County and service take-up rate was high. This led to the second challenge; capacity. Grant funds were available to support contracted hours of clinical provider time. As the provider's caseload reached full in the second year of the program, it became clear that alternate capacity was needed to accommodate the community outreach function and this created budgetary pressure above and beyond the issue of long term sustainability. In response, other mental/behavioral health staff were trained and leveraged to support senior care. As discussed further below, a more permanent solution to expanded and ongoing capacity was achieved in a twofold manner; 1) PNP and LCSW salaries were included in a "New Access Point" funding request to HRSA which was approved, and 2) new partnerships and planning commenced to introduce the use of telemedicine at the LRHC as a means by which to expand capacity and better serve the needs of patients with more complex needs.

Sustainability

On-going Services and Activities:

The RHOG project had two main components; service delivery and best practice outreach.

The grant-funded Geriatric Outreach Worker is from the service area and has an undergraduate degree in psychology and background in senior services. She has implemented a “train the trainer” approach to client case finding through building numerous relationships with area businesses, churches, civic organizations, State programs, and more. The RHOG Geriatric Outreach Worker has been integrated to the promotoras department. The organization has a team of 7 Promotoras (indigenous lay health workers) who support clients with a wide variety of enabling services including translation, interpretation, transportation, and basic assistance with continuum of care needs. The promotoras each possess special skills specific to a particular target audience; e.g. pregnant women, African Americans, Latinos, children, and now seniors. The work requires a balance of community outreach and partnership building and direct client support with continuum of care services. The organization is currently pursuing Patient Centered Medical Home recognition and has already identified the need and opportunity to fully integrate the role of the promotoras into the formation of care teams. Psychiatric nurse practitioner (PNP) services targeting seniors were added to the onsite service line as a result of the RHOG award. Those services will continue. The PNP provides medication management support to the physician provider team. The PNP was such an effective addition to the mental/behavioral health unit and the medical provider team, that the use of additional PNPs has been implemented at each of the organization’s service sites. They see all ages of patients. Ultimately over the 3 year project period a strategic plan and partnerships to pursue more primary care/mental health integration, incorporate psychiatric consultation, and use technology as a means of expanding access through tele-psychiatry services has been established.

A tangential outcome of the Consortium and the RHOG project is a new partnership with Brandywine Counseling and Community Services to provide behavioral health and substance abuse services to homeless clients. In this partnership, the La Red psychiatric nurse practitioner is an integral point of first assessment and triage to the more intensive treatment services provided by Brandywine, and required of the special population of persons experiencing homelessness.

Consortium partners will continue to collaborate on community and policy maker education.

Sustained Impact:

Sustainability planning was initiated at the onset of the project and included consideration for addressing the long-range leadership and staffing needs for the project, measuring and communicating the project’s value to stakeholders, and securing ongoing commitment from Consortium members to support the project.

The passage of the Affordable Care Act presented unexpected opportunities for continuation and expansion of the program through enhanced community health center funding. La Red was awarded an additional New Access Point grant through HRSA BPHC in August 2011. That award enabled the integration of salary support for the service delivery staff of the Rural Health Outreach Grant as a component of the overall staffing plan for the organization. Funding for the outreach position has been pieced together from various state contracts. The State of Delaware, via competitive bid process, is implementing a statewide Health Ambassadors program targeting underserved communities. La Red submitted a response to utilize its promotoras program as an outsourced business solution on which to build. If funded, a 3 year, more centralized, source of salary support for the Geriatric Outreach Worker would be realized.

Finally, above the impact that the RHOG grant has had on our daily service delivery system and partnerships, it has evoked more systemic and long-range planning to further integrate mental and behavioral health services into the primary care operation. Additional partners have joined the Consortium to elevate the work “to the next level” and form a new project plan. Best practice models for full mental/behavioral health integration, coordinated psychiatric consultation, and the use of telemedicine as a modality are the basis of a comprehensive new plan to take La Red into a reformed health environment.

Implications for Other Communities

La Red utilized best practice models to expand its service delivery menu and capacity, introduce effective community outreach, and achieve sustainability in a practical manner. Consistency prevailed over complexity and in so doing, we can offer other communities a realistic pathway to build core partnerships and sustainable enhanced service capacity.

FLORIDA

Baker County Health Department

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12702 |
| Grantee Organization | Baker County Health Department |
| Organization Type | County Health Department |
| Address | 480 West Lowder Street Macclenny, Florida 32063 |
| Grantee organization website | www.doh.state.fl.us/chdbaker |
| Primary Contact Information | Terrenia Staier Administrative Services Manager Phone number: 904-653-5230 Fax number: 904-259-1950 Terrenia_Staier@doh.state.fl.us |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$149,763 May 2010 to April 2011: \$124,191 May 2011 to April 2012: \$99,265 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---------------------------------------|----------------------------|---------------------|
| Faith Bible Church | Sanderson, Baker, Florida | Faith based |
| Emmanuel Church of God in Christ | Macclenny, Baker, Florida | Faith based |
| New Jerusalem Church of God in Christ | Margaretta, Baker, Florida | Faith based |
| First Coast YMCA | Macclenny, Baker, Florida | Fitness center |
| Anytime Fitness | Macclenny, Baker, Florida | Fitness center |

Community Characteristics

Area:

The grant served all of Baker County in Northeast Florida. Classes for Diabetes Self-Management were held in the town of Macclenny and the community of Sanderson. The Power to Prevent Program was held in Macclenny and the communities of Sanderson and Margaretta.

Community description:

Baker County, with a total population of 26,006, is one of the smaller counties by population size in Florida. The primary language is English and the demographic make up consists of 84.7% white, 14.2% African American, and 1.1% other. Approximately 21.6% of residents are ages 14 or younger, 14.6% are 15-24 years old, 27.5% are 25-44, and 36.3% are 45 and older. There is no public transportation in the entire county which covers 585 square miles. The majority of jobs are low paying, blue color jobs with few benefits. In 2011, the unemployment rate for Baker was 11.3% compared to the State at 11.6%. The county per capita income was \$20,034 by the end of 2009 compared to \$27,128 for Florida. The health of a community depends on access to health services and quality of health care. Robert Woods Johnson and the University of Wisconsin recently ranked Baker 62nd out of 67 counties in Florida in terms of health outcomes representing the health of a county. The county is federally designated as a primary health professional shortage area for its low income population and considered to be a medically underserved area and population. In 2010, the average number of unhealthy physical health days over the past 30 days reported by residents was 5.7% higher than Florida at 4.1%. In addition, 23.8% of residents reported that they could not see a doctor at least once during the past year due to cost (compared to 17.3% for Florida).

Need:

Despite its small size, Baker County has a significant problem with the prevalence of diabetes and its related complications. Baker has a high rate of diabetes, a high rate of low income people and few doctors. The 2002 Baker County Behavioral Risk Factor Surveillance System (BRFSS) survey results indicate a growing trend of 15.4% of adults in the county that have been told by a doctor that they have diabetes. This is nearly double the State of Florida at 8.2%. Obesity increases the risk for diabetes. Those at risk for diabetes include 22.8% of adults that are obese, 54.7% that get no regular physical activity and 73.8% who consume less than 5 servings of fruits and vegetables per day.

The Florida Department of Health Florida Diabetes Prevention and Control Diabetes Fact Sheet states that 18.7% of adults diagnosed with diabetes did not have their hemoglobin A1C checked in the last 12 months and 32% of adults diagnosed with diabetes did not have their feet checked for sores or irritations at least once in the last 12 months. In addition, 53.3% of adults diagnosed with diabetes had never taken a course or class in how to manage their diabetes. Baker suffers higher rates of deaths from diabetes than the rest of the state indicating an increased need to provide self-management education to reduce the death rate from diabetes. Results from the BRFSS indicated the diabetes age-adjusted death rate in Baker was 55.2 per 100,000 compared to Florida at 21.2 (Healthy People 2010 goal 46.0).

Program Services

Focus Areas

Chronic Disease Management: Diabetes
Health Education and Promotion
Physical Fitness and Nutrition

Target Population

Adults
Elderly
Caucasians
African Americans
Latinos
Native Americans
Alaska Natives
Uninsured
Underinsured

Description:

The Baker County Health Department (BCHD) coordinated the grant activities which were implemented with support from the Beat Diabetes consortium. The activities consisted of health screenings, diabetes prevention classes, and diabetes self-management education classes (DSME).

1. Health screenings (blood pressure, BMI, glucose or A1C) were provided by the BCHD. They were held at a variety of locations: work sites, churches, schools, community centers and events (county fairs, farmers markets, parks, fitness centers and health fairs). Applicable participants were referred to Power to Prevent and DSME classes. Funding paid for screening supplies and equipment.
2. Power to Prevent classes were held at 4 different sites: Year 1 at the Central Center located in Sanderson, Year 2 at Emmanuel Church of God in Christ located in Macclenny, and Year 3 at the Community Center in Sanderson and at New Jerusalem Church of God in Christ in Margaretta. Funding paid for materials, physical activity equipment, stipends for class leaders and fitness trainers as well as scholarships to a fitness center. Participants used the Power to Prevent curriculum developed by the CDC and National Diabetes Education Program and were urged to track their food intake and physical activity. They were taught that small steps reap big rewards and that by taking one small step each week to improve eating habits or increase physical activity they could prevent or delay diabetes. They had physical activity at each session and discussed healthy foods.
3. DSME classes were held at 2 sites—BCHD in Macclenny and Central Center in Sanderson. In Year 1, 5 series of classes were conducted and 4 series in Years 2 and 3. Funding paid for Certified Diabetes Educators, materials, incentives, supplies for A1C and glucose testing, and eye, foot, and dental exams. Clients learned what diabetes is, how it affects their lives, and how to control their diabetes. They made goals that were tracked for a year.

Role of Consortium Partners:

The consortium consisted of 3 faith based organizations, 1 community organization, 2 fitness centers and the county health department. Each organization provided specific components to the partnership.

- Baker County Health Department was the grantee and fiscal agent of the grant. BCHD coordinated and advertised activities, provided health screenings, recruited partners, contracted services, kept records, purchased materials, tracked clients and served as a site for DSME classes and screenings.
- Faith Bible Church provided the Central Center as a site for screenings, Power to Prevent classes and work outs. They also provided the leader for the classes in year 1. They advertised the program to their members and helped to promote it to the community. Most of the class members were from their congregation. The minister and his wife acted as role models and participated in classes.
- Emmanuel Church of God in Christ was a screening site and the Power to Prevent site for year 2. The leader was a member of the church along with other participants including their minister.
- New Jerusalem Church of God in Christ was site of the Power to Prevent Program in year 3. They provided a program leader and hosted screenings. Their associate minister was a class participant.
- Baker County Community Development Center became an additional provider of Power to Prevent after approaching BCHD for assistance with a Biggest Loser contest. Power to Prevent was presented as a good fit and easily adaptable to their goals. They provided a leader and monetary incentives to their participants. Their sessions were held at the Community Center in Sanderson in year 3.
- Baker County YMCA provided fitness trainers for the Power to Prevent classes for the first and third years. The second and third years, they provided a trainer for an exercise class at the Central Center in Sanderson. Each year they provided discounted club memberships to select program participants.
- Anytime Fitness provided a fitness trainer for Power to Prevent in Year 2. They also served as a site for health screenings and gave discounted club memberships for 2 participants.

Outcomes

Project evaluation is being conducted for the three main activities provided by the project: Diabetes Self-Management Education, Diabetes Prevention Education, and Health Screenings/Clinical Services. Project activities that will be utilized to evaluate the findings of the program are still taking place, therefore the overall program outcomes are not known at this time. Although the outcomes for the entire project period are not known at this time, selected evaluation findings for the first two years are summarized below:

Diabetes Self-Management

- Participants completed a questionnaire before and after each session. Mean scores from pre/post-tests indicated 100% of participants improved their overall knowledge of the recommendations for self management. This includes significant changes in nutrition self-management, monitoring diabetes, behavioral changes related to diabetes, acute complications of diabetes, and diabetes medications.
- 40% of participants decreased their A1C and 75% increased their frequency of physically activity.
- Participants were administered a Satisfaction Survey after program completion. Results indicated 100% of the participants who completed the survey were satisfied with program services.

Diabetes Prevention Education

- Outcome evaluation results for the Power to Prevent program include feedback on goals, physical activity, nutrition and confidence to engage in healthy behaviors. The pre/post-surveys used to measure these outcomes were developed by the authors of the Power to Prevent program.
- After completion, participants sustained physical activity by implementing community aerobic classes resulting in 38% of previous program participants reporting compliance with their exercise plan.

Health Screening/Clinical Services:

- 415 individuals (unduplicated) received health screenings including blood pressure check, BMI, and glucose or A1C test. Of those who received screenings, 184 also received services through either the DSME or Diabetes Prevention Classes. An additional 179 individuals only received screenings.
- A total of 12 participants received eye exams, 39 received dental exams, and 1 received a foot exam.

Challenges & Innovative Solutions

Our main challenge was keeping clients involved for the duration and follow up of programs. The Power to Prevent is an 8 month program. It consists of meeting once a week for 6 weeks then once a month for 6 months. When it drops to monthly meetings, some of the momentum for attending seems to drop too. Since classes were held in churches and community centers and most participants

were friends, some viewed them more as a social activity. The success of the program depends heavily on the class leader. Those who conscientiously followed the curriculum and led by example were most effective.

- A variety of incentives were available to clients who attended Power to Prevent classes—pedometers, water bottles, stretch bands, t-shirts, tote bags etc. A healthy snack was prepared to sample and the recipe was distributed. When they began to meet monthly, clients were contacted to remind them of class. Data collection was emphasized to the class leader and a check-off sheet was devised to be checked, signed and returned along with sign-in sheets, indicating each objective of the class had been met. The fourth Power to Prevent partner adapted it to their schedule, meeting twice a month for 6 months. They charged a \$25 entry fee and had a gala celebration where the 3 biggest losers were awarded cash prizes from those funds.

The DSME program required tracking clients' goals and A1C for a year. Getting clients to return for screenings and to submit information was difficult. There are electronic tracking systems available to manage data but we have state restrictions that do not permit their use.

- At the first session of DSME, clients were told that the classes were provided through a grant. The collection of information for reports and maintaining ADA accreditation was explained as the reason for surveys and screenings. Special events—a podiatrist doing a "Foot Talk," a chef demonstrating preparation of healthy dishes, YMCA trainers leading a physical activity session--were held at follow-up classes to obtain A1C's. Letters were sent inviting clients to the events.

Sustainability

On-going Services and Activities:

All partners who provided Power to Prevent are capable of providing it in the future. They have the curriculum, experienced leader, and physical activity equipment. They were all provided a CD with downloadable materials and they can order educational materials from the National Diabetes Education Program. The curriculum and leader's guide are available to other sites and BCHD and leaders from the original sites can act as advisors to anyone interested. The leader at Faith Bible Church said she would like to modify the program to use again with her church. Members from the first Power to Prevent class enjoyed Zumba so an instructor was provided for them once a week during the second year. They met 2 additional times per week on their own, exercising to videos or walking and running. They meet with or without an instructor and have a member who is very capable to lead the class. The Faith Bible Church will continue to offer their Central Center facility for their use. Their motivation inspired the Baker County Community Development Center to become involved with Power to Prevent. The Baker County Community Development Center used it with a competition and minimum help from BCHD. Their leader would like to repeat it but raise funds and provide snacks and physical activity for the whole family.

The BCHD is committed to providing DSME classes but may have to decrease the sessions provided annually. Currently, there are 4 per year. Funding for health departments continues to be reduced and budgets stretched so additional funding will be sought to pay for certified diabetes educators. Seeking assistance from a pharmaceutical company is an option to assist with programmatic support. The BCHD and Healthy Baker websites, digital sign, flyers, and local health providers will be the sources utilized for promoting classes. BCHD staff will continue to conduct screenings and distribute health information.

Sustained Impact:

Residents have become more knowledgeable about diabetes. They better understand what it is and that it can be prevented, delayed or controlled. Through prevention classes, participants have taken strides in reducing risks of diabetes by losing weight and/or becoming more physically active. The Sanderson community keeps exercise classes going. Those who attended DSME classes give unsolicited testimonies and call to report improved A1C levels and weight loss. The rate of adults diagnosed with diabetes in Baker is decreasing—(2002) 15.4%, (2007) 11.1% and (2010) 10.5%. Classes have served as a venue to inform members of other resources available in the community. Partners have worked well together and future endeavors can be built on these partnerships. Capable leaders have been recognized and have increased their experience and ability to lead health related programs.

Implications for Other Communities

Working with faith based organizations was beneficial as was having classes at their sites or nearby. Some of the organizations chose times for classes on the same evenings they were meeting for mid-week services but at an hour earlier. Having a peer class leader was also a plus. Class members already knew one another and wanted to support the class and leader by participating. Having a leader who serves as a role model and completes the program activities along with the members as well as stresses the expectations and outcomes to be achieved is vital for success.

The Beat Diabetes programs that were provided—Screenings, Power to Prevent, and Diabetes Self-Management Education—identified pre-diabetics and diabetics, provided education and activities for preventing diabetes, and education to control diabetes. The Power to Prevent curriculum is comprehensive and simple. It includes dialogue, discussion points and objectives for leaders to follow for each session. Conversation Maps were utilized by Certified Diabetes Educators for DSME classes. These include participants in discussions and give them opportunities to ask questions specific to their needs. They become somewhat of a support group for one another due to this interaction. Both these curriculums work well with smaller groups and participants feel comfortable with the formats.

FLORIDA

Putnam Behavioral Healthcare

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12738 |
| Grantee Organization | Putnam Behavioral Healthcare |
| Organization Type | State Mental Health Facility |
| Address | 330 Kay Larkin Drive, Palatka, FL 32177 |
| Grantee organization website | N/A |
| Primary Contact Information | Lori Milam Outreach Liaison Phone number: 386-546-6335 Fax number: unitedvisionprogram@gmail.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--|---|
| CDS Family & Behavioral Health Services, Inc. Juvenile Crime Prevention Office | Palatka/Putnam/FL Palatka/Putnam/FL | Substance Abuse Treatment for Adolescent Prevention, Intervention, and Diversion for adolescent |
| Putnam Behavioral Healthcare | Palatka/Putnam/FL | State Mental Health Facility |

Community Characteristics

Area:
Grantee Putnam Behavioral Healthcare and The *United Vision Program* serves Palatka, Crescent City, and Interlachen communities in Putnam County, FL.

Community description:
Putnam County has approximately 73,000 residents with 82% of those being Caucasian. The remaining population is African American and Hispanic. Putnam County is a rural community that has one of the highest rates of domestic violence in the country. In addition to this, over 20% of all persons in Putnam County live in poverty. Other factors influencing life in Putnam County include high juvenile crime rates, teen pregnancy, and mental health and substance abuse factors. In the area of prescription pain relievers, Putnam County adolescents are more than 33% higher than the state average. Overall, Putnam County is at 43% for being medically underserved as opposed to the 5% for the state. The entire area is characterized by disproportionate poverty, low educational attainment, highly disorganized communities and a history of antisocial behavior.

Need:
The *United Vision Program* was designed to address those youth who were in need of mental health and substance abuse services but were unable to attain them. Specifically, we wanted to reach the target population that was uninsured or underinsured. The *United Vision Program* would offer case management and referral follow-up to ensure the youth was connected to the needed service.

Program Services

Focus Areas

Access: Primary Care
Behavioral/Mental Health
Coordination of Care Services
Health Education and Promotion

Target Population

School aged children - teens
Adults
Caucasians
African Americans
Latinos
Native Americans
Uninsured
Underinsured

Description:

The *United Vision Program* provided a structured, referral based system that operated through a formal network of services to link those in need with services. Beyond the target population of youth, The United Vision Program offered outreach services to the entire family, bringing tangible, healthy, and potentially life changing solutions to the family unit. Additionally, *The United Vision Program* researched, produced and continues to maintain a Community Resource Directory that is made available throughout the community through the schools, law enforcement, and other community partners.

Role of Consortium Partners:

All of the Consortium Partners participated in the implementation of the program. The Consortium met monthly to discuss the successes and issues associated with the program. Each partner was a service provider and therefore was intricately involved in the referral process. This Consortium maintained a close working relationship that directly contributed to the success of this program.

Outcomes

In many ways, the *United Vision Program* (UVP) was extremely successful. Overall, the original intent and precipitating factor behind the original grant application - youth with substance abuse treatment or prevention needs were in need of access to mental health services in conjunction with their substance abuse services – has been structurally addressed through the development of a first class framework for referrals and services. Additionally Targeted Client Outreach has become a sustainable feature of the local mental health/substance abuse service delivery system, and the stigmatism associated with mental health/substance abuse needs have begun to be broken down. Specifically, the *United Vision Program* was able to identify 217 at-risk youth in need of Mental Health and/or Substance Abuse services and was able to provide services for almost 60% (128 at risk youth) of that population. Of the at-risk youth referred to the UVP that became clients, one-third successfully completed their individualized treatment plan goals, and one-fourth were actively engaged in services towards completing treatment plan goals at the conclusion of the grant term. Through evaluation findings, it was reasonable to infer that for these clients, the *United Vision Program* has improved the quality of life, and helped to provide a more stable, healthy living environment. During case file reviews, the evaluation team noted comments such as "client resolved problems with family member and is able to demonstrate sound coping skills" and "client is progressing satisfactorily with high expectation to remain substance free".

The *United Vision Program* also participated in over 15 different county wide events throughout the duration of the program that were focused on educating community members on the current resources available to them. One of the biggest outreach services the UVP was involved in was the annual "Fall Fling". This event focused on increasing awareness and de-stigmatizing the negative ideas surrounding community resources. In its final year, the UVP team joined forces with over 25 different community resources to serve and educate over 500 community members from local schools, cheer squads, dance teams, band groups, etc. Youth and their families were encouraged to participate in festival activities and visit the community resource booths all free of charge. Community resources worked together to provide free health screens, hearing tests, food, basic needs supplies such as tooth-brushes and combs to Putnam county youth and families. The teamwork and cooperation focused towards the goal of community fun and well-being was immeasurable.

Additionally, the UVP Outreach Liaison participated in five different monthly coalition type meetings to increase the awareness and strengthen partnerships between community members and the *United Vision Program*. The decision to join in and attend monthly meetings of at least one of these groups in particular was based on evaluation recommendations due to low participation from African American youth in Year 1 of the program. As a result, the *United Vision Program* Outreach Liaison began attending the Beasley "BEST" meetings at Beasley Middle School, which had one of the highest incidences of both African American students and student referrals in

the District. Consequences of this involvement were the significant increase in referrals from Beasley (12%) and African Americans (32%).

Finally, a priceless product of the *United Vision Program* for at risk youth and families that has become a sustainable resource for Putnam County is the "Community Resource Guide". The Community Resource Guide offers a brief description and contact information on all of the community based resource providers in Putnam County for at risk youth and families. These guides were distributed all over Putnam County, can be found online, and are available on request in hard copy or electronic format.

Challenges & Innovative Solutions

The greatest challenge for the United Vision Program came in the third and final year's last months. The fiscal agent and Consortium Member, Putnam Behavioral Healthcare, abruptly lost funding for mental health and substance abuse services. This impacted the program dramatically as we were not able to transfer the fiscal agent to another partner due to the lack of time left on the grant. Additionally, the transition to the new mental health and substance abuse provider has been difficult and confusing.

Sustainability

On-going Services and Activities:

The *United Vision Program* has continued since we lost our funding prematurely. The school district is funding most of the salary of the Outreach Liaison as she continues to work on the Community Resource Directory and providing instruction for the Creating Lasting Families Connections Classes. Additionally, the school district has housed the Community Resource Directory on their school website. Their partnership has been invaluable as we continue to maintain and update this resource. The Putnam County Anti-Drug Coalition is partnering with *The United Vision Program* to continue the prom initiative that was started the second year of the grant. The Coalition is providing the funding budgeted for this event as well as working with UVP as we canvas the community to bring the message for prom, "Stay Safe and Sober".

Sustained Impact:

One of the long-term effects on our community as a result of the *United Vision Program* is the way our partners have learned to work together and define collaboration. This program brought together three service providers and we learned how to coordinate services as well as ways to promote each other's programs. Another effect on our community was the understanding of the importance of the referral system that was developed by the *United Vision Program*. This was the first of its kind and proved to be extremely valuable as a tool for tracking and ensuring that children get connected to needed services.

Implications for Other Communities

There have been many lessons learned through the implementation of this Outreach Grant. First, I would encourage new grantees to BEGIN by thinking about sustainability for their programs. Creating partnerships outside your consortium is very important and may prove to be critical to your program after funding stops. I don't think it can be stressed enough - it's all about the relationships that are created and the ability to see beyond your own program and how it interrelates to others.

FLORIDA

Rural Health Network of Monroe County Florida, Inc.

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12704 |
| Grantee Organization | Rural Health Network of Monroe County Florida, Inc. |
| Organization Type | Non-profit organization; 501-c-3 |
| Address | P.O. Box 500370, Marathon, FL 33050-0370 |
| Grantee organization website | www.rhnmc.org |
| Primary Contact Information | Daniel Smith Program Director and (President & CEO) Phone number: 305-517-6613 Fax number: 305-517-6617 dsmith@rhnmc.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|---|---------------------------------------|
| Monroe County School District (MCSD) Year 1, 2, & 3 | City of Key West, Monroe County, FL 33040 | County School System |
| Florida Keys Area Health Education Center (FK-AHEC) Year 1 | City of Marathon, Monroe County, FL 33050 | Non-profit organization 501-c-3 |
| Monroe County Health Dept. (MCHD) Year 1, 2, & 3 | City of Key West, Monroe County, FL 33040 | Health Department (government agency) |

Community Characteristics

Area:

The coverage area for the Outreach grant is a one county area at the southernmost tip of Florida, Monroe County (aka the Florida Keys), stretching out 120+ miles into and dividing the Atlantic Ocean and the Gulf of Mexico.

Community description:

In 2007, 20+% of all persons under sixty-five years of age had no health insurance (13,743 out of 67,561 persons) in Monroe County¹. There are no known reliable statistics for those with or without dental insurance in Monroe. It is certain that a significantly greater number are without dental insurance.

Monroe County's population is spread out over 120 linear miles, connected by a single, 2-lane highway (US 1) making central accessibility to health care (and social services) a geographical challenge. In addition, Monroe County residents and visitors are confronted with quality of life issues and choices. (1) The relaxed come-as-you-are advertising to encourage tourism also attracts the marginalized and the homeless, and is coupled with the promotion of excessive alcohol and illicit drug use, possibly resulting in a high incident of auto accidents, as well as risky and unprotected sexual encounters. (2) High cost of living factors, limited career opportunities and a shortage of higher paying jobs, makes health care insurance in general and health care access in particular difficult

¹ Source: Monroe County Health Profile, published by the Health Council of South Florida

for the working poor. (3) The distances that low-income residents must travel to access available services are truly problematic, while there are few transportation options available for those without automobiles.

Need:

The work plan focuses on all of the 1211 second and seventh grade students in Monroe schools (for each of the three years of grant support) who are on Medicaid, are uninsured, or are considered at-risk and/or underserved.

In Monroe County, dental disease and lack of access to dental care is a most critical health care issue. Considerable oral health disparities remain in Monroe, especially among low income and no income populations. There are no "private" dental offices in Monroe that accept Medicaid, including the one part-time pediatric dentist, because of the low reimbursement rates and the complexity of processing claims, which has created additional barriers to dental care for low income patients.

Program Services

Focus Areas

Children's Health
Oral Health

Target Population

School aged children - elementary
School aged children - teens
Caucasians
African Americans
Latinos
Native Americans
Uninsured
Underinsured

Description:

The grant activities were coordinated and implemented through Rural Health Network of Monroe County FL, Inc., with some staffing support provided by the consortium partners. The Outreach grant supported the implementation of the following activities:

There are four components to the program. 1) the development of comprehensive educational training program utilizing consortium members; 2) the establishment of the school linked exam and referral mechanism; 3) providing the students with preventative and restorative oral health care services and a dental home; and 4) to address the Medicaid issues that hinder its use and have created a "no can take" attitude among providers.

Role of Consortium Partners:

The grant program had a very active consortium. This three year program provided an important opportunity for the consortium partners to develop stronger working relationships and jointly plan and implement multiple activities. Each consortium partner played an active role in the program:

- Rural Health Network of Monroe County FL (RHNMC) was the lead agency. It has three dental clinics, all on a sliding fee scale and all strategically located at 45 miles intervals through-out the county. RHNMC's very own staff provided the clinical outreach to each of the county schools, doing the dental assessments and providing the dental sealants (using portable dental equipment). RHNMC was also able, between year 1 & 2 to get two of its four dentist set up as Medicaid providers. Florida ranks at the very bottom of Medicaid reimbursements, but it establishes a start in the process of helping those with low income.
- The Florida Keys AHEC provided an educational component during the first year of the grant. RHNMC found that this was actually somewhat disruptive to the "flow" of providing services and for year 2 & 3 RHNMC's dental hygienist provided the educational component for this program.
- The Monroe County Health Department (MCHD) worked with RHNMC to plan the oral screening events. The school nurses, working at each school are actually county health department employees, making this a perfect fit for our program. The school nurses were very instrumental in coordinating the site visits and acted as a liaison between RHNMC and the schools.
- The Monroe County School District (MCSD) was the key to the success of this program. They agreed to allow RHNMC's clinical staff to come into each of the county's schools and see the children that RHNMC/MCHD had parental permission slips to work with.

Outcomes

We collected evaluation data the following areas of the program, client satisfaction with the program, and improvements in health care access. Selected evaluation findings are summarized below:

Patient satisfaction

- Patient satisfaction surveys showed that 98% of participants reported receiving quality care (satisfied and very satisfied) within our three clinics. That level of satisfaction remained consistent over the term of this program.

Health care access:

Through the use of free CDC software called "SEALS", we were able to extrapolate the following data for our program;

- Year One sealant facts:
Of the 1,145 students potentially served, the program served 50.5%. Of those students served, 6.4% were identified as having urgent care needs; 32.7% had untreated decay; 26.6% had early dental needs; and 65.9% (380) were identified as having dental needs. Five hundred and twenty-one students received dental sealants through the program. This saved \$290.26 per cavity averted. Overall, in year one, the program averted a total of \$710,759.66 in potential dental costs.
- Year Two sealant facts:
Of the 1,231 2nd and 7th graders potentially served by the sealant program, 44.7% (550) were served. Of those served, 8.4% had urgent care needs; 37.1% had untreated decay; 28.9% of students had early dental needs; and 74% had dental needs. Four-hundred and seventy-three students received dental sealants through the program. This resulted in \$478,076.24 in costs averted.
- Year Three sealant fact: Still in progress. This final year RHNMC's goal is to transition students to a dental home, by providing the sealants to all young school children in our clinics, free of charge.

So far this year at the Tavernier Clinic, 301 students have received sealants and 256 have received decay treatment. At the Marathon Clinic, 227 students received sealants and 158 received decay treatment. At the Key West Clinic, 759 students have received sealants and 843 have received decay treatment.

Dental Home Totals (from above table):

Children receiving sealants year 3= 1,287

Children receiving treatment for decay year 3 = 1,257

Challenges & Innovative Solutions

Initially, coordinating the school's schedules with a workable schedule for our RHNMC clinical team was a challenge. Year one of this project saw the H1N1 flu virus scare occurring simultaneously with the start of our sealant project. While RHNMC was scheduling to get into each of the county's schools, the Monroe County Health Department (MCHD) was attempting to provide "emergency" vaccinations to the school children, utilizing the same scheduling pattern used by our organization. This, at the onset, became a scheduling nightmare, but ended up creating a valuable partnership between RHNMC, MCSD and MCHD. Originally the MCHD was not a direct partner in this project. Because of conflicts with the local AHEC, and due to the necessary coordination that was needed between the School District, RHNMC and the Health Dept., it became apparent that there was a new relationship developing that worked very well together. The school nurses (who are actually health department employees) became an integral part of this sealant program.

Another challenge RHNMC had was acquiring the needed parental permission slips to place dental sealants on the children's teeth. Through-out the entire three years of this project that issue would remain a challenge. RHNMC addressed the challenge head-on by providing (multi-lingual) literature and educational components more aggressively each year. The best method we discovered was to actually get the child (and family) into the clinic environment. We dedicated year three to that approach with great success. We found that the school environment was a fantastic way to reach the children, but limited in its ability to get the attention of the parent. By media advertising of "free" dental sealants at each of our clinics we have been able to get the parents actively involved in the process and in the care of the children.

On-going Services and Activities:

The main components of the grant-funded program will continue after the grant period ends, though they will be much reduced in scope and modified to our existing operations.

- RHNMC currently has three dental clinics strategically placed through-out the county. We dedicated year three of this project as a transitional period. We got the parents more involved in the oral health care of their children and have been able to bring the outreach program into our clinical environment. This makes the sealant program more cost effective and provides the “dental home” to the family (a goal of the program).
- The Oral Health Advocate Program will continue, and will be supported through the volunteer efforts of the Health Advocates and the support of the Monroe County Sheriff’s “shared asset forfeiture fund” and the local Rotaries.
- The Monroe County Health Department will continue to partner with RHNMC as part of their normal community outreach efforts. (RHNMC currently provide dental services to the Health Department via their Ryan White grant, and has done so since 2002.)
- The Monroe County School District is always a willing partner and we are hoping to partner with the local AHEC and provide oral health education in the schools on a regular basis.

Sustained Impact:

Our community has been impacted in significant ways since this program was funded. This funded grant program has created a community of local providers who better understand the challenges faced by the uninsured and underinsured in our community and are more willing to lend a hand. We have seen their attitudes change over the past three years as a result of the positive working relationship between providers and our Healthcare Coordinator and with the patients.

This program has enabled RHNMC to establish greater credibility with local non-profits and for-profits, by establishing a solid and sustainable program which was implemented across our entire county with a variety of partner “types” (a non-profit, a public health department and a school district). The return on investment (ROI) for this program establishes that a limited (but much needed) amount of seed money can have a massive impact on the community and a high ROI.

Implications for Other Communities

RHNMC was fortunate to have owned and operated three dental clinics (two at the onset of this project) to support our outreach efforts. We believe that if proper communication techniques are utilized between working organizations, whether for-profit or not-for-profit, goals can be achieved and sustained over a period of time. It is imperative that all players feel that the program is a win/win for all; including each partner and especially including those being served. A positive return on investment is essential and needs to be incorporated into the ongoing analysis of any outreach program.

FLORIDA

Washington County Health Department

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12703 |
| Grantee Organization | Washington County Health Department |
| Organization Type | County Health Department (state government agency) |
| Address | 1338 South Boulevard Chipley, FL 32428 |
| Grantee organization website | N/A |
| Primary Contact Information | Miriam Forehand, RN Program Director Phone number: 850-638-6240 Fax number: 850-638-6244 Miriam_Forehand@doh.state.fl.us |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------------------|--------------------------------|----------------------------|
| Northwest Florida Community Hospital | Chipley, Washington County, FL | Hospital |
| Shepard's Gate Church | Wausau, Washington County, FL | Faith based |
| Bay Cares Program | Panama City, Bay County, FL | Community Based Non-profit |

Community Characteristics

Area:

The coverage area for the Outreach Grant is Washington County including the communities of Caryville, Chipley, Ebro, Greenhead, Sunny Hills, Wausau, and Vernon.

Community description:

The area served by this grant is Washington County, a sparsely inhabited, rural county in the Florida Panhandle with a population density of 36 persons per square mile. The rates of unemployment and poverty in the area are higher than the state average. The county is comprised of many low income residents that have chronic health conditions, are obese, and smoke. It has a high death rate associated with heart disease, cancer, diabetes and stroke. Twenty percent of the population has no medical insurance. The county percentage of adults that reported being unable to see a doctor due to cost in 2010 was 22.3% compared to the state average of 17.3%. High school graduation is at a low rate of 71% and only 9% of residents over the age of 25 have a college diploma or higher level of education. These statistics reflect a need for adult education and literacy.

Need:

The focus of the grant program was to provide access to primary and preventative care. The target population of the program was uninsured adults. The county has a large number of uninsured (20%), or under insured residents that are unable to access affordable health care, including preventative care and primary care. There is marginal access to specialists; a shortage of comprehensive health care; a lack of public transportation that crosses county lines. The county is a designated HPSA (health professional shortage area) for primary care, dental care and mental health. High gas prices make visits to the WCHD extremely difficult for those residents living in the southern communities of the county.

Program Services

Focus Areas

Access: Primary Care
Access: Specialty Care
Chronic Disease Management: Cardiovascular
Chronic Disease Management: Diabetes
Pharmacy Assistance
Minority Health/Cultural Competency
Uninsured

Target Population

Adults
Caucasians
African Americans
Latinos
Uninsured
Minority Health/Cultural Competency

Description:

- The provision of community health screenings for chronic disease (glucose testing, blood pressure, cholesterol, etc.). Health screenings were organized through collaboration between the Washington County Health Department and The Shepard's Gate Church FDA food distribution program.
- Other, less successful, community health screenings were conducted in area middle schools and a community center.
- The Team Care program: For uninsured residents of Washington County, the program provided access to health care through the Washington County Health Department (WCHD). These services included health assessments/visits with our ARNP, lab work, and access to Pharmacy Assist Programs.
- Referrals to specialty care through BAYCARES.
- Transportation to WCHD and other medically needed locations contracted through Tri-County Community Council transportation.
- Coordinated several blood drives with Southeastern Community Blood Center Mobile Unit.

Role of Consortium Partners:

Decision making and problem solving was primarily the responsibility of the Washington County Health Department. Our consortium partners were used primarily for diagnostic and specialty services

- The Washington County Health Department acted as the grantee and fiscal agent for the grant and staffed the program with a 1.0 FTE Registered Nurse/Program coordinator.
- Northwest Florida Community Hospital: provided radiology services paid at a Medicaid reimbursement rate.
- BAYCARES program through the Bay County Health Department provided referral to specialty care based on specialty availability.
- Shepard's Gate Church provided access to the general public through their FDA food distribution program. There, we were able to do health screenings and hand out Team Care pamphlets along with health related brochures.
- Washington County Tobacco Free Partnership. Provided smoking and tobacco cessation services.

Outcomes

We collected evaluation data in three main areas: patient satisfaction with the program, improvements in health care access, and pharmacy assistance program outcomes. Selected evaluation findings are summarized below:

Patient Satisfaction:

- Program participants were asked to rate overall satisfaction with information and services provided. The ranges included Very Satisfied, Satisfied, Neither Sat/DisSat, Dissatisfied and Very Dissatisfied. Of the respondents 74% were very satisfied, 24 % were satisfied, 0% were neither satisfied nor dissatisfied, 0% were dissatisfied, 0% were very dissatisfied.
- Additionally, questions were asked regarding (1) participants received information/services needed, (2) services / information was clear and understandable, (3) staff friendly / polite, (4) staff well informed, (5) staff was helpful and (6) served in a timely manner. Of the responses, over 98% agreed they received the services and information in a clear, understandable, friendly, timely manner and the program staff was well informed and helpful. The only real concerns expressed were related to the front desk staff not being friendly (one responder). One patient had memory concerns this was addressed by suggesting he bring his wife to assist and by giving him a copy of his medication list.

Health Care access:

- A total of **884** individuals have been participants during the course of the grant in the Team Care program. Considering the population of Washington County, this is a great direct impact on health care access for the uninsured.

Pharmacy Assistance program:

- The program coordinator completed 6097 applications for Pharmacy Assistance Programs (Annual applications for each medication along with Refill applications that had to be submitted quarterly).
- The AWP Value being \$2,196,833.58

Challenges & Innovative Solutions

One of the biggest challenges we encountered was providing offsite health screenings. We attempted to have after hour clinics in Ebro (the southernmost part of the county) with very poor turnout. Health screenings are now done at the various food drives provided by the Shepard's Gate church. The turnout has hugely increased.

Limited availability of specialty care: This continues to be an ongoing problem even with the much needed assistance of BAYCARES we are not able to refer to specialties such as neurology or cardiology.

Transportation continued to be a challenge due to high gas prices and people in the southernmost part of the county having no access to a clinic or hospital within 30 miles. Tri-county availability was limited in that they required a 24 hour notice (request had to be in before noon regardless of appointment time.) They only transported to certain locations on certain days and certain times. This made it quite the challenge to book specialty appointments in Bay County.

Pharmacy Assistance Programs on occasion would discontinue certain medications with short notice. Patients had to be switched to alternate generics which increased out of pocket expense for a population that is already financially strapped. In a population with a large chronic disease problem this could have life threatening results. We found a retail pharmacy that provided a fairly limited \$4.00 medication list.

Sustainability

On-going Services and Activities:

Our TeamCare Outreach program participated in a variety of activities targeting the under and uninsured in Washington County. These activities included outreach clinics to outlying and remote areas to conduct health screenings and education; medical services provided by a nurse practitioner; specialty referral services through one of our community partners; case management and prescription assistance through our OutReach Program coordinator (RN); and laboratory and radiology services.

Without further grant funding, the scale and scope of our activities will diminish. We will continue to do periodic outreach clinics through our health promotion employees. The outreach will not be as often, but should reach the same populations. We will be unable to provide the case management that was made possible by the outreach grant. We will still see uninsured patients in our clinic as long as fiscal resources are provided by the state and county. We will not see as many patients as we could during the grant period. And we should continue to provide specialty referral services through one of our consortium partners, but on a much diminished scale and at more inconvenience (transportation) to our patients. We are hopeful that we can find a way to continue prescription assistance, but right now we have no answer. Also, radiological services will probably be terminated, but laboratory services should continue for those patients we see in our clinic. We will no longer be able to provide transportation vouchers to our program participants.

Collaboration with community partners will continue. We have good community partners and have developed new ones. We have not developed alternative funding sources. We don't think the community has alternative funding sources. If the Affordable Health Care Act is implemented, many of our here-to-fore uninsured patients will have access to services that were previously unavailable to them. Florida is a plaintiff in the 26-state lawsuit challenging the constitutionality of the Affordable Care Act. As a state agency, we will follow whatever guidance we receive from the Governor and Legislature.

Sustained Impact:

During the last year of the grant period, we brought onboard two new consortium partners who will be instrumental in any future endeavors targeting hard-to-reach and remote populations. We have provided screenings and education to many hard-to-reach

residents and hopefully they will take their lessons learned and continue to live a healthier lifestyle. Also, many residents are now aware of services provided by their local health department about which they were previously unaware.

Implications for Other Communities

Other communities with similar demographics and challenges could learn from our successes and some of our less than stellar endeavors.

First, without the grant funding provided by the Outreach Grant, we would not have been able to even begin these activities. With grant funding, we were able to afford one RN project manager who both managed and executed almost every aspect of the program. The program coordinator will need to be a very disciplined and organized employee. Some clerical help would have greatly assisted the RN program coordinator, but we chose to fund as much patient care as possible. Grant reporting requirements are a must and were secondary only to patient care.

Our initial outreach screening clinics were not a success. We picked remote areas of the county, but logical locations – a church, a community center, and a middle school. We published the times, dates, and locations and almost no one showed up. We then switched tactics and looked for community events that were already planned and had a built in audience. Events such as a community celebrations, food banks, and church socials provided venues with the built in audience we were targeting. A nurse can more easily draw a crowd when there is already a crowd from which to draw.

Once we determined the most effective venues, we teamed out Outreach Coordinator with our Health Educators (2). The health educators would focus on educating the target populations on chronic diseases and lifestyle choices while the RN coordinator would conduct health screenings. The majority of the target populations seemed genuinely pleased with the opportunity to both learn and be screened at the same event.

One area in which we have not had success is in realizing a way to sustain the majority of the program. Sustainability has been addressed in a previous section of this report. But, we think we would be remiss if we didn't report that we have tried to find other funding sources. In the fiscal climate and the community in which we operate, we don't think those resources exist today.

GEORGIA

Evans County Health Department

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12767 |
| Grantee Organization | Evans County Health Department |
| Organization Type | Non Profit |
| Address | 4 N. Newton St., P.O. Box 366, Claxton, GA 30417 |
| Grantee organization website | N/A |
| Primary Contact Information | Cindi Hart Program Director Phone number: 912-739-2088 Fax number: 912-739-3975 crhart@dhr.state.ga.us |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--------------------------|--|
| Savannah Perinatology | Savannah, Chatham, GA | Private practice MD's perinatologist |
| Dr. Jeffery Harris | Jesup, Wayne, GA | Private Practice MD OB/GYN |
| Vidalia Women's Ctr. | Vidalia, Toombs, GA | Private Practice MD OB/GYN |
| Dr. DeVoe | Augusta, Richmond, GA | Private Practice MD Mat./Fetal Med. OB/GYN |
| Evans Co. Health Dept. | Claxton, Evans, GA | Health Dept |
| Evans Memorial Hospital | Claxton, Evans, GA | Hospital |
| Wayne Memorial Hospital | Jesup, Wayne, GA | Hospital |
| Candler Memorial Hospital | Metter, Candler, GA | Hospital |
| Candler Co. Health Dept | Metter, Candler, GA | Health Dept |
| Wayne Co. Health Dept | Jesup, Wayne, GA | Health Dept |
| Tattnall Co. Health Dept (Reidsville) | Reidsville, Tattnall, GA | Health Dept |
| Tattnall Co. Health Dept (Glennville) | Glennville, Tattnall, GA | Health Dept |
| East Georgia Health Care Center | Reidsville, Tattnall, GA | FOHC |
| Candler Co. Concerted Services | Metter, Candler, GA | Non profit |
| Evans Co. Dept. Family and Children's Services | Claxton, Evans, GA | Non profit |
| Wayne Co. Dept. Family and Children's Services | Jesup, Wayne, GA | Non profit |
| Tattnall Co. Dept. Family and Children's Services | Reidsville, Tattnall, GA | Non profit |
| Candler Co. Dept. Family and Children's Services | Metter, Candler, GA | Non profit |
| Dr. Barbara Williams | Statesboro, Bulloch, GA | Private OB/GYN |
| Dr. Jeffery Harris | Jesup, Wayne, GA | Private OB/GYN |
| Dr. Sandra Mager | Jesup, Wayne, GA | Private OB/GYN |
| Dr. Williams | Statesboro, Bulloch, GA | Private OB/GYN |
| Dr. Suber | Statesboro, Bulloch, GA | Private OB/GYN |
| Dr. Kramer | Vidalia, Toombs, GA | Private OB/GYN |
| Dr. Palmer | Statesboro, Bulloch, GA | Private OB/GYN |
| Dr. Borquaye | Statesboro, Bulloch, GA | Private OB/GYN |

Community Characteristics

Area:

Tattnall (Reidsville and Glennville), Evans (Claxton), Candler (Metter), Wayne (Jesup) Counties in Rural Southeast Georgia

Community description:

Evans, Candler, Tattnall and Wayne counties are located in rural, southeast Georgia. The predominant industry in the region is agriculture, including poultry processing. Low-paying service jobs and a number of smaller industries such as mobile home manufacturing make up other employment sectors. Evans County is the home of Claxton Poultry, which employs about 1,200 workers, the majority of whom are Hispanic. Three of the counties targeted by the grant, Evans, Candler and Tattnall, are designated as Vidalia onion growing counties by the Georgia Department of Agriculture. Other crops grown in this region include tobacco, cotton and soybeans. The health care sector and the educational system are large employers in all counties. The population of these four counties is 77,133 (2007 Georgia County Guide). The past ten years has seen a dramatic increase in the number of Hispanics residing here, drawn to the area because of employment opportunities in agricultural labor. The white and Hispanic populations for this four-county area are larger than Georgia's, while the black population is smaller. The uninsured rate for this 4 county area is approximately 17.1 to 24.8 percent of the population < 65 years of age. Of the clients the Best Babies program served, 8.6 to 12.8 percent were uninsured. These four rural counties have limited health care and other needed resources to meet the needs of the population. Often, clients/families have to travel numerous miles to locate the needed resources.

Need:

Provide a brief description of the need that your Outreach program was designed to address.

The Best Babies Program was designed to meet the needs of High Risk Pregnant Women in the 4 county areas served. We serve Medically High Risk Pregnant women by physician referral. Our goal was to decrease preterm and high risk babies in this 4 county area. We partnered with numerous local and regional agencies to accomplish this goal. This program was designed to address Health care barriers in these rural counties. Barriers to prenatal care in this rural region are numerous. Candler and Tattnall counties have no OB/GYNs and as of January 1, 2009, Evans County no longer has OB/GYN providers. As a result, women must travel long distances for prenatal care and for labor and delivery. In addition to health professional shortages and transportation, 8.6 to 12.8 of women served by the Best Babies program were uninsured. These women face significant barriers to prenatal care as they have no mechanism for payment and they must pay soaring gas prices to get to their prenatal appointments. For Latinas, transportation and language barriers pose a huge problem due to the lack of or limited number of interpreters available in the delivering facilities and private practices. The Best Babies program worked with the local and regional partners to improve pregnancy outcomes to the patients we serve which are affected by these barriers. The Best Babies program provided RN case managers that visited the patients and provided medical assessments and education to the patients and their families according to set policy and procedures.

Program Services

Focus Areas

Coordination of Care Services
Integrated Systems of Care
Maternal/Women's Health

Target Population

Pregnant Women
Caucasians
African Americans
Latinos
Uninsured
Underinsured
Private Ins.

Description:

The Best Babies program used marketing to promote and facilitate consortium membership through Network steering committee meetings. The staff met with local and regional providers in their offices to build relationships and promote the program to those providers. The Best Babies staff met with local birthing hospital staff to develop relationships that would facilitate consortium membership.

The Best Babies program improved access to perinatal care by providing comprehensive services to women at high-risk for adverse birth outcomes and their families. The project staff worked closely with local and regional partners to identify women early in pregnancy at high risk for adverse pregnancy outcomes. The referring partner was kept up to date of project staff's assessment and

education provided to the client/family through weekly feedback forms. The staff provided nursing assessments, support and education in client's homes during nurse home visits. At each visit the patient/family were given individualized, intensive health education services for their identified medical diagnosis. Staff also utilized health education materials that were culturally appropriate and proven to meet the needs of African American and Hispanic women.

At the time of inception, the Best Babies staff could not offer interconceptual care to its participants. Creation of the Public Health Outreach Worker (PHOW) position filled this gap. The PHOW continued to work with participants after delivery, to ensure that they and their families were linked with vital community services and resources while providing family planning information and other health education to interconceptual clients. The PHOW also provided targeted developmental screening on babies from birth to 2 years of age in an effort to identify developmental delays early and refer for appropriate intervention. The PHOW identified and equipped project staff with the knowledge of community resources sufficient to address issues related to client/families individual needs. If problems or delays were identified, referrals to appropriate resources were made such as Babies Can't Wait, Children's Medical Services, and Universal Newborn Hearing Screening, etc.

Role of Consortium Partners:

The consortium board consists of representatives from the four county health departments (Candler, Evans, Tattnall and Wayne), birthing hospitals, community agencies, and OB/GYNs. Other attendees who participated in consortium meetings included local pediatricians, representatives of the Southeast Health District of which the target area is a part, and patients who previously received services through the Best Babies program. When the need for outside services was identified clients/families were referred to the community agencies to meet the identified needs. The local birthing hospitals provided emergent and delivery services to clients they serve. The OB/GYN is the ongoing client's primary care provider and the referral source to the Best Babies program. Each was expected to send a representative to provide feedback at the network steering committee meetings. The other consortium attendees were to provide feedback on an as needed basis. Evans, Candler, Tattnall and Wayne County Health Departments provide the full range of services offered by health departments. The nurse manager at each health department served as a network representative. All four health departments provided linkages between Best Babies, family planning, and Perinatal Case Management (PCM) services. Family planning services were coordinated as part of interconceptual care for postpartum women. PCM nurses advocated for inclusion of high-risk women in the Best Babies program early in pregnancy. Health departments also provided nutritional counseling for participants as needed through referral to the WIC program.

Outcomes

According to our FY11 Best Babies evaluation data, among women participating in the Best Babies program, a mean birth weight of 3234.6 grams was recorded for previous deliveries. Moreover, mean gestational length for these women was 31.3 weeks. After enrollment in the Best Babies program the mean birth weight improved to 3482.3 grams, and the mean gestational length for these women increased to 38.4 weeks gestation. A Cost Benefit Analysis was performed on the Best Babies program and the sister program, Perinatal Health Partners. These programs cover 14 of our 16 county health district, and the latest data demonstrated an average return on investment was \$2.16 for every dollar invested in the program over a 3 year period.

The following is a quote taken from our external evaluator at Georgia Southern University from our FY 11 evaluation. "From an evaluation standpoint, the health-related outcomes demonstrate effective programmatic functioning. The Best Babies program provides valuable prenatal and postnatal service to many high-risk women. Particularly commendable is the number of women served who are the most vulnerable in the community, including minorities. It is evident that the Best Babies program has improved outcomes related to birth weight and gestational length based on prior obstetric histories of patients. Moreover, it is evident that patients enrolled in the Best Babies program possess a degree of satisfaction as indicated through the administration of surveys."

Challenges & Innovative Solutions

Perhaps the greatest challenge to the effectiveness of the Consortium was the large geographic area from which members came. Driving from the extreme southern end of the target area to a point in the middle entails a 2-hour drive one way. To address this particular challenge, we utilized the video teleconferencing equipment in each health dept in the project area, so that members who could not travel to the meeting site could actively participate. A Best Babies staff member was at each site to facilitate, encourage participation at meetings, and to greet our partners.

Another challenge we faced was the recruiting and retention of qualified staff in the project area. Health department nursing salaries are below the regional standard and although health departments offer excellent benefits, the prospect of a better paying job is sometimes more attractive. We innovatively worked through this challenge by utilizing qualified staff from the sister program, Perinatal Health Partners, to cover the project area as needed. We also utilized former Best Babies employees on an hourly, part-time basis when available. Appropriately trained health dept staff was utilized short term to cover the area as needed also.

Best Babies staff all received cultural diversity training and instruction on providing culturally sensitive care to clients/families we served. Medically trained bilingual staff were hired and utilized to communicate with non English speaking clients/families to help alleviate linguistic and cultural barriers.

Sustainability

On-going Services and Activities:

The current economic status in Georgia and a lack of available Grant-In-Aid funding, necessitates that the Best Babies program project decrease the service area covered. We will continue service provision in one of the current counties covered by the Grant Project. This county is in close proximity to the sister project and the providers in that area provide services in multiple counties covered by the sister project. We are pursuing additional fund sources and, if and/or when we obtain funding, we will strongly consider reinstating services in the other 3 counties.

Sustained Impact:

Sustained impact on the service area has broadened consortium partner's knowledge of the services provided by other agencies involved in the project. Professional relationships were developed and continue today as a result of participating on the steering committee together. Clients and their families have been educated regarding local resources and how to access those resources. It has been reported that the clients/families have shared with others in their culture and communities how and where to access services. Over all, birth outcomes for the clients/families we served improved. This improvement led to the prevention of possible long term developmental/social disabilities. The families were provided with exceptional educational training while enrolled in the program that can impact their future pregnancies and birth outcomes. Additionally, these families can share the knowledge they gained with other friends and families.

Implications for Other Communities

Other communities can benefit from this project by improving communication between agencies and community partners as well as regional partners to improve pregnancy and birth outcomes in their areas. Improving birth outcomes makes for a healthier community, state and nation. As our cost analysis and evaluation data prove, this program works. Replicating this program can only be beneficial for communities to help improve their economy and health of the community members.

GEORGIA

Georgia Southern University

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH16319 |
| Grantee Organization | Georgia Southern University |
| Organization Type | University |
| Address | Box 8028, Statesboro, GA 30460 |
| Grantee organization website | http://www.georgiasouthern.edu/RHRI |
| Primary Contact Information | Jacob Warren and Bryant Smalley Co-Executive Directors, Rural Health Research Institute Phone number: 912-478-7254 Fax number: 912-478-8649 jwarren@georgiasouthern.edu |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$142,340 May 2010 to April 2011: \$96,767 May 2011 to April 2012: \$69,137 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--------------------------------|--------------------------|
| Bulloch County Health Department | Statesboro, Bulloch County, GA | County Health Department |
| Magnolia Coastlands Area Health Education Center (AHEC) | Statesboro, Bulloch County, GA | AHEC |

Community Characteristics

Area:

The Outreach project focused on churches and community organizations in Bulloch County.

Community description:

Bulloch County is a rural county located in the southeastern portion of Georgia. It lies along Interstate 16, which connects Savannah on the coast of Georgia to Macon in the middle of the state. Cities and towns within Bulloch County include Statesboro (population 23,000), Brooklet (population 1100), Portal (population 597), and Register (population 164) (See Figure 2). At its founding, the county was almost entirely agricultural, with most residents being involved in farming. The farming tradition continues today, with cotton and tobacco fields still within just a few miles of almost anywhere in the county. The agricultural nature of Bulloch County has sustained its rural culture even in the presence of a large University. Bulloch County has no rural health clinics. Residents of Bulloch County face two major obstacles when accessing preventive care and screenings: lack of insurance and lack of physical access. An estimated 17.7% of Bulloch County residents have no health insurance at all (Georgia Health Equity Initiative, 2008), and this percentage does not take into account those individuals whose insurance does not provide coverage for preventive care and screenings. In addition, because 24.5% of Bulloch County residents live below the Federal poverty level (Georgia Health Equity Initiative, 2008), the lack of insurance makes health care even harder to obtain. Even for those with insurance, not being able to access a provider is yet another hurdle to be crossed. Despite qualifying as a medically underserved area (MUA), Bulloch County does not have a federally-qualified community health center (Georgia Health Equity Initiative, 2008), which further impedes the efforts of residents to receive health care. The lack of access to basic medical care in Bulloch County has been recognized by HRSA in its designation as a primary care health professional shortage area (HPSA), a mental health professional shortage area (mental health HPSA), and a medically underserved area (MUA) (HRSA Shortage Designation Advisor, 2008). Access issues become even more pronounced for minorities in Bulloch County. The population of Bulloch County is 28.76% African-American (HRSA, 2008). An estimated 36.7% of African-American residents of Bulloch County live below the federal poverty line (Georgia Health Equity Initiative, 2008). When reviewing Bulloch

County's minority health status, the Georgia Health Equity Initiative (2008) graded Bulloch County as having the worst possible level of social and economic indicators of minority health, hospital admits and emergency visits, and primary care access.

Need:

Health education and screening represent the frontline of defense in preventable and treatable illnesses. However, one of the major challenges in receiving education and screening as a rural resident, and in providing education and screening as a rural provider, is in connecting those in need with those who can provide services. Health education and screening fairs have long been used to provide easy-to-access care. Unfortunately, in rural counties with low population density, having one central location for a health fair will not reach all individuals who need services because of challenges with access, advertising, and transportation. Because of difficulties with obtaining transportation and the rising cost of gas, travel in particular has come to be an unaffordable luxury in many communities, particularly ones like Bulloch with near 25% poverty. The issue then becomes how to provide services to people where they are, rather than requiring people to come to you.

This led the outreach team to the idea of taking health fairs to the community, rather than asking the community to come to them. Because of their role as community centers and trusted locations for receiving supportive services in rural areas, churches were selected as the best venue for reaching underserved rural residents. By taking the fairs to the churches, concerns about transportation and access are greatly reduced, and by getting pastors (as community leaders) involved, utilization of the fairs is greatly enhanced. In addition, because of the increased disparities experienced by rural African-Americans and the association of African-American culture with religious involvement (Hunt & Hunt, 2001), churches provided an avenue to reach further disadvantaged subgroups within the rural community.

Program Services

Focus Area

Health Education and Promotion

Target Population

- Adults
- Elderly
- Caucasians
- African Americans
- Uninsured
- Underinsured
- Faith-based Communities

Description:

The Community Health Access Network for Grassroots Education and Screening (CHANGES) project focused on providing health screenings and health education centered on hypertension, diabetes, diet, and exercise through small health fairs conducted within rural churches (primarily at African-American churches). In addition, health ministry-building activities were conducted to help each church begin or expand health-focused activities conducted within the congregation. These health ministry activities were added to the project after the original submission based upon feedback from the churches and the Consortium's ongoing dedication to ensuring the needs of the community were being met.

At health fairs, congregation members received blood pressure screenings, blood glucose screenings, height/weight/BMI/body fat screening, and a behavioral assessment. Following these assessments, each participant met with a health educator that reviewed the screening results and made recommendations for follow-up care or for a course of behavioral action to diminish health threats.

For ministry building activities, churches were guided through the process of developing and implementing a health ministry within their church to help promote healthy living among their congregation members. Activities were offered on a modular basis, allowing each church to select the activities they felt would best benefit their congregations. Key activities offered included ministry building, walking group formation, forming a transportation network, and healthy cooking programs. Project staff was available throughout the formation of the ministry and after to provide any assistance requested by the churches, and maintained active communications following the implementation of the ministries to provide support to the growing ministries.

Role of Consortium Partners:

Both the Bulloch County Health Department (BCHD) and the Magnolia Coastlands Area Health Education Center (MCAHEC) were active supporters in the development of the grant project. Along with Georgia Southern University faculty and staff, BCHD and MCAHEC helped develop both the health fair structure and the health ministry structure that was added after implementation of the original health fair model. Both partners also assisted with connecting the project to local groups that could support its activities and

help connect with churches and other civic groups. MCAHEC also assisted with the development of the training program that health screening volunteers were required to complete prior to working on the project, helping the team create, record, and deploy an orientation webinar that familiarized volunteers with both the project protocol and the necessary ethical and cultural factors at play in the project.

Outcomes

In total, 204 participants completed a total of 959 screening tests. Thirteen percent of these participants were uninsured, 35% had an existing diabetes diagnosis, and 44% had an existing hypertension diagnosis. 26 individuals who were uninsured and did not have regular access to care were referred to the network of FQHCs that surround the target county (there is no adult-serving FQHC in the project's home county). In total, 172 individuals received weight-reduction counseling (including both diet and exercise), 71 received diabetes risk-reduction counseling, and 9 received smoking cessation counseling. Because of the nature of the health screening fairs and the sensitivity of rural minority communities to "research," outcome measures are not available to examine health behavior change; however, at exit, 80% of the participants reported they "definitely" planned to modify behaviors based upon the information provided to them.

When examining the impact of the ministries, 5 of the churches implemented health ministries, representing a combined congregation membership of more than 1000 (greatly extending the reach of the proposed project). As of the last month of the original funding period, all of these churches maintained an active health ministry.

Challenges & Innovative Solutions

Despite having an established presence in the local community, the first challenge encountered in the project was difficulty in finding churches willing to participate in the program. This became particularly challenging for implementing the first health fair. Initially, churches seemed resistant, somewhat anticipating there was a hidden cost or expectation of them following the health fairs. Despite repeated assurances that there was no cost to the church, many were still hesitant. The major breakthrough for this challenge came when we found a pastor who was willing to champion the project personally. The first fair was conducted at his church, after which he became a vocal advocate for the project and helped personally connect us with other churches for health fairs. Once we were able to demonstrate what we had been able to do, churches were much more willing to participate. The addition of the health ministry building component of the project also helped with church willingness to be a part of the program, as this provided more of an ongoing "value-added" proposition for the churches and allowed us to be able to show them that we would maintain an active connection with them following the fair (and that we weren't simply wanting to do a health fair and then walk away from the churches).

Another challenge faced was attendance at each individual fair. While we had initially anticipated a high percentage turnout of congregation members, early fairs sometimes had only ten or so participants. Once we began to associate the fairs with an existing church event, such as a revival or a festival, attendance rates were much higher. Other strategies included involving church leaders in promoting the events, posting flyers in church bulletins and in the surrounding areas, and planning longer health fairs (expanding our original 2-3 hour window to 4-5 hours).

One complexity faced was the unanticipated high number of individuals who were aware of having diabetes or hypertension (more than half of fair participants), but did not know what to do about it. For these individuals, post-screening education focused on ways to self-manage their condition and local resources that could support them, but this helped highlight the need for an ongoing connection back to each church. This contributed to the development of the health ministry building model that was implemented, because it also helped each church in coming up with ways to support those in their churches with a known health condition.

Sustainability

On-going Services and Activities:

As of the end of Year 3, we anticipate sustaining all project activities. The project has relied heavily on student volunteers to man the health fairs, and these volunteer sources will be able to continue after the funding period. In addition, a manual of health fair and ministry-building activities will be finalized to streamline maintenance of the project once a funded staff person is not available. The two main costs for sustaining the project are the project management/oversight and the screening supplies necessary for the fairs and ministry activities. Upon the end of funding, the project management will be absorbed by the staff of the Rural Health Research

Institute. Small-source funding (including from pharmaceutical companies and medical manufacturers) will be pursued to secure the necessary supplies.

Sustained Impact:

Given the project will be fully sustained following funding, the impact will be constant as new churches are engaged and new health ministries formed and supported. By implementing ministries that are then overseen and sustained by each individual church, the impact of the program would sustain even if formal activities did not, as these ministries will engage in health outreach on their own with the congregations of their churches. This can lead to not only increased health awareness and health literacy, but hopefully impact health outcomes in the long run.

Implications for Other Communities

We believe the CHANGES project can be implemented in other rural communities given the large presence of religious organizations in many rural areas. The keys to implementing the project will be 1) finding a motivated faith-based champion who can partner in the early stages until the project has gained its own reputation as a feasible, beneficial program; and 2) finding a sufficiently large and motivated volunteer base who will not be discouraged by the potential low numbers that occur at each individual fair. For the current project, this volunteer base was secured because of the project's connection to a University in the home county – however, other avenues could include technical colleges, other churches, and health professionals in the home county.

GEORGIA

Irwin County Board of Health

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12769 |
| Grantee Organization | Irwin County Board of Health |
| Organization Type | Public Health |
| Address | 407 West 4 th Street Ocilla, GA 31774 |
| Grantee organization website | http://southhealthdistrict.com/content.asp?pid=6&id=156 |
| Primary Contact Information | Bridget Walters, RN, BSN, CDE Program Director, Certified Diabetes Educator Phone number: 229-468-5003 Fax number: 229-468-5028 bmwalters@dhr.state.ga.us |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---------------------------------|-----------------------------|----------------------------------|
| South Health District | Valdosta/Lowndes/Georgia | Public health, government agency |
| Ben Hill County Board of Health | Fitzgerald/Ben Hill/Georgia | Public health, government agency |
| Cook County Board of Health | Adel/Cook/Georgia | Public health, government agency |
| Berrien County Board of Health | Nashville/Berrien/Georgia | Public health, government agency |
| Irwin County Hospital | Ocilla/Irwin/Georgia | Hospital |
| Dorminy Medical Center | Fitzgerald/Ben Hill/Georgia | Hospital |
| Berrien County Hospital | Nashville/Berrien/Georgia | Hospital |
| Memorial Hospital of Adel | Adel/Cook/Georgia | Hospital |
| Irwin Family Medicine | Ocilla/Irwin/Georgia | Private physician's office |
| Adel Family Medicine | Adel/Cook/Georgia | Private physician's office |
| Nashville Eye Center | Nashville/Berrien/Georgia | Private physician's office |
| Berrien County Collaborative | Nashville/Berrien/Georgia | Non-profit organization |
| Cook County Family Connections | Adel/Cook/Georgia | Non-profit organization |
| Adel Cook Recreation | Adel/Cook/Georgia | Non-profit organization |

Community Characteristics

Area:

The Irwin County Board of Health's program, Sweet Dreams, provides services to four rural counties in South Georgia: Ben Hill, Irwin, Berrien, and Cook Counties.

Community description:

Sweet Dreams is located in a medically underserved rural community. The predominant employment sectors are government services, production of goods and service, and agriculture. More than 26% of the community is made up of minority groups, primarily African American and Hispanic. There are high rates of obesity, little physical activity, and high poverty levels within the community. The rate of diabetes in this community exceeds both the state and national averages.

Need:

Diabetes is a chronic disease that affects 8.3% of the United States population or almost 26 million people. Unfortunately, the 2009 rate of diabetics in the state of Georgia exceeds this at 9.7%. The counties of Ben Hill, Irwin, Berrien, and Cook are included in the newly identified "diabetes belt" which consists of 644 counties in the southeast that have an 11.0% or higher prevalence of diabetes. Diabetes is the seventh leading cause of death in the nation and is a major contributor to heart disease, stroke, kidney failure, amputations, and adult onset blindness. Considering there are approximately 79 million Americans with pre-diabetes, the rate of diabetes and the risk for these complications will continue to rise if these high risk individuals do not make healthy lifestyle changes.

Program Services

Focus Areas

Chronic Disease Management: Diabetes
Health Education and Promotion
Pharmacy Assistance

Target Population

Adults
Elderly
Caucasians
African Americans
Latinos
Uninsured
Underinsured

Description:

Sweet Dreams is a rural approach to diabetes education. It is a community disease prevention and education service that targets the growing epidemic of type 2 diabetes in the counties of Ben Hill, Irwin, Berrien, and Cook in southeast Georgia. The program specifically targets adults with type 2 diabetes who are below the poverty level and are underinsured or uninsured and offers prevention education to the general public.

The two main goals of the program are to:

1. Reduce the number of hospitalizations resulting from diabetes or diabetic complications in Ben Hill, Irwin, Berrien, and Cook Counties by 10%.
2. Increase community awareness of the importance of prevention and early detection of type 2 diabetes in Ben Hill, Irwin, Berrien, and Cook Counties.

Diabetes self-management education classes are taught by a diabetes educator and dietitian and are offered in each of the four counties served. The curriculum for the classes follows the American Diabetes Association's "Life with Diabetes" and is taught over a series of four classes. The content of the classes is as follows:

- I. Introduction to Diabetes: Understanding diabetes, Managing your emotional/psychological adjustments, Family involvement, Exercise and the diabetic
- II. Nutrition and Diabetes: Meal planning, Dining out, Cooking school for diabetics
- III. Medication Management: Understanding the basic functions of your medicine, Hypoglycemia and hyperglycemia, Blood glucose monitoring
- IV. Avoiding Complications of Diabetes: Chronic Complications, Foot care, Wound care

In addition to these classes, a financial assistance program is available to help uninsured low income diabetics with medications and testing supplies. Patients receiving these services are provided case management and individualized education based on the patients' needs. Prevention education in the form of health fairs, community presentations, and newspaper articles is also provided by Sweet Dreams to educate the community on early detection and prevention of type 2 diabetes.

Role of Consortium Partners:

The members of the consortium have been meeting quarterly since August 2003. The consortium members agreed on the need for a diabetes education and management program and were involved with the planning and development of the current Sweet Dreams program. The consortium responsibilities are as follows:

The **Irwin County Board of Health** is the lead agency and fiscal agent for the grant. Responsibilities include general supervision of project staff, provision of office space for project staff, referrals, providing nursing staff to assist with community outreach, and participating in quarterly oversight and planning meetings for the project.

The **Ben Hill County Board of Health**, **Berrien County Board of Health** and the **Cook County Board of Health** provide the same services with the exception of providing space and supervising the staff. Each of these boards of health is in the **South Health District**. The district office and its staff provide general oversight and management to the project including epidemiological support for data collection and evaluation. In addition, the South Health District's public relations specialist provides assistance with media reports and the development of materials.

Irwin County Hospital, **Dorminy Medical Center**, **Berrien County Hospital**, and the **Memorial Hospital of Adel** have been a great source of referrals for Sweet Dreams. Other responsibilities of the hospitals include assisting in educating physicians about the project, providing space for the classes, and participating in quarterly oversight and planning meetings for the project.

General medical oversight for the project has been provided by **Irwin Family Medicine**. With assistance from **Adel Family Medicine** and **Nashville Eye Center**, Irwin Family Medicine has lead the efforts to educate local physicians about the project, made referrals, and participated in quarterly oversight and planning meetings for the project.

The **Berrien County Collaborative** is a source of referrals and assists in disseminating diabetes information to the community and schools. The **Adel Cook Recreation Department** also is a source of referrals and supports the efforts of increasing physical activity by offering community exercise classes. Both of these agencies participate in quarterly oversight and planning meetings for the project.

Outcomes

The first measure of success of Sweet Dreams is the establishment of the diabetes coalition made up of the local hospitals, physicians, recreation departments, and other community agencies. This collaborative effort of the consortium expands the number of diabetics that can be targeted in the community and increases access to diabetes education.

Over 800 unduplicated diabetics have received education or medication and supply assistance through Sweet Dreams. This program increased access to diabetes self-management classes. The success of the classes is evident by the average improvement in hemoglobin A1C's in class participants from 9.11% pre education to 7.45% 3 months post education. The American Diabetes Association recommends a goal of less than 7%. Using this data, Sweet Dreams demonstrated a \$9.48 return on investment for every one dollar spent. The education portion of the program demonstrated an economic impact on the community in the amount of more than \$132,000 with a projected decrease in medical spending over \$280,000 during a five year period.

Sweet Dreams also increased availability of medications and testing supplies to diabetics in rural communities through prescription assistance programs provided through a local trust fund, the Palemon Gaskins Trust Fund, and RX Assist. Over \$225,000 in medications and supplies have been provided to diabetics in this community.

Challenges & Innovative Solutions

The biggest challenge has been long term sustainability of the education classes. Although this service could be self-sustaining if clients were billed for their services, Sweet Dreams' target population is uninsured low income diabetics who do not have the finances to pay for services. Another challenge with sustaining Sweet Dreams' classes has been the obstacle of not being able to bill Medicare for services provided by the certified diabetes educator who is also a registered nurse. The strategy to address this challenge has been to promote the success of the program to gain future funding opportunities and to continue to pursue avenues for billing.

Although education and prescription services have been expanded with Sweet Dreams, there are still high risk groups that are not being reached such as the Hispanic population who do not qualify for prescription assistance through the pharmaceutical companies if they are not legal residents. Sweet Dreams has been able to provide assistance to some of these patients through a local trust fund.

On-going Services and Activities:

With limited resources for diabetics in rural South Georgia, sustaining Sweet Dreams has become a necessity. The strategies and activities for sustaining the program include generating program income, researching and applying for grant opportunities, and receiving support from the program's partnerships. Local and state grant opportunities are available and if awarded will provide temporary funding for the current services of Sweet Dreams. In addition, partners of our program receive services for their patients. Evaluation data is shared with these members to demonstrate the effectiveness of Sweet Dreams in hopes of receiving continued support in the form of referrals and funding.

Many diabetics are now receiving their medications due to the Sweet Dreams prescription assistance program. Some of these medications are provided from pharmaceutical company assistance programs. These recipients are instructed on how to continue this assistance without the aid of Sweet Dreams. In addition, two of the four counties served by Sweet Dreams have access to a local trust fund called the Palemon Gaskins Trust Fund. The medications and supplies granted with these funds will continue to be distributed by the public health nurses. Both of these services help to improve diabetes management and have a lasting impact on the diabetics and community by decreasing the risk for long term complications.

At current funding levels, Sweet Dreams should be able to sustain the services provided for at least one year. Sources of funding for this will include carry over grant funds, a grant received from a Georgia charitable foundation, and the Palemon Gaskins Trust Fund. Sweet Dreams will continue to seek other funding opportunities during this time period.

Sustained Impact:

There are many aspects of the Sweet Dreams program that will continue to benefit the community. This program has created a collaboration of hospitals, doctors, school systems, public health workers, and other community leaders that will continue to work together to improve healthcare in four rural South Georgia counties. The collaboration has opened the communication lines not only between community agencies but across the county lines.

Sweet Dreams has purchased diabetic meters for patients that would otherwise not be able to afford them. Monitoring blood glucose levels is a necessity for diabetes management. These meters will continue to serve the diabetics for many years. In addition, the education that has been given to these diabetics will have a lifelong impact for helping them to manage their disease. Many of the participants have made lifestyle changes that will not only improve their diabetes control, but will help to protect them from other chronic diseases.

The curriculum that was developed for the self-management classes will be available for public health to continue to provide classes. Through community education programs, Sweet Dreams has increased public awareness of diabetes prevention and management. This endeavor extends into the school systems where Sweet Dreams has provided nutrition and diabetes prevention education materials. Students have been educated on the importance of and encouraged to increase physical activity through walking events. Equipment for increasing activity and monitoring body mass index of high risk students has also been provided by Sweet Dreams and will continue to be used in the school systems.

Implications for Other Communities

Receiving physician referrals was one of the struggles that we encountered in the beginning of Sweet Dreams, but once we established a trusting relationship with a few of the local physicians, we were able to recruit most of their diabetic patients. Patients respect their physicians' opinions and are more likely to attend diabetes education classes if instructed to by their doctor. One of the methods that Sweet Dreams used to accomplish this was through the distribution of a diabetes report card for the physician to complete at each visit and give to the patient with their lab values, education, and contact information for Sweet Dreams. This is one tool that Sweet Dreams developed that can be used to benefit similar programs.

GEORGIA

Polk County Health Department

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12766 |
| Grantee Organization | Polk County Health Department |
| Organization Type | Public Health Department |
| Address | 125 E. Ware Street, Cedartown, GA 30125 |
| Grantee organization website | N/A |
| Primary Contact Information | Malindy R. Ely County Nurse Manager Phone number: 770-749-2270 Fax number: 770-749-2298 Mrely@dhr.state.ga.us |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-------------------------------|----------------------------|---------------------------------|
| Polk County Health Department | Cedartown, Polk County, GA | Health department |
| NW GA Public Health Dist. 1-1 | Rome, Floyd County, GA | District public health office |
| Polk County DFCS | Cedartown, Polk County, GA | Dept. of Family/Children Svcs. |
| Polk Family Connections | Cedartown, Polk County, GA | Community collaborative |
| Polk Medical Center | Cedartown, Polk County, GA | Hospital |
| Harbin Clinic | Cedartown, Polk County, GA | Multi-county physician practice |

Community Characteristics

Area:

The coverage area for the Outreach Grant is Polk County. A rural county of approximately 41,000 in Northwest Georgia

Community description:

Polk County is a community composed of varied ethnic groups (white, black, and Hispanic) with a per capita income lower than that of Georgia's overall per capita income. According to the 2007 Georgia County Guide, 15% of county residents live below the poverty level. Over 10% of the county population is Hispanic. Many of these residents are unemployed due to closure of some local poultry industries. Of adults age 25 and over, 36.7% have not completed high school. Approximately 17% of residents are uninsured.

Need:

The program was designed to address the need for routine primary care for the indigent (250% poverty), under- and uninsured population of Polk County.

The 2008 Department Community Health Report on health disparity gave Polk County a "D" in the categories of "Access to Primary Care Providers," "Primary Care Safety Net," "Health Professional Diversity," and "Health Insurance Coverage." A score of "F" was assigned for preventable ER visits.

Polk County has been designated as a Health Provider Shortage Area (HPSA) by the Health Resources and Services Administration (HRSA). The hospital is a 25-bed Critical Access Facility. There are few medical providers and the only specialty physician is a Pediatrician. In a county where public transportation is only available within the city limits of one municipality (Cedartown- the County Seat), travel to seek specialty care approximately 25 miles away is difficult, if not impossible, for many residents.

Polk County residents have some of the worst health indicator rates in the state of Georgia. The county has the 12th highest incidence of diabetes in Georgia and the highest in North Georgia. Cardiovascular disease, especially hypertension, is also a problem for many county residents. In 2006, the age adjusted mortality rate for CVD was 411.3 for Polk County. This rate exceeded both that of the 10 county Northwest Georgia Public Health District (276.5), and Georgia (232.3).

Program Services

Focus Areas

Access: Primary Care
Chronic Disease Management: Cardiovascular
Chronic Disease Management: Diabetes
Coordination of Care Services
Integrated Systems of Care
Pharmacy Assistance

Target Population

Adults (Ages 45-64 were the primary recipients of service)

Description:

The grant activities were coordinated and implemented through Polk County Health Department with some ancillary services provided by community partners. The focus of the grant was provision of Primary Care Services. This was accomplished by a Nurse Practitioner and a Bilingual Program Assistant working at Polk Primary Care Center. The center opened on September 14, 2009 and has served 1,340 clients in 4,323 encounters. The primary diagnoses (diabetes and hypertension) correlated with county health indicators. In addition to provision of basic Primary Care Services, the Nurse Practitioner also provides chronic disease management for clients with diabetes and CVD, coordinates services with other providers, and manages Pharmacy Assistance for clients as needed. Polk Primary Care Center has been able to integrate systems of care through access to Polk Medical Center, Redmond Regional and Floyd Medical Center's electronic medical record systems.

Role of Consortium Partners:

- Polk County Health Department acted as the grantee and fiscal agent for the grant. The health department provided in-kind contributions in the form of clinic management and supervision. The Nurse Manager and Operations Support Coordinator each contributed 10% of their time to performing grant related functions. The Nurse Manager provided staff supervision, coordinated collaborative meetings, and acted as liaison with community partners. The Operations Support Coordinator assisted with supply maintenance and acted as a resource for the Program Assistant.
- Northwest Georgia Public Health District 1-1 provided fiscal management (including the financial audit), overall medical back-up, personnel and IT support. The District Program Manager was a vital consortium member and provided grant management expertise and support.
- Polk County Department of Family and Children Services supported the clinic through participation in consortium meetings, referral of clients, and provision of additional client services/resources as appropriate.
- Polk Family Connections contributed approximately \$3,000 of in-kind services in the form of grant evaluation performed by the Family Connections Coordinator. In addition, the Coordinator attended consortium meetings, developed a brochure, and presented information on the clinic within the community.
- Polk Medical Center has been a critical partner in the development and ongoing operation of Polk Primary Care Center. The hospital designated two management team members (the Administrator and Director of Nursing) to function as consortium members. In addition, the hospital has provided bio-hazard waste disposal, light maintenance, minimal medical supplies, and specified diagnostic services (Comprehensive Chemistry Panel, CBC, Urinalysis – 20 each/month; EKG and Basic X-rays – 10 each/month). In addition, they have also allowed clients to obtain additional diagnostic services at significantly reduced rates (even CT Scans and MRIs). When the consortium identified the need for additional funding in order for operations to continue throughout the grant period, Redmond Regional Medical Center, the entity operating the hospital at that time, donated \$10,000. As of April 1, 2012, management of the facility has been assumed by Floyd Medical Center. They have agreed to provide operating capital for the clinic for the remaining 6 months of our Health Center Planning Grant. Polk Medical Center, Redmond Regional Medical Center, and Floyd Medical Center also provided access to their electronic medical record systems.
- Harbin Clinic provides a physician to act as Medical Preceptor for the Nurse Practitioner. This physician consults with the Nurse Practitioner on client issues, signs prescriptions for Pharmacy Assistance, reviews medical records, and attends consortium meetings as an active member. A Harbin Clinic Cardiologist also provides final reading of all EKGs ordered by the Nurse Practitioner. In addition, Harbin Clinic donated \$10,000 for clinic sustainability through the grant period.

- Rome Radiology is not a Consortium Partner, but they read the X-rays performed for Polk Primary Care Center clients at Polk Medical Center free of charge.

Outcomes

Evaluation data was collected through three main efforts: client satisfaction surveys, a random sample of patient files, and patient interview. Selected evaluation findings revealed that of the patients evaluated, 77% were happy with the cost of services, 54% were walk-ins, 86% stated they “felt better” after services and knew when to return for follow-up. Through an opportunity for comments, they included, “Sara is a wonderful doc <sic>, “very nice staff and very helpful,” “kind and professional,” “very pleased,” “a great service to our town,” “perfect nurse, she listens and understands.”

Of the 23 files audited on a random basis, 65% were offered Patient Assistance, 74% returned for over 10 visits, and over half of patients surveyed came to the clinic for an initial unrelated issue, but other problems were discovered and treated successfully. Primary diagnoses included diabetes, hypertension, ear, nose and throat issues, asthma, flu, GI issues, injury, depression, injury and general physicals. The patient interview supported these findings and made additional comments: “glad to find out about Patient Assistance and services were above and beyond with no waiting.” She also stated that she had learned about the services through a pamphlet in the community.

Challenges & Innovative Solutions

Our biggest challenges were access to outside medical records, management of clients needing high level diagnostic studies and specialist referrals, and funding for sustainability throughout the grant period.

- Many clients presented to Polk Primary Care Center after being referred there from an ER visit (either Polk Medical Center, Redmond Regional Medical Center, or Floyd Medical Center). Many of these clients were poor health historians, unsure of their discharge diagnosis and unclear about their treatment. This problem was discussed at one of the first consortium meetings and members worked with all 3 hospitals to provide Polk Primary Care Center access to their electronic medical record systems. This was a great benefit to the Nurse Practitioner and allowed her to provide comprehensive, quality care in coordination with that provided at the hospital.
- After performing an initial exam and basic diagnostic studies, the Nurse Practitioner identified a need for further tests not included in the MOU with Polk Medical Center. This need was met in a variety of ways. After the 1st Grant Year, a portion of carry-over funding was used to pay a discounted rate for CT Scans and MRIs. When these funds were exhausted, the hospital continued to provide heavily discounted rates to clients needing these procedures. The hospital also worked with clients regarding payment.
- Some clients presented with, or developed, conditions which exceeded the Nurse Practitioner’s Scope of Practice. Many clients had extremely poor oral health. The Nurse Practitioner consulted with the Medical Preceptor and worked diligently to find resources for care of these clients. Again, some 1st Grant Year carry-over funding was used to reimburse for a limited number of specialist referrals, primarily for dental care. In other circumstances, the Nurse Practitioner was able to connect clients to indigent resources and services outside our county (i.e. Grady’s Kidney Transplant Program). When other avenues failed, she referred clients to the ER.
- Due to decreasing grant funds throughout the 3 year period, operational funding to complete the grant cycle became a significant concern. The 3rd year allocation of \$100,000 was not sufficient to cover the cost of salaries and fringes for the 2 staff members. Initially, the consortium had hoped the clinic would generate revenue from Medicaid and Medicare billing, in addition to some client payments; however, Medicaid and Medicare billing were not possible as there was not a physician located at the facility and only a minimal amount was collected from clients. In order to keep the clinic open, Harbin Clinic and Redmond Regional Medical Center donated \$10,000 each. This allowed the clinic to operate for the entire timeframe of the grant.

Sustainability

On-going Services and Activities:

Polk County Health Department and other consortium members are diligently seeking ways to maintain the full scope of primary care services currently provided at Polk Primary Care Center. The health department applied for, and was awarded, a Health Center Planning Grant. Work under this grant is proceeding to pave the way for a possible FOHC new access point application. In addition to

the FQHC option, Floyd Medical Center (FMC) has offered to provide all operating capital to the clinic for, at least, the duration of the Health Center Planning Grant. As well as funding the Nurse Practitioner and Bilingual Program Assistant positions, they will also provide another staff member (possibly a CNA or MOA) to free up some of the NP time in order for more clients to be served. FMC will pursue Medicaid and Medicare billing through their primary care network. They have also offered to move the clinic into a vacant physician office building owned by the hospital. During this time, the health department will continue to manage Polk Primary Care. At the end of the planning grant period, FMC, the health department, and other consortium members will evaluate results from the community assessment and focus groups and determine the most appropriate course to follow for future sustainability.

Sustained Impact:

If a way to maintain Polk Primary Care Center is identified, the impact on the indigent, under- and uninsured residents of Polk County will be tremendous. The consortium members are committed to not only sustaining, but also expanding the scope of this clinic.

A true medical home for the at-risk residents of Polk County would decrease the incidence of complications from untreated chronic illnesses, such as diabetes and CVD. Early screening, diagnosis, and treatment ensure better disease management and a higher quality of life for anyone with a chronic disease. In addition to a better quality of life for clients, consistent medical care would decrease hospitalizations and the amount of work time lost due to illness.

Adding mental and dental health services to the scope of care would encourage clients to take advantage of these benefits, if needed, as they would be located in one facility. Clients would be more likely to seek multiple avenues of care if they didn't have to make multiple trips and/or take time off work.

In addition to client benefits, the partnerships established in planning for and operating the clinic have become an invaluable asset. The relationships built during these years are a strong foundation for further work in advancing healthcare for residents of Polk County.

Implications for Other Communities

Providing comprehensive primary healthcare to at risk and underserved populations is a complex task requiring input and assistance from numerous resources. Polk County is a small, rural Georgia county without a lot of material resources, but it is rich in compassion with groups and individuals who are dedicated to promoting the health and well-being of all community members. Forming close working relationships within the local community is the most effective way to meet this goal. Look for partnership opportunities and be a strong advocate for your program. Let the community know about the work you are doing through news articles, in discussions with local leaders, at meetings, and in civic groups. Don't be afraid to ask for what you need and don't ever give up!

HAWAII

Na Pu'uwai, Inc.

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12678 |
| Grantee Organization | Na Pu'uwai, Inc. |
| Organization Type | Native Hawaiian Health Care System |
| Address | P.O. Box 130, Kaunakakai, HI 96748 |
| Grantee organization website | www.napuuwai.com |
| Primary Contact Information | Allison Seales (Judy Mikami retired) Behavioral Health Services on Lana'i Phone number: 808-560-3653 Fax number: 808-560-3385 ahs@napuuwai.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---------------------------------------|-----------------------|-------------------------------------|
| Na Pu'uwai, Inc. | Kaunakakai/Molokai/HI | Native HI Health Care System |
| I Ola Lahui (IOL) | Honolulu/Oahu/HI | Rural psychologist training program |
| Lana'i Community Health Center (LCHC) | Lana'i City/Maui/HI | FQHC |

Community Characteristics

Area:

Grantee Na Pu'uwai, Inc.'s project – *Lana'i Consortium for Integrative Behavioral Health Care* – serves the entire small island of Lana'i in the state of HI. The island is one of three that make up Maui County.

Community description:

Lana'i is a low-income, rural, geographically isolated island that is the second smallest of the 7 inhabited islands within the state of HI. Lana'i is separated from O'ahu, the island with the highest population concentration, and majority of the health care and economic resources, by 65 miles of ocean. In 2008, with the increased instability of the local and national economy, air travel costs have become prohibitively expensive which further highlights the geographic isolation of rural islands such as Lana'i and the barriers to accessing timely health care. The total population on Lana'i is 3,200. Eighty-six percent of the population is of ethnic minority, the majority of whom are Filipino (45.5%), followed by Native Hawaiians (pure or part Hawaiian) (20.6%). Fifty-four percent of the residents were born in the State of Hawaii, while 30% were foreign born. Approximately 40% have incomes below 200% of the federal poverty level.

Need:

Needs assessments on Lana'i have revealed major health challenges that include inadequate prenatal care and women's health services, pediatric asthma, oral health, drug abuse, obesity, high teen birth rates, diabetes, and an elderly population in need of community based support. In addition, barriers to accessing health care include geographic isolation, non-English language and culture, low income with high cost of living, and limited health care resources and infrastructure.

While all the identified health needs on Lana'i warrant attention, the grant program focused on those that would benefit most from preventative efforts (i.e., identification, screening), as well as, through the integration of behavioral health and primary care. Thus, the health domains to be addressed include chronic disease, mental health, and substance abuse across the lifespan to include pediatric,

adolescents, adults, and elderly. A key component was to increase access to culturally appropriate, integrative behavioral health services to address these needs. Additional goals included establishing collaborative and sustainable partnerships with existing health care providers and organizations, conducting research/evaluation to examine quality and cost-effectiveness of behavioral health services, and promoting workforce development through recruitment, quality training, and retention of psychology trainees in order to improve behavioral health provider shortages and enhance the continuity of care.

Program Services

Focus Areas

Behavioral/Mental Health
 Chronic Disease Management: Cardiovascular
 Chronic Disease Management: Diabetes
 Chronic Disease Management: Other
 Health Education and Promotion
 Health Professions Recruitment and Retention/Workforce Development
 Integrated Systems of Care

Target Population

School aged children - elementary
 School aged children - teens
 Adults
 Elderly
 Pregnant Women
 Caucasians
 Latinos
 Native Americans
 Uninsured
 Underinsured

Description:

Seven key grant activities were coordinated and implemented by all consortium partners.

1. Network Development

The collaboration represented by the grant consortium filled existing service gaps. The shared resources of LCHC, Na Pu'uwai's Ke Ola Hou Lana'i (KOHL), and IOL allowed for a sustainable integrated behavioral health system that is evidenced-based and culturally competent. This initial collaboration also increased collaboration between the consortium and other on-island service providers.

2. Primary Care Screenings

The consortium implemented primary care screenings targeting depression, substance abuse, and domestic violence. The data collected was used to complete necessary referrals and individualized treatment plans for identified individuals.

3. Increased availability of behavioral health appointments

The consortium members surveyed existing services and assisted in the development of a larger consortium of organizations and providers to maximize current resources and prevent duplication of services. Then short- and long-term strategies for increasing access to mental health and behavioral health services and minimizing the effects of chronic disease and mental health concerns upon the community were created and implemented.

4. Program outcomes, Patient and Provider Satisfaction

Administration of brief measures of physical functioning and mental health prior to the start of the first session and then again prior to the start of the fourth session provided interns and their supervisors more information on patient functioning. This additional information was extremely useful in treatment planning and tracking progress which is beneficial both to the patients as well as the trainees who have more information available them to provide the best care possible.

5. Chronic Disease Management

By utilizing postdoctoral fellows and trainees with specific training in integrated behavioral health as well as health psychology and behavioral medicine, the consortium was able to make an impact on physical health conditions such as diabetes and asthma that typically present adherence problems and require significant behavior change for successful management. The postdoctoral fellow was available to assist the medical providers on patients with adherence issues related to diet and exercise, medications, laboratory testing, and smoking cessation. In addition, for patients who were seen more often by behavioral health, regular assessments as part of treatment were focused on not only behavioral health symptoms but also overall management of the patients' health. Interventions by the postdoctoral fellow included motivational interviewing to guide patients through the change process and increased the likelihood of the patient's participation in existing educational support groups already in place on the island. Patients suffering from chronic diseases are also at greater risk for developing depression and anxiety related to their illness, which in turn affects adherence rates. By increasing the number of behavioral health appointments available on the island, it improved access to treatment much earlier in the

chronic disease process. Tobacco cessation groups also serve to decrease nicotine dependence in the community and hopefully reduced complications related to diabetes and asthma.

6. Workforce Development

The formation of the consortium provided a win-win situation for the three organizations involved. With the inception of LCHC on the island, collaboration with Na Pu'uwai's KOHL helped to maximize the available resources for patient identification, referrals, education, and treatment. However, both on-island organizations struggled with recruitment and retention of qualified health care providers. As a result, many of the services offered were sporadic and based on contracts that brought in providers once or twice a month. With the addition of IOL to the consortium, the goal of developing a full program that could integrate with existing resources and fill sizable service gaps was much more realistic. The mission of I Ola Lāhui is to provide training to post-doctoral psychology fellows in effective, culturally-minded interventions for use in Hawai'i's rural and medically underserved communities. The philosophy of the training program is based on a scientist-practitioner model with a focus on training the generalist practitioner supplemented by training in specialty areas including primary care psychology, health psychology and behavioral medicine, child psychology, and community psychology, as well as program development, evaluation, and sustainability. Fellows are trained within an integrated behavioral health model of service delivery. The goal of the program is to increase Hawai'i's capacity to address the growing health needs through training in behavioral health care, chronic disease management, and psychopharmacology, in addition to more traditional mental health concerns such as anxiety and mood disorders. IOL is unique in that it is the only organization that provides this type of culturally-minded training and service provision model to numerous community health center settings at the same time. The IOL staff is comprised of doctoral level staff that creates a web of appropriate expertise that supports all participating sites in their effort to provide quality cost effective behavioral health services.

7. Sustainability

Provider recruitment and retention of providers in rural and underserved areas is always difficult. Even when graduate students are living in these rural areas, they frequently must travel to O'ahu or in some cases the continental United States for graduate training. While in school, they develop roots in the metropolitan area and are less willing to relocate back to the rural area upon graduation. While this is the case for the larger neighbor islands, the problem is magnified on Lana'i given the size of the island, its population, and the limited infrastructure. Given these constraints, it was hypothesized that finding a full-time psychologist willing to relocate to the island was unlikely. An alternative solution was positioning the psychology training program (IOL) as the consistent service provider on the island, with turnover occurring with each new fellow. While it did result in frequent changes in the provider, the programs and relationship among consortium members remained stable. As the LCHC was still in its infancy, taking on a full-time post-doctoral fellow was in many ways unrealistic. The intent of the consortium was to demonstrate the sustainability of a post-doctoral psychology fellow while supplemental funding was available. Once the BH program was more fully developed and LCHC has been regularly billing for services, the proposition of independently paying for a trainee was seen as less daunting.

Role of Consortium Partners:

The consortium for this grant worked closely together to implement behavioral health services on Lana'i.

- Na Pu'uwai acted as the grantee and fiscal agent for the grant. Na Pu'uwai staffed the program with a CFO, Associate Director, and Training Supervisor. The Training Supervisor traveled to Lana'i at least monthly and supervised trainees and coordinated meetings with the collaborating partners. Na Pu'uwai staff also planned health screenings/behavioral health awareness events and held wellness courses in collaboration with LCHC trainees.
- I Ola Lahui recruited, hired, and trained Clinical Psychology Postdoctoral Fellows and trainees. IOL also conducted research and data analyses for the program.
- Lana'i Community Health Center served as the main site for the behavioral health Fellows and trainees, and provided access to potential primary care patients. Fellows and trainees worked closely with LCHC providers (registered dietitians, nurse practitioners, specialists, etc.).

Outcomes

Evaluation data was collected in several areas and selected evaluation findings are summarized below:

Health care access:

- A total of 244 patients were served during individual and group appointments at LCHC. The total number of appointments was 969 (as of 3/2012).
- A total of 68 participants participated in a community comprehensive health screening event, including depression. All participants met with behavioral health providers to discuss health goals, motivation, and behavioral health needs.

- A total of 121 patients were screened for behavioral health issues and were seen as “warm handoffs” by other providers.
- BH providers also staffed 7 other community health promotion events/fairs, with an average number of 200 participants at each event. Providers passed out flyers and discussed services.
- At the end of this third year, LCHC found and hired a full time, on island BH provider due to the grant expansion of Lana’i behavioral health services, ensuring ongoing services.

Patient satisfaction:

- Patient satisfaction surveys indicated that 100% of patients were satisfied with the help they received from their behavioral health provider.
- Patient satisfaction surveys indicated that 100% of patients felt that services received helped them better deal with their problems.
- Patient satisfaction surveys indicated that 100% of patients would return to our program for services.

Provider satisfaction:

- Provider program impact surveys indicated that community providers outside of the consortium felt that the program expands the options available to all Lanai community members that want counseling or therapy, heard from clients that they were satisfied with services, and want more collaboration with providers.
- BH providers also held 3 communication and mediation skills trainings for staff at LCHC.
- Provider satisfaction surveys from providers at the main service site indicated that providers agreed that they were satisfied with BH consultation services delivered to patients and BH consults they received, patients were more likely to follow through with referrals, services were convenient, helpful, and increased their ability to see more patients.

Patient outcomes:

- For the Sf-12 Analysis, Vitality scale scores showed significant improvement over time.

Challenges & Innovative Solutions

Challenges during the grant were partly attributed to the isolation and unique healthcare situation of the island.

- Establish sustainable communication: The consortium partners were located on three separate islands and each had its own executives and personnel. Challenges in communication were resolved by using one of the Na Pu’uwai personnel as a communication liaison and holding meetings which included all partners of the consortium.
- Institute 3rd party reimbursement; demonstrate financial sustainability: The uniqueness of the supervision model for the trainees created challenges as insurance companies did not have policies in place for reimbursement of this model. All insurance companies were contacted and meetings were held to create new policies for reimbursement. After the hiring of an on-island, full-time behavioral health provider, this issue became less important as billing rates with an on-site supervisor were already established for 3rd party reimbursement companies.

Sustainability

On-going Services and Activities:

The main goal of the grant was to expand behavioral health services on the island of Lana’i. Indeed, the behavioral health program will continue beyond the grant period, including all services that were developed and implemented during the three years of the grant. An on-island full-time behavioral health provider will serve the community and will continue to increase community health collaborations. This provider will be supported by 3rd party reimbursements, FQHC funding, and Maui County funding.

Sustained Impact:

Our community of Lana’i (and other communities) have benefited greatly from the funding of this program. The Lana’i Consortium for Integrated Behavioral Health Care has addressed several health domains including, chronic disease, mental health, and substance abuse across the lifespan to include pediatric, adolescents, adults, and elderly of the island. Additionally, this program has increased access to culturally appropriate, integrative behavioral health services to address these needs. Additional goals met included establishing collaborative and sustainable partnerships with existing health care providers and organizations, conducting research/evaluation to examine quality and cost-effectiveness of behavioral health services, and promoting workforce development

through recruitment, quality training, and retention of psychology trainees in order to improve behavioral health provider shortages and enhance the continuity of care for Lana'i residents.

Implications for Other Communities

Lana'i is a unique, isolated island in Hawai'i populated by people of diverse cultures and health needs.

At the state level, the findings from this project would be useful to other health center sites considering the addition or expansion of behavioral health services. In addition, findings may also be beneficial to policy makers that make decisions about future funding for community health centers and behavioral health services as part of the Hawai'i health care system. As such, findings would be presented to the Hawai'i Primary Care Association and other CHC sites along with the Hawai'i Psychological Association for use in advocacy efforts. Efforts will also be made to present these findings to the community at large through articles in newspapers and local magazines.

Nationally, our understanding of the generalizability of using an integrated behavioral health approach within primary care settings may be enhanced by the findings from this project, particularly because of ethnic diversity of the target population, and the cultural adaptations that will be documented in qualitative analyses. Moreover, rural community health centers and behavioral health training programs across the country may find the data on the supervised trainee model of behavioral health service provision to be useful in developing new training opportunities that are mutually beneficial to the training program as well as the communities they serve. As such, findings from the project would be presented at national conferences and be submitted for publication in peer reviewed journals and newsletters.

HAWAII

The Bay Clinic, Inc.

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12679 |
| Grantee Organization | The Bay Clinic, Inc. |
| Organization Type | FQHC |
| Address | 224 Haili Street, Bldg. B, Hilo, HI 96720 |
| Grantee organization website | http://bayclinicinc.org |
| Primary Contact Information | Monica Adams Acting Chief Executive Officer Phone number: 808-961-4080 Fax number: 808-961-5678 madams@bayclinic.org |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|---|---|
| Lutheran Medical Center Dental Residency Program Office of Social Ministries | Brooklyn, Kings County, NY Hilo, Hawai'i County, Hawai'i | University/Dental School Faith-based |

Community Characteristics

Area:

The area served by the mobile dental van was North Hilo, South Hilo, Puna and Ka'ū in East and South Hawai'i Island in the State of Hawai'i. Towns and communities served include Hilo, Kea'āu, Kurtistown, Mountain View, an Paradise Park, Orchidlands Estates, an Acres, Eden Roc, Fern Forest, Fern Acres, Ainaloa, Leilani Estates, Nanawale Estates, Pāhoa, an Beaches, Volcano, Pāhala, Wai'ōhinu, Na'ālehu, Discovery Harbour, Ocean View

Community description:

Of Bay Clinic's 18,000 patients, 88% are uninsured or on Medicaid/Medicare and live in poverty. Bay Clinic's patient population is ethnically diverse with 78.7% of the population of Native Hawai'ian, Other Pacific Islander, and Asian descent. Bay Clinic provides comprehensive medical, dental, and behavioral health care to the Hawai'i County residents of the districts of Hilo (North and South), Puna, and Ka'ū with a combined population of 106,745; of which 1 in 3 receive food stamps; 2 of 5 are on temporary assistance for needy families; the regional unemployment rate is 12% with some areas reaching 16%; and the per capita income is \$26,194, the lowest in the state. The entire region is federally designated a Medically Underserved Area/Population and a Dental Health and Mental Health Provider Shortage Area. The DOH Primary Care Access Indicators Report 2009 ranked Hawai'i County as the most at-risk in the entire state; and of the County's 9 districts, Puna, Ka'ū, and Hilo are ranked 1st, 2nd, and 3rd respectively. According to the report, Hawai'i County has the highest percent of the population living in poverty (34.5%); largest proportion of adults without health insurance (15%), greatest shortfall of licensed physicians than warranted by its population (38%); biggest percent of its population (45.3%) who have had permanent teeth removed; and was consistently ranked in the top three most at-risk for a number of other significant health concerns such as diabetes, cardiovascular disease, obesity, hypertension, anxiety and depression, and low prenatal care utilization.

Need:

Hawai'i County residents experience multiple barriers to oral health care access, primarily due to a high rate of residents who are uninsured or on Medicaid (55%) and a lack of dentists who serve this population. There are only three providers who provide dental

care to the 37,000 low-income residents (one-third of the total population) of East and South Hawai'i Island. Those most at risk in our target population are children, people with chronic diseases, developmentally disabled, the recent immigrant and the elderly. Additional barriers to care include large geographic areas with limited transportation options, cultural and language differences, and little knowledge on how to access health care services. Overall, residents of our service area experience higher rates of permanent teeth removal and lower rates of preventative oral care when compared to Hawai'i State averages. This demonstrates that lack of access to dental care is the root cause of these rates of untreated dental disease, which result in pain, loss of teeth, poor nutrition and poor self-image.

The Oral Health Task Force (OHTF) studies access and barrier issues to oral health care on our island. OHTF found that only 30% of all of the dentists in the state serve Medicaid beneficiaries. This is among the lowest percentage of participation in the nation. While the State has a robust Medicaid program covering many people living in poverty, this coverage does not apply to adult preventative dental care. As a result, 30.66% of adults have not visited the dentist within the past year. This combined with an un-fluoridated water supply leaves our populations with dire oral health conditions. Bay Clinic's dental services are among the only available for the uninsured and Medicaid populations in East and South Hawai'i Island.

Program Services

Focus Areas
Oral Health

Target Population
Pre-school children
School aged children – elementary
School aged children – teens
Adults
Elderly
Pregnant Women
Caucasians
African Americans
Uninsured
Underinsured
Native Hawai'ian/Other Pacific Islander
Asian

Description:

The Mobile Dental Van has two dental operatories and provides routine dental care (cleanings, x-rays, and examinations), fillings, extractions, emergency treatment for pain, swelling, broken tooth, etc...; root canal therapy, prenatal dental care, crown and bridge treatment, and partial denture treatment to the rural and remote regions of East and South Hawai'i Island.

Prior to the opening of our Hilo Family Dental Center in December 2011, the Mobile Dental Van spent 1 week in Na'ālehu town, 1 week in Pāhoa town, and 2 weeks in Hilo providing dental care services for all. As of opening of the Hilo Family Dental Center, the Mobile Dental Van is now stationed in Pāhoa for 2 weeks and in Na'ālehu for 2 weeks per month to ensure dental care access is available at all of our service districts. Hours of operation for the mobile van are Tuesday through Friday 7am to 6pm.

The Mobile Dental Van program has been highly successful, reducing hospital emergencies due to dental pain among our patients from 177 in the first year to 7 in the first 6 months of our third and final year. This rural outreach project has facilitated critically needed dental health care services to 2,442 individuals to date.

Role of Consortium Partners:

The partnership for the Mobile Dental Van program comprises of Bay Clinic as the lead organization, Lutheran Medical Center who provides staff in the form of a dental resident, and the Office of Social Ministries, who contributed a Mobile Dental Van and its technological equipment.

In addition to providing the Mobile Dental Van and technological equipment, the Office of Social Ministries (OSM) provided a dedicated location in the parking lot of one of its homeless shelters in Hilo for two weeks out of every month. In addition, OSM also provides patient transportation to bring the homeless clients to the van for care; help the homeless patients who cannot read or write fill out their paperwork for their appointments; and OSM also receives funding to pay the co-pay of homeless clients who are uninsured. OSM

provides a critically needed services and access point for providing dental care to the homeless and transient population in our community.

We receive dental residents from the Lutheran Medical Center, one in the first year of the program and two in the second year. Our dental director maintains his status as a training dentist and his rotations include providing dental care via the van. The demonstrated demand for our service area community members facilitated the increase of dentists via the residency program, which provide much needed expanded access to dental care at no cost to the program. The residents both serve our patients in our stationary dental sites and the dental van in rounds.

Although slightly delayed in year 1 as a result of unexpected logistical issues that were effectively resolved; year 2 and 3 of the program has experienced strong growth and community support, particularly in the more rural and remote regions.

Outcomes

The Primary Care Needs Assessment 2009 revealed that residents of our service area had the highest rates of permanent teeth removal within the County and Statewide; and lower rates of preventative oral care when compared to the rest of the state. The Consortium was created to provide a solution to the dental care disparity in our region through the deployment of the mobile dental van with the ability to provide the full spectrum of services they would be expected in a dental clinic office.

Preliminary data suggest that we have affected the number and frequency of oral health related emergency department (ED) visits by our patients from 177 in 2009 to 7 in 2011. Since the start of the Mobile Dental Van program, we have cared for 2,442 people with 9,109 total encounters, as follows:

| Year | Total Patients | Total Encounters |
|------|----------------|------------------|
| 2009 | 655 | 1,784 |
| 2010 | 846 | 2,619 |
| 2011 | 941 | 4,706 |

This project has touched the lives of so many in our community who are in need of dental care but did not have access to affordable and quality dental care regardless of ability to pay or insurance status. Many of these individuals would most likely have eventually presented in ED's seeking emergency dental care.

Challenges & Innovative Solutions

The dentist to patient ratio in Hawai'i is 1:5,181. Of our service population, 21% are uninsured and 55% receive Medicaid coverage. According to the Hawai'i Island Oral Health Task Force (2008), only 3 dentists serve the entire 37,000 member Medicaid population in our area and none, except Bay Clinic, provide low cost care to the underserved.

In addition, our service area population primarily comprise of people of Native Hawai'ian/Asian American/ Pacific Islander ancestry; groups at risk for poor oral health. Nearly 50% of Native Hawai'ian, Southeast Asian, Filipino and other Pacific Islander children age 6-8 have unmet dental treatment needs. Other challenges include: 1) English language proficiency, 2) rural and remote geographic area; 3) inadequate transportation system, and 4) high poverty rates.

This rural outreach project enabled Bay Clinic to expand access to critically needed dental care in our service region, especially for hard-to-reach populations in the more remote and rural areas. The deployment of the Mobile Dental Van addressed the inadequate transportation issue by bringing dental service to the rural and remote areas within our service region. To respond to the additional challenges and ensure access to dental care for the low-income, under insured, and uninsured residents in our vast rural and remote service area, we:

- Utilize language interpreters representing the major ethnic groups in our service population.
- Have translated our education and outreach materials in the major languages of our patient population.
- Identify and assist eligible Medicaid (QUEST in Hawai'i) patents through the enrollment process, including advocating on the patients behalf once the paperwork is submitted to the State QUEST office.

- We advertise the van's services, hours of operation, and location schedules in the local newspapers, community bulletins, at our clinic locations, and on our website.
- We provide outreach and provide information on health care issues, including dental, and how to access our services at all community, town, school, and civic events that we attend.
- We outreach to the homeless through our Outreach Coordinators and our partnership with the Office of Social Ministries, who coordinate transportation and other assistance, to ensure the homeless benefits from the Mobile Dental Van.

Sustainability

On-going Services and Activities:

As a result of the high demand for quality and affordable dental care services, we opened the Hilo Family Dental Center in December 2011. In response to the demonstrated need in the Hilo community for dental care, the Mobile Dental Van now rotates between our Pāhoā Family Health Center (Puna District) and our Ka'ū Family Health Center locations. Both the Puna and Ka'ū Districts are rural and remote with no other dental provider in the area providing dental care for all regardless of ability to pay or insurance status. There is a demand for this service as: 1) the Puna District is experiencing the fastest rate of growth of all the districts in Hawai'i, showing an increase of 66% in the population over the past 10 years; 2) the Ka'ū District is a vast rural region primarily focusing on commercial agricultural production, with the area supporting the largest Macadamia Nut farms in the state. The vast, remote, and rural characteristics of Puna and Ka'ū, coupled with the region's rudimentary infrastructure, high percent of low-income residents and migrant workers, and growing uninsured and Med-Quest populations are significant constraints toward improving health care services in the region in the short- and medium-term.

Bay Clinic will continue to work with the Lutheran Medical Center's Dental Residency Program and the Office of Social Ministries to coordinate dental care services for the under and uninsured, publically insured, and the homeless in our service region. Bay Clinic will also continue to foster its partnerships with the Office of Hawai'ian Affairs, the Department of Health, and other state and county agencies to ensure continued support of the program. Additionally, Bay Clinic will continue to seek and nurture partnerships with community organizations and foundations to provide health and dental care services to the underserved population in East and South Hawai'i Island.

In addition, most of this program's service delivery is sustainable through billing insurance providers of Medicare, Medicaid, QUEST, HMSA, AlohaCare, Summerlin, and other insurance payers. Based upon community uninsured rates and our current number of uninsured patients, we operate with the assumption that 15-20% of our patients seeking care will fall into this category and qualify for sliding-fee discounts. Additionally, we provide enrollment coordination support and advocacy for uninsured patients who qualify for Medicaid / QUEST coverage, for which all further visits will be reimbursed.

Sustained Impact:

The opening of the Hilo Family Dental Center is a result of the Mobile Dental Van program. The Dental van enabled Bay Clinic to provide data that demonstrated the high demand and need for affordable and quality dental services in Hilo, as well as the Pun and Ka'ū districts. The Dental Van program also demonstrated the critical need for dental care in the Ka'ū District, which in turn enabled us to expand the scope of services that will be available at our new Ka'ū Family Health and Dental Center facility that is expected to be completed in late 2013.

The Mobile Dental Van enabled Bay Clinic to reach individuals and families living in the more remote locations in East and South Hawai'i Island that would otherwise not have accessed dental. Through outreach and education on preventive dental care to the remote areas of our region, we have positively impacted the lives of many who would otherwise not partake in these services until emergency dental care is required. In addition, the Dental Van provided for greater access to preventive dental care on a regular basis, this in-turn has impacted the lives of many well into the future. Whole families have benefited from this program, and the children who are benefiting from this service have greater self-esteem and knowledge of the importance of preventive care over the longer-term. For our children alone, this program has opened up greater opportunities for them to live healthier and happier lives.

Implications for Other Communities

The Consortium partners were all equally committed to ensuring the program was a success. Flexibility of the program's partners to address unforeseen or emerging issues in a timely and effective manner was key to ensuring that the program was implemented and effectively managed within the context of the many barriers to care present in our service area. The majority of the constraints were

overcome as the scope of the program took into account factors such as geographic isolation, language and cultural barriers, and socio-economic barriers. While these factors were taken into account, other issues arose like mechanical breakdown of the van, which were addressed as quickly as possible. Open communication to keep the communities involved and confident of the new program was key to assuring success. Utilizing local community leaders in support of the program, announcing schedules, hours of operation, and other service delivery changes in the local newspapers, community bulletin boards, and on our website and social media applications were all important aspects of the program's success.

ILLINOIS

Sarah Bush Lincoln Health Center

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12733 |
| Grantee Organization | Sarah Bush Lincoln Health Center |
| Organization Type | non-for-profit health center |
| Address | 1000 Health Center Drive, Mattoon, IL 61938 |
| Grantee organization website | www.sarahbush.org |
| Primary Contact Information | Molly Daniel Grants Specialist Phone number: 217-258-2195 Fax number: 217-258-4135 mdaniel@sblhs.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|---|--|
| Lake Land College Embarrass River Basin Area Head Start Program | Mattoon, Coles County, IL 7 centers in 3 counties (Clark, Coles, Cumberland counties, IL) | Community college Early childhood program |
| Local health departments in: Clark County Coles County Cumberland County Effingham County Moultrie County Shelby County | Martinsville, Clark County, IL Charleston, Coles County, IL Toledo, Cumberland County, IL Effingham, Effingham County, IL Sullivan, Moultrie County, IL Shelbyville, Shelby County, IL | Public health departments |
| 68 public elementary, middle, junior high and high schools (complete list available upon request) | across a 9-county area (Clark, Coles, Cumberland, Douglas, Edgar, Effingham, Jasper, Moultrie, Shelby counties, IL) | public schools |
| 1 faith-based elementary school | Newton, Jasper County, IL | faith-based school |

Community Characteristics

Area:

List the communities/counties that the Outreach project served.

The project served communities in Clark, Coles, Cumberland, Douglas, Edgar, Effingham, Jasper, Moultrie and Shelby Counties in East Central Illinois.

Community description:

The counties targeted by the Women & Children First Dental Program -- now known as Sarah Bush Lincoln (SBL) Dental Services -- exhibit substantial need for improved access to oral health care for low-income children. In the project service area an estimated 35 percent of school-aged are eligible to participate in National School Lunch Programs. More than 6,000 children receive food stamps, and 15,623 persons under age 18 are enrolled in KidCare or Medicaid (based on 2007 data). The service area is marked by a limited number of health care professionals in primary care and in dental care. Among the more than 2,000 school children who received oral

health exams through SBL Dental Services during school year 2007-2008, 47 percent exhibited mild to significant dental decay or pathology. Of that 47 percent, 10 percent have an urgent treatment need. Based on the region's population of 19,264 children enrolled in Medicaid/All Kids (2008 data, IL Healthcare and Family Services) and the incidence of dental decay observed by SBL Dental Services (57% of children screened in 2009), an estimated 10,980 children in the region have unmet oral health care needs.

Need:

This project was planned to address a gap in access to comprehensive oral health services for underserved children in East Central Illinois. Funds from the Rural Health Care Services Outreach Program provided operating support for program expansion to increase access to restorative care. The expansion was built upon an existing program which delivers oral health education, preventive care and a limited number of restorative care services throughout the targeted geographic area. With ORHP funding, SBLHC launched a mobile dental clinic. Prior to program expansion, the capacity of SBL Dental Services to deliver restorative care was limited to about 450 procedures annually provided by volunteer dentists who contributed clinic-based services at their practice locations. Their contributions are critical to the program but are not sufficient to address the ongoing need of the community.

Program Services

Focus Areas

Oral Health

Target Population

- Infants
- Pre-school children
- School aged children - elementary
- School aged children - teens
- Adults
- Pregnant Women
- Caucasians
- African Americans
- Latinos
- Native Americans
- Alaska Natives
- Uninsured
- Underinsured

Description:

The addition of a mobile dental clinic provided increased capacity for comprehensive diagnostic and restorative care services. The program now provides comprehensive care for eligible clients, delivery regular preventive care in accordance with recommendations of the American Dental Association. Program expansion was in addition to existing portable services (which focus on delivering education, screening exams and preventive services). Local or other non-federal funds were secured to purchase and equip a 40-foot mobile unit, and ORHP funds were allocated for support of a portion of personnel and other operating costs of the expansion.

SBL Dental Services now provides oral health education, screenings, diagnostic services, preventive and restorative care to low-income children in a nine-county service area at no cost to the program participants. Services are delivered through two integrated models – a portable program which provides oral health education, oral health assessments, screening exams and preventive care; and a mobile program which delivers follow-up restorative care on a self-contained mobile unit with dedicated staff. (Restorative procedures continue to receive support from office-based volunteer dentists.) Program participants are identified in partnership with participating schools, WIC and Head Start programs. Oral health education is provided to all children in participating schools. All children are eligible to receive a free dental screening examination with return of a positive consent form. Children from low-income families (determined by a child's eligibility for the National School Lunch Program) receive dental exams and preventive care through the program's portable services. During the screening exam, clinical staff assesses each child's oral health needs, and eligible children in need of follow-up or restorative care are scheduled for additional services on the mobile unit or at a community-based dental office partnering with the program. Staff employed by SBL provide support for program coordination, case management, scheduling, and billing of program services. The current staffing plan includes 15 employees (full-time and PRN or as-needed staff), including 8 providers (2 dentists and 6 hygienists) and 7 support staff (dental assistants, secretary, oral health educator.)

Role of Consortium Partners:

Lake Land College supports the program through the use of the mobile clinic as a training site for students in their Dental Hygiene Program.

Local health departments assist with promotion of the program services and coordination with Women, Infants and Children (WIC) programs.

Local schools facilitate access to the target population in a setting conducive to delivering oral health education and assessments. Schools assist in promoting and explaining the program to families, as well as distributing and collecting parental permission forms. Space is provided, as available, at each school for delivery of program services, which include oral health assessments, oral exams, and preventive services. Co-location of the mobile unit at school sites extends the access to restorative care and provides the opportunity for aggregate use of the program's resources (both personnel and supplies). Schools also support the program by assisting with documentation of program services, providing figures for school enrollment and documentation of the numbers of students who participate in program services.

Outcomes

In 2011, more than 4,000 unduplicated persons received comprehensive oral health care (oral health education efforts reach 12,000 children.) Prior to the addition of the mobile dental clinic, the program supported about 3,240 encounters annually in dental exams and preventive care (prophylaxis, sealants, fluoride treatments) conducted at schools and other sites throughout the region and about 450 restorative care procedures, primarily through the generosity of volunteer dentists and their clinic-based services.

By comparison, in calendar year 2011, the program supported 6,619 encounters, providing 6,801 preventive care procedures and 1,782 restorative care procedures. Our proudest accomplishment comes with the completion of a child's treatment plan. Expanding access to restorative care with the launch of a mobile dental clinic in 2010 had significant impact on this goal -- treatment plans are now completed for about 15% of the annual caseload, compared to fewer than 2% prior to the mobile program. To date, the program has completed treatment plans for 1,084 children.

Challenges & Innovative Solutions

The program encountered unexpected mechanical failures and service issues with the mobile unit. This resulted in service disruptions and scheduling complications. The challenges were addressed by returning the mobile unit to the vendor for service when necessary and redirecting clinic staff to alternative productive duties and/or training during the downtime. Additional challenges included staff turnover, deployment of a server-based information management tool, and the need for increased awareness of the program among the target population. While these challenges were not unanticipated, they nevertheless required additional resources and the time of key individuals in the organization. Staff recruitment efforts are ongoing and benefit from the support of the organization's expertise in recruiting medical professionals as well as the ongoing partnership with the Dental Hygiene program of Lake Land College. The solution to the problem of the location of the server and access to its data was an agreed-upon schedule for the mobile unit (which carries the server) to be on site at the hospital, where staff in the Accounting Department perform server-based billing tasks. Finally, the challenge of improving community awareness of the program's purpose and availability was addressed through the development and deployment of targeted communication tools, supported with a small grant from the Lumpkin Family Foundation, Mattoon, IL.

Sustainability

On-going Services and Activities:

SBLHC will continue operation of the expanded program (i.e., comprehensive oral health services to about 4,000 children annually, with continued capacity to support about 1,700 restorative procedures per year.) The annual ongoing operating costs include personnel (15 full-, part-time and PRN employees), supplies, fuel for the program's transport van and mobile unit, and other costs. In FY 12, budgeted operating expenses are \$531,589. These costs are supported with revenue from services and donations to a local sustainability fund. In addition, a local philanthropy, Women Connected, provided a special access-to-care fund which supports restorative care for uninsured children enrolled in National School Lunch Program. Support for most of the capital costs of the mobile clinic came from SBLHC as well as from grants made by the Illinois Children's Healthcare Foundation, Walmart Foundation, and the Delta Dental of Illinois Foundation.

Sustained Impact:

The program demonstrated measurable impact in key indicators of health status, including the following:

- Increased awareness of oral health, as measured by number of participants receiving oral health education
- Increased early detection and prompt treatment of oral health needs among the target population
- Increased utilization of dental and medical services available for low-income population
- Improved coordination of dental and medical services for target population
- Increased volume of restorative services provided to the target population
- Increased support for delivery of comprehensive services, as measured by the growth in the number of sites/partners for the program
- Increased capacity of the hospital to address the needs for restorative oral health services because of investment in capital resources (i.e., mobile unit and equipment)

The sustained impact of the program can be considered in terms of both direct and indirect effects on the community and program participants which were more difficult to measure (e.g., strengthened relationships with partners, diminished oral pain and improved self-esteem among the children served, increased understanding of the importance of preventive health behaviors, etc.)

Implications for Other Communities

We strongly advise organizations seeking to operate an oral health outreach program to engage in a planning process and to include dental professionals in its planning, operation and management. Seek guidance from clinical professionals with experience in providing community oral health services. Program sustainability cannot be achieved without an informed approach to such issues as how to maintain clinic schedules and staffing patterns appropriate for the planned delivery of care and reimbursement levels.

INDIANA

Affiliated Service Providers of Indiana, Inc.

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12660 |
| Grantee Organization | Affiliated Service Providers of Indiana, Inc. dba ASPIN |
| Organization Type | Not-for-Profit Behavioral Health Network |
| Address | 8425 Woodfield Crossing Boulevard, Suite 101 Indianapolis, IN 46240 |
| Grantee organization website | www.indianaprojectice.org |
| Primary Contact Information | Greg Lorenz, LCSW Clinical Program Development Coordinator Phone number: 317-536-4683 Fax number: 317-735-0057 glorenz@aspin.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$148,132 May 2010 to April 2011: \$124,999 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|---------------------------|--|
| Affiliated Service Providers of IN (ASPIN) | Indianapolis/Marion/IN | Behavioral Health Network |
| Advantage | Indianapolis/Marion/IN | Statewide Managed Care Organization |
| Anthony Wayne Services dba AWS | Ft. Wayne/Allen County/IN | Statewide Services Provider for Intellectually Disabled Population |
| MDwise | Indianapolis/Marion/IN | Statewide Managed Care Organization |

Community Characteristics

Area:

36 rural counties in Indiana including Adams, Blackford, Brown, Cass, Davies, Decatur, Delaware, Elkhart, Fayette, Fountain, Fulton, Gibson, Grant, Greene, Knox, LaGrange, Madison, Miami, Montgomery, Newton, Noble, Orange, Parke, Perry, Pike, Porter, Posey, Pulaski, Randolph, Ripley, Rush, Starke, Vermillion, Wabash, Washington, and Wayne.

Community Description:

These counties were chosen based upon highest rates of diagnosed diabetes and/or diabetes mortality rates, cross-referenced with rurality and levels of available health care professionals to serve the populations. In general, all counties are rural, many are dominated by persons over the age of sixty; the ethnicity in all counties is predominantly white, with lower than state average income and education level. In addition, these counties are all either medically underserved and/or health professional and/or mental health professional shortage areas. Barriers to care include cost of disease management and services, geographic location, access to and quality of care, primary care ability to manage patients with these conditions effectively, and cultural barriers such as language and lack of trained physicians. For persons with intellectual disabilities and/or other complicating behavioral health issues, routine education is insufficient for behavioral change. More intensive supervision is required and specialized instruction is needed in smaller segments over longer periods of time. This is usually not feasible in the typical primary care office.

Need:

The need for coordinated care to encourage compliance and appropriate access to primary care was established through surveys, focus groups, and interviews with human service providers, primary care providers, educators, and community leaders throughout the

state. A review of statewide demographics highlighted rural counties with the highest concentrations of persons with diagnosed diabetes or mortality rates from diabetes.

These stakeholders consistently identified the need for training to work with persons with mental illness and/or intellectual disabilities. The need to improve compliance in the management of diabetes in these populations was also delineated. The topic areas that these stakeholders identified as needs were related to diet/nutrition, activity/exercise, glucose monitoring, sufficient medical supervision and preventive care, inconsistent supervision in the home environment, medication compliance, strategies for working with these populations, and greater general knowledge about diabetes.

Program Services

Focus Areas

Access: Primary Care
Behavioral/Mental Health
Chronic Disease Management: Diabetes
Health Education and Promotion
Physical Fitness and Nutrition

Target Population

Adults
Caucasians
African Americans
Uninsured
Underinsured
The severe mentally ill
The intellectually disabled

Description:

This outreach project developed a series of trainings that were offered to providers in both behavioral health and primary care. Trainings included seven face-to-face trainings on fundamentals of diabetes, serious mental illness, and intellectual disabilities provided throughout the state (year one), three webinars on working with these two populations on treatment adherence, nutrition, and physical activity (year two), and an on-line training for primary care providers on how to manage issues presented by these patients in order to improve care (year three). We also provided a website with information and resources on these topics and a list-serv. Updates and related information and resources were emailed to participants on a monthly basis. Additional to grant contracted activities, training for consumers was adapted from these trainings and provided through teleconferencing equipment.

Role of Consortium Partners:

Consortium partners met regularly to discuss the program activities and review and approve training content. During the first and second years, the consortium met monthly. During the third year, meetings were quarterly. Consortium partners also helped facilitate access to providers and organized additional venues to provide trainings. They assisted with marketing, training development, and sustainability planning.

Outcomes

We realized the following positive results from this project. We provided outreach to and created awareness in over 7000 providers and formally trained over 500 in mental health and primary care. We achieved the goal of a statistically significant increase in the number of primary care visits among the targeted populations – those with current diagnoses of mental illness or intellectual disability and diabetes. We also achieved the goals of increasing HbA1c, LDL, retinal eye, and nephropathy screenings. From a survey of training participants, it was found that many were implementing information gained through Project ICE training in their work including: increasing referrals to primary care physicians, dietitians, and Managed Care Organization case managers; increased medical screenings/assessments; improved coordination with primary care providers; better meal planning; increased exercise with clients/patients; stabilization of blood sugar; reduction in complications; and prevention of developing type 2 diabetes in other clients. We also had participants who indicated that they were compiling data to make a case to providers to change treatment planning for patients and/or creating a business plan for a new department in their hospital.

Challenges & Innovative Solutions

One challenge was that Medicaid MRO was undergoing major policy changes that were reducing community mental health system's financial viability. Through this system change, training was being reduced as providers needed clinicians to be participating as much as possible in billable activities. We believe that using webinar and online-based training helped, with as these modalities reduced

travel and time out of the office. However, while we had over 70 participants sign-up for the webinars offered in the second year, we only had about 20 actually complete the training. Fortunately, our plan to archive all trainings and offer online compensated for those losses down the road. One hundred and fifteen individuals have taken archived webinars to date. In a survey of participants, some suggested we provide the option for people to actually attend the training in person or remotely through webinar. They indicated that when they did not leave the office, it was too easy to get wrapped up in work and skip training, especially as it was free, or for others to interrupt them or sidetrack their plans.

We also discovered that our evaluation measures were probably not sensitive enough to detect significant changes given the intervention type and the broad geographical region of the state chosen in the time frame of grant. In the future, we would select more discreet populations where we could more comprehensively get providers trained and select sensitive clinical outcomes coming from a smaller population size.

Sustainability

On-going Services and Activities:

All trainings have been archived and are continuously available to be taken on our Learning Management System. We will continue to market and charge a fee for them after the grant is completed. The website and list-serv are also easily maintained. A staff person could maintain the program as it is as part of their responsibilities and work on other projects as well.

Our Consortium has elected to continue to meet after the grant period ends. The Project Director will continue involvement within state chronic disease initiatives. We are currently adapting material to a wellness group format that we can then provide to clients of our network providers through tele-health equipment as our providers are mainly rurally located. We are researching billing of these with the Office of Medicaid Policy and Planning. We are also examining creating a train-the-trainer format where we could teach providers to give group themselves and charge for that training. We have exploring having trainings adopted by Managed Care organizations or other third party payers for educational use with their providers. In addition, we are looking for additional grant funding that may broaden the chronic disease focus using a similar model.

Sustained Impact:

We definitely have raised awareness of comorbid mental health and physical health disorders and the higher risk that people with serious mental illness and intellectual disability face. Many of the sustained impacts we have had were discussed in the outcomes section above and include direct service providers implementing new skills and changing treatment behaviors to those who are actually trying to change the policies and dynamics which impact services including entirely new models of service delivery.

Implications for Other Communities

Our outcomes suggest that this type of project can have some substantial benefits to improving the care, health outcomes, and life expectancies of people with serious mental illness and intellectual disabilities and skills and health care behaviors of providers. In turn, these changes could result in better health outcomes and cost savings for the community and state. For those that attended trainings, there is clearly a lack of knowledge around serious mental illness and intellectual disability but a willingness and desire to know more. One of the best attended trainings was offered at the Indiana Rural Health Association State Conference and was mainly primary care providers and a large contingency of medical students. Considering this and barriers we encountered, I believe we could have been more effective starting with smaller regions of the state and then progressing. It is advantageous to consider what environmental and work process stressors are affecting the silos you are targeting to determine when best time is to implement this type of program and choose venues carefully to increase participation. If we started this again, I would also spend more time targeting medical, nursing, and social service students. These individuals practice behaviors are less set and are amenable to change. They also demonstrated a strong interest in learning about topic.

INDIANA

Indiana Rural Health Association

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12662 |
| Grantee Organization | Indiana Rural Health Association |
| Organization Type | Non-profit organization |
| Address | 2901 Ohio Blvd, Ste 110 Terra Haute, IN 47803 |
| Grantee organization website | www.indianaruralhealth.org |
| Primary Contact Information | Don Kelso Program Director Phone number: 317-989-3411 Fax number: mserricchio@indianarha.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$124,600 May 2011 to April 2012: \$99,600 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--|--------------------------------|
| Affiliated Service Providers of Indiana, Inc. | 8425 Woodfield Crossing Blvd., Suite 101 Indianapolis, IN 46240 | Mental Health Provider Network |
| Indiana Rural Health Specialty Exchange | 1908 West Lincoln Ave Goshen, IN 46526 | Network and Consulting |

Community Characteristics

Area:

The coverage area for the Outreach grant is the entire state of Indiana, focusing on rural areas of need. Using telemedicine, we have built 8 mini-networks with over 25 individual sites in multiple rural Indiana locations with each other and with providers in metropolitan Indianapolis and other non-rural locations.

Community description:

The health of Indiana's rural residents and their access to quality health care, public health services and preventive health programs differ from urban residents. Approximately 19% of Indiana's rural population find themselves uninsured, while others remain under-insured. These statistics are not surprising, given the current economic climate and the rising cost of health insurance. The number of uninsured and underinsured residents has increased and is causing more individuals to turn to the Indiana Medicaid program and safety net providers for basic health services, placing additional financial strain on these already-stressed programs and rural providers. According to the Economic Research Service, the average per-capita income for all Hoosiers in 2004 was \$30,204, although rural per-capita income lagged at \$26,166. Estimates from 2003 indicate a poverty rate of 9.5% in rural Indiana, compared to a 10.1% rate in urban areas of the state. Data from 2000 show that 20.9% of the rural population has not completed high school, while only 16.9% of the urban population lacks a high school diploma. The unemployment rate in rural Indiana is at 5.9%, while in urban Indiana it is at 5.3% (USDA-ERS, 2005).

Need:

Local research we conducted through community forums, surveys, and informal needs assessment highlighted problems congruent with findings in the President's New Freedom Commission on Mental Health. In that document, three major obstacles were identified

that prevented Americans with mental illnesses from getting the excellent care they deserve: 1) stigma that still surrounds mental illnesses; 2) unfair treatment limitations and financial requirements placed on mental health benefits in private health insurance; and 3) the fragmented mental health service delivery system. This project seeks to alleviate the fragmented nature of the delivery system through better integration among providers, while at the same time reducing individual clinics' financial and geographic disadvantages in trying to address fragmentation issues.

When access to appropriate care is limited, health problems often get deferred until they reach the crisis stage and Primary Care Physicians (PCPs) in rural areas are left attending to major illnesses related to lack of early intervention and treatment. It is now widely recognized that a significant percentage of primary care office visits involve patients whose symptoms are caused solely or primarily by depression. However, physicians are often overbooked and time and pressure make it difficult for physicians to provide effective behavioral health services or to prescribe adequate courses of medications. Most rural physicians have limited access to mental health specialists either outside the clinic or within the clinic providing collaborative care. In addition, critical access hospital emergency rooms need mental health professional staffing in order to properly treat, transfer, triage, etc. patients with mental health needs. Not having access to mental health professionals in the ER can lead to dramatic delays in treatment, or and in some cases a patient being held for over 72 hours before being seen by a mental health specialist. This can severely influence patient outcomes, satisfaction and ER throughput.

Program Services

Focus Areas

Behavioral/Mental Health
 Chronic Disease Management: Diabetes
 Health Information Technology
 Integrated Systems of Care

Target Population

School aged children - elementary
 School aged children - teens
 Adults
 Elderly
 Caucasians
 African Americans
 Latinos
 Uninsured
 Underinsured

Description:

The overall goal of this project was to increase access to mental health services in rural areas by leveraging the use of telemedicine technology. We provided equipment and training to allow rural providers to establish locally controlled "mini-networks" that they could operate themselves according to business arrangements that were sustainable to them. We found these partners through outreach and presentations in public forums outlining telemedicine program development and sustainability models. Each "mini-network" had to have a viable financial model in place, sustainable from its inception, before we installed equipment and began training. As of this writing, 7 of the 9 networks we started (including 30 active sites) are functioning sustainably. Our partners have implemented a number of different models to achieve this:

1. Bowen Center is a CMHC with offices in 7 rural counties, including an inpatient hospital and multiple clinics. Their psychiatrists and nurse practitioners were spending several hours each week driving from site to site to provide medication management services. IRHA initially provided 4 telemedicine units and later added 2 more to allow psychiatrists and nurse practitioners to see patients at multiple sites and avoid traveling. One unforeseen benefit of this program was an increase in efficiency on the part of providers. Providers are able to see patients sooner (shorter time to initial appointment), see patients more regularly (less time between kept appointments), and spend a larger percentage of their clinic time performing billable services when in telemedicine clinics as opposed to traditional services. The Bowen Center also provides psychiatric evaluation services for the local judicial system via a Telehealth connection.
2. Carey Services is a Rural Health Clinic with a mission to serve patients with intellectual disabilities in Marion County. They have opened the clinic to the general public to enhance its sustainability. IRHA provided equipment and training to Carey Services to establish a telemedicine program in which they contract for psychiatrist and psychiatric nurse practitioner time to see patients (in both the ID population and the general public) at Carey Services. They pay the clinicians an hourly rate and bill their RHC encounter rate for the services, making the program sustainable.
3. Oaklawn Psychiatric Center is a CMHC with three offices in two counties in northern Indiana. They face chronic shortages in their psychiatric workforce. They partnered with IRHA to establish a telemedicine program that has allowed them to hire two new psychiatrists in Chicago and Sacramento to provide services onsite at Oaklawn. They now provide more than a full FTE

via tele-psychiatry, and pay only marginally more than if they had hired these clinicians locally (a significant savings over using *locum tenens* physicians). They are saving money over the other arrangements available to them, and feel they are getting better quality services. They are working hard to integrate these providers into their medical staff and treatment culture in order to sustain quality long-term employment relationships with them.

4. WindRose Health Network is a group of four FQHCs in southern Indiana. They provide a wide range of safety net services, but would like to provide a much more integrated approach to behavioral health care. They partnered with IRHA to establish telemedicine rooms in two of their clinics (with two more planned) to allow behavioral health clinicians to accept rapid referrals from primary care physicians and see patients in the same clinic where they receive their primary care. Ideally, they would like to establish a system to provide a “warm handoff” between primary care and the behavioral health providers, lowering barriers to entry into behavioral health and increasing referral success rates.
5. Bloomington Meadows is a private standalone psychiatric hospital that provides inpatient and outpatient services in southern Indiana. Through their partnership with IRHA they established a telemedicine program with outreach to six critical access hospitals across southern Indiana. They provide urgent and emergent psychiatric consultations to these CAHs and provide follow up outpatient services to help sustain the program. Bloomington Meadows also provides outpatient psychiatric treatment, via telemedicine, at a group private practice in western Indiana.

Role of Consortium Partners:

Indiana Rural Health Association (IRHA):

Program and fiscal management of project, effective planning of network operations, leading conference calls, addressing consortium members and project participants concerns, monitor outcome and performance, develop sustainability strategies, work with critical access hospitals and community mental health centers to bring mental health services into the ER via Telehealth.

Affiliated Service Providers of Indiana, Inc. (ASPIN):

Coordinate and facilitate communication among Community Mental Health Center network participants, provide assistance in implementing telemedicine practice at each provider site, assist with data collection and evaluation related to the goals of the grant, provide evaluation and data collection consultations, connected substance abuse and diabetes management service providers into Telehealth network, and facilitated meetings between statewide organizations

Indiana Rural Health Specialty Exchange (INRHSE):

Develop and complete telemedicine implementation plans for each network site, worked with rural health clinics, FQHC, community mental health centers to integrate tele-mental health into their practices.

Outcomes

The initial grant period began in April of 2009. Our primary goal was to increase access to mental health services by facilitating adoption of tele-mental health across the state of Indiana. We planned to equip and train rural sites to start their own self-run telemedicine “mini-networks” and use contracting and other “peer-to-peer” methods to increase their ability to provide and sustain rural mental health services.

In November of 2009 our first “mini-network” began providing live tele-mental health services. Bowen Center, a rural community mental health center, provided 12 outpatient mental health medication evaluations in that month. The next month, they provided 13. Since then, the number of mini-networks and services has continued to grow. The Bowen Center telemedicine program provided a total of 419 telemedicine visits in their first full year of operation. By the middle of the third year of the grant, we had 7 active partners providing about 100 mental health encounters per month at over 20 individual telemedicine sites across rural Indiana.

Our project currently supports 9 active partners operating a total of 30 individual end points where various types of tele-mental health care are provided. As of January 1, 2012, more than 1200 individual encounters had occurred across our network of networks. Outpatient mental health medication management and evaluation services are by far the most common type of service, and the one in greatest demand in rural areas. Outpatient counseling and emergency mental health evaluations are also provided, and patients include the full range of ages, from children to adults and seniors.

An outstanding example of improved access has been provided by Bowen Center, our original tele-mental health site and partner. During the first 12 months of their telemedicine program, they provided 419 medication visits to 185 patients. A comprehensive analysis and comparison involving Bowen’s traditional services and telemedicine services showed that patients were provided an initial telemedicine appointment in half the time it took to get a traditional appointment (17.4 days vs. 33.9 days) and were seen for follow up

appointments in half as long as traditional services (28.6 days vs. 61.4 days). Moreover, these services were provided at greater efficiency via telemedicine than they could be using traditional methods, allowing the clinicians involved to convert 97.5% of their scheduled time into billable services during telemedicine clinics, while these same clinicians converted only 72.5% of their scheduled time into billable services during their traditional in-person clinics at other sites. These outstanding results were replicated almost exactly in a follow up analysis covering the second full year of the program. The analysis of the first year data were recently submitted for publication in the Journal of Rural Mental Health.

Another goal we set for this project was full sustainability for the clinical services through clinical reimbursement alone. The grant provided no funding for clinical services. Rather, we provided equipment and training and taught sites how to bill appropriately for services. Analyses we have done to date indicate greater than 90% pay rate for telemedicine services across our networks, equal to the rate for traditional in-person services. Both Medicare and Medicaid reimburse services at all our sites, and the major commercial payers are also paying consistently for telemedicine in Indiana. One further indication that these services are sustainable is that now our member sites are beginning to purchase their own telemedicine equipment without any need to resort to grant funding. They have found that they can sustain and even expand their telemedicine programs without the need for further grant funding.

Challenges & Innovative Solutions

The overall scope and purpose of our project has not changed since the funding was awarded. We have connected practitioners in Community Mental Health Centers (CHMC) via telemedicine and intend for them to serve as a base to connect other facilities that lack a practitioner to plug in to. In our original plan we assumed that we would recruit a psychiatrist into the system within the first 6 months. Once we started working with the clinics, hospitals, CMHC's, and information technology staff we discovered that the timing for getting equipment into a facility, credentialing, process integration, staff adoption, etc. was much longer process than anticipated. In addition, once Telehealth was adopted, often by connecting entities that already had established relationships, efficiencies were achieved that allowed existing partnerships to better provide for patients.

Critical Access Hospitals presented a different challenge. While an individual patient presenting with mental health issues may be very disruptive to the system, the number of patients who need these services can be highly variable and sometimes infrequent. Because of this, the staff at each hospital may not be as familiar with the Telehealth process or make it a priority to integrate the service into their current processes. The staff on duty may not even recall that there is Telehealth service available. This presents an educational opportunity for the hospitals, to speak with their associated CMHC via video, once a month, to establish process and keep the service on the forefront.

Credentialing continues to be a barrier to implementation as the process can be long and frustrating for both the provider and receiver of services. CMS has provided measures to help alleviate some of this burden from critical access hospitals but in practice we have seen few instances of using the new telemedicine rules. These challenges are addressed by being realistic and upfront with project participants, and communicating the ultimate goal of the project with stakeholders, so as to keep the project moving forward.

Recruiting practitioners has also been a barrier for rural providers. For this outreach project, we have connected a CMHC located in rural Indiana to mental health providers in California. This addresses the barrier for recruitment issues, and high cost of available options such as locum tenens.

Sustainability

On-going Services and Activities:

Community mental health centers (CMHCs) and primary care clinics that contract for tele-mental health services have been billing for those services from the beginning of the project. A key focus throughout the project has been empowering partner sites to manage their own tele-mental health services and develop effective ways to pay for the services using available clinical reimbursement methods. Through contracts with other sites, each partner has virtual access to the mental health "markets" of the whole network, including both the aggregated demand and the resources of all peer members of the network, allowing each member to consider hiring and coverage decisions from the perspective of the entire network.

It is believed that this project will stimulate many new services and service delivery arrangements and will allow sites to consolidate resources in previously impossible ways as it continues to develop. One example is the need for extended-hours coverage in crisis or intake centers located at most CMHCs. Such services may develop in one or a few physical locations but be available at all sites

across the networks. Another example is the dire need at rural hospital emergency departments for crisis mental health evaluations. These services have begun to be developed, but further development is needed, especially in the area of sustainability of emergency mental health evaluation services.

Medicare and Medicaid, which make up a significant part of the payer mix for most rural clinics, both currently pay for telemedicine services at rates equal to reimbursement provided for in-person services. Anthem Blue Cross/Blue Shield, the largest commercial payer in Indiana, has also recently signaled its intention to cover telemedicine services for its safety net managed Medicaid members. There is ample precedent within the Blue Cross/Blue Shield organization for providing such coverage.

Other sources of significant funding are available to support the ongoing need for safety net clinical services. Federally Qualified Health Centers, Rural Health Clinics, Critical Access Hospitals, and community mental health centers all have access to various publicly funded programs that support their vital clinical activities, some following a cost-based reimbursement or encounter rate model. Contracts for services provided over the peer-to-peer telemedicine network will count as qualified service costs under these programs, further enhancing clinics' abilities to support these services and sustain the peer-to-peer telemedicine network.

Sustained Impact:

The long term impact on Indiana's rural communities is significant and diverse. Our project has brought increased mental health providers into underserved areas and increased the efficiency of providers already working in these areas. Based on the impact of proper mental health care, we can extrapolate that by making mental health care more available, we will have a positive impact. In one example the average wait time to see mental health clinicians for medication management went from 77 days to 34 days, driven primarily by even shorter wait times for telemedicine services. The provider efficiency was increased due to better process flow, more flexible clinic scheduling, and eliminated clinician travel time. Also, rural providers were able to recruit new clinicians to provide services to their clients, as the geographical restrictions they formerly faced were not a barrier in recruiting providers to work via telemedicine.

Implications for Other Communities

We have already discovered how these program outcomes benefit other communities and providers of mental health services. Through this grant program, we have provided assistance in incorporating several different business models, technology solutions and process improvements related to providing tele-mental health services. From our experiences, and based on each entity's unique location, population, needs, limitations, opportunities, etc., we can provide advice and successful project for most tele-mental health service options. For example rural health clinics, critical access hospitals, federally qualified health centers, substance abuse programs, community mental health centers, contracting, credentialing, sharing resources, recruiting and hiring/contracting out-of-state providers. With our depth and breadth of experience, we believe our models can be replicated or provide a foundation for replication in almost any community. There are obvious limitations due to different Medicaid regulations, and in reality each individual entity usually has its own unique circumstances. With our diverse set of successful projects, solutions can often be piecemealed from other successful implementations to create a newly successful project.

INDIANA

Vermillion-Parke Community Health Center

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH16278 |
| Grantee Organization | Vermillion-Parke Community Health Center |
| Organization Type | FQHC |
| Address | 777 S Main Suite 100, Clinton, IN 47842 |
| Grantee organization website | N/A |
| Primary Contact Information | Elizabeth Morgan Burrows Chief Executive Officer Phone number: 765-828-1003 Fax number: 765-828-1030 emorgan@vpchc.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,784 May 2010 to April 2011: \$124,062 May 2011 to April 2012: \$99,178 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|---|--|
| Lugar Center for Rural Health Hamilton Center, Inc. | Terre Haute, Vigo Count, IN Terre Haute, Vigo County, IN | Not for profit Community Mental Health Center |

Community Characteristics

Area:

The coverage area for the Outreach grant is a two county area in West Central Indiana: Parke and Vermillion County.

Community description:

The target area for this proposed project includes all of the Vermillion-Parke Community Health Center's (VPCHC) service area. VPCHC is a Federally Qualified Health Center (FQHC) located in Vermillion County in west-central Indiana. VPCHC's service area includes all of Vermillion County as well as all of neighboring Parke County.

VPCHC is physically located in Clinton, Indiana, a town of 5,126, situated in the southeast portion of Vermillion County. Clinton is the largest town in Vermillion County and residents in rural and surrounding communities come to Clinton for health care services, shopping, dining out, and recreational activities. Residents often must travel approximately 22 miles from northern Vermillion County—from the town of Cayuga—for these services. Cayuga is a town of 1,102 people and has the Cayuga Rural Health Clinic. This clinic currently provides only basic access to primary health care services. A part of this project included expanding access to services both at VPCHC as well as at the Cayuga Rural Health Clinic.

The largest town in Parke County is Rockville, population 2,751, located in the center of the county and approximately 12 miles from Clinton. There is a highway connecting the two communities and many residents in Rockville and the surrounding rural Parke County area commute to Clinton for health care because there is no hospital and limited health care services in Parke County. Of these two population centers Clinton has 1,574 residents under 200% FPL or 63.8% and Rockville has 893 residents living under 200 % FPL, or 36.2%. All of this sub-population is included in the target population for this project.

Need:

Vermillion County reported 133 abuse and neglect cases in 2003, with 38% of the abuse cases substantiated and 29% of the neglect reports substantiated, for an overall rate of 11.3 per 1,000. Parke County reported 244 abuse and neglect cases, for an overall rate of 13.9. Parke County is federally designated as a geographic HPSA and a partial-county geographic MUA.

Barriers in these counties include many of those that increase the risk for child abuse and neglect among families. These include poverty, unemployment, lack of education, lack of transportation systems, and lack of an adequate supply of health care providers.

Vermillion County, with a population of 16,366, is one of Indiana's poorest counties, with 30.10% of the population living below the 200% poverty level. Parke County, with a population of 17,317, has 30.26% of its population living below the 200% poverty level. Combined economic data for the service area show 10.4% of the population is living under 100% of FPL and 30.18% of the population is living below 200% FPL.¹ According to the Bureau of Labor Statistics, Indiana Department of Workforce Development, in March 2007, the unemployment rate for Vermillion County was 6.7%, compared with 5.0% for the state, making this the seventh highest ranked county in Indiana. Parke County's unemployment rate was 6.1%, making this the fifteenth highest ranked of 92 counties.

Factors that affect economic and community well-being include the educational attainment of the service area's residents. According to the Indiana Department of Education, US Census Bureau (2000) statistics, only 81.2% of adults 25 years and older residing in Vermillion County achieved a high school diploma or higher level of education. Comparatively, 80.5% of adults 25 years and older residing in Parke County achieved a high school diploma or higher level of education, ranking 51 out of Indiana's 92 counties. These counties both rank below the state rate of 82.1%

Transportation systems in most Indiana rural areas are non-existent and this is true for these two rural counties as well. There is no public transportation system in either Vermillion or Parke County. The Amish population still travel by horse and buggy. Many elderly must depend on family members or neighbors to provide transportation to the doctor and grocery store.

Statistics for both counties show 9.9% of the total population is uninsured,² and 24.8% of VPCHC's target population is uninsured. VPCHC's target population ratio to primary care provider in Vermillion County is 4,917:1.³

In addition to these barriers, health care providers are not always aware of the physical and behavioral signs of child abuse and neglect and must acquire knowledge and skills in the physical, psychological, and social assessment of child abuse and neglect, the assessment of child development and parenting skills, as well as the utilization of community resources.

Determining the need for this project involved many stakeholders, especially including those from within the indicated target population. During the annual strategic planning session conducted by the community board members of the Vermillion-Parke Community Health Center, a need for social service and behavioral health integration into the primary health care setting was identified based on the current child abuse and neglect rates in the area. These rates were linked with the health center's service area demographics which clearly identified factors such as parental poverty, unemployment, lack of parental education, young maternal age, substance abuse, and mental illness among the target population which posed specific risks conducive to child abuse and neglect.

A directive was given by the community board members to further research this issue to determine the extent of the problem. The Vermillion-Parke Community Health Center along with West Central Community Hospital (the nearby Critical Access Hospital) conducted a focused assessment among patients and families seeking care and treatment at those locations to determine what community resources and services were lacking in the area that would allow them to provide a stable and nurturing home environment for children. This focused assessment revealed that new mothers were offered referrals to Healthy Families Indiana (HFI) shortly after delivery, but were reluctant to enroll in the program due to focusing on the immediate needs of themselves and their infants, along with the stigma associated with needing help. The social service representative at both the Vermillion-Parke Community Health Center and West Central Community Hospital also identified an increase in the number of new mothers and families who did not have appropriate resources to effectively care for the infants in the home environment, as well as the presence of mental illness and substance abusing behaviors among family members.

The Healthy Families division of the local community health center also conducted a Family Stress Checklist among patients and families in the service area that had been referred to the HFI program. This stress checklist identified factors such as the parents' childhood history, substance abusing behaviors, mental health and criminal histories, family stressors, parent expectation of infant

¹ <http://factfinder.census.gov>

² <http://www.census.gov/cgi-bin/hhes/sahie/sahie.cgi>

³ Indiana State Department of Health, 2006.

milestones and behaviors and discipline techniques. From the Family Stress Checklist it was found that 75% of 107 families screened indicated a need for the Healthy Families program, but only 7 families actually enrolled in the program.

Program Services

Focus Areas

Access: Primary Care
Behavioral/Mental Health
Health Education and Promotion
Health Professions Recruitment and Retention/Workforce Development

Target Population

Infants
Pre-school children
School aged children - elementary
Adults
Pregnant Women
Caucasians
Uninsured
Underinsured

Description:

Prevention is the best hope for reducing child abuse and neglect and improving the lives of children and families. The WE CAN program is an innovative partnership among a federally qualified health center, the Lugar Center for Rural Health, a rural health clinic, and a community mental health center that provides a holistic, integrated, and innovative approach aimed at the reduction of child abuse and neglect rates in the area.

Through the WE CAN partnership program, we designed and implemented an expanded referral process to include primary health care settings as a part of the Hamilton Center's (the community mental health center partner) Healthy Families Initiative. In addition, we implemented expanded access to services supportive of the family, including through the use of telemedicine methodologies to offset transportation barriers. One of the primary goals of the project was to reduce risk factors among families at high risk for child abuse and neglect. The WE CAN initiative included the following strategies:

- VPCHC created an innovative model that integrated behavioral health care and primary health care processes among a community mental health center, a Rural Health Clinic and a Federally Qualified Health Center, resulting in increased access to mental health care services, particularly to services that reduce the risk of child abuse and neglect within the targeted service area.
- VPCHC and Hamilton Center worked to incorporate the services of a family resource specialist with Healthy Families Indiana (HFI) from the partnering community mental health center and the services of a licensed clinical social worker from the lead agency at the Cayuga Rural Health Clinic and at the Vermillion-Parke Community Health Center (VPCHC). Clinical behavioral health services were integrated into the primary care setting.
- The Lugar Center for Rural Health and VPCHC incorporated telehealth technology to increase integration resulting in increased access to psychosocial services and education.
- VPCHC worked to incorporate student clinical experiences into this integrated behavioral health delivery system to increase health professions students' awareness of mental health issues. The initiative provided opportunities for students to experience first-hand this integrated model of primary and mental health care services in a rural community, particularly to services designed to strengthen parent/child relationships and the reduction of risk factors associated with child abuse and neglect.

Role of Consortium Partners:

The role of each consortium partner was integral to the success of this grant. The Lugar Center for Rural Health led the program evaluation and worked diligently throughout the grant period to ensure that partners were informed and updated on the status of the project. They reported outcome measures at each meeting, as well as kept the group updated on any technical difficulties regarding telemedicine equipment.

The Vermillion Parke Community Health Center (VPCHC), as the lead grantee, provided learning experiences through clinical rotations in their center to students of various disciplines to provide them the experience in rural medicine, which increased knowledge of the needs of rural citizens who often did not have access to a health care home. VPCHC also housed the behavioral health specialist in the Cayuga Clinic in west central Indiana, and provided supervisory assistance and training in the rural medical clinic setting. VPCHC also provided educational materials and teaching via medical staff on behavioral health issues.

Hamilton Center provided the behavioral health specialist in the rural clinic setting, as well as integrating the Healthy Families Indiana agency into the clinic, which provided a safety net for parents as well as resources and services for infants in their care.

Outcomes

Data was collected and documented monthly. A quarterly report was distributed to all consortium members. Modifications of process for tracking and collecting data within the electronic medical record system were required during the grant project for two reasons: 1) to better implement this within the providers' workflow and 2) to more accurately gather appropriate data. The need for modification was discovered when reports were ran for certain goals and the data was not consistent with actual operations. Therefore, there are certain quarters where there is a lack of data for particular goals; it was more appropriate to discard the inaccurate data than use it as a baseline. Below is a brief summary of outcomes in each area of measure for data from 09/01/09 thru 02/29/12.

- Health Professional Students
 - A total of 32 health professional students rotated at VPCHC during this project. Every student was given an educational packet that explained common mental health disorders in primary care and ways to reduce risk factors for child abuse and neglect.
 - Pre-test was completed by 93.75% of students and post-test was completed by 53.13%, or 17 out of 32, of the students. Of the students that did not complete the post-test, 3 have not yet completed the rotation and therefore, a post-test is not yet due.
 - There was demonstrated improvement in scores of post-test for 29%, or 5 out of 17 students. There was no change in scores of post-test for 41%, or 7 out of 17 students. There was a reduction in scores of post-test for 29%, or 5 out of 17 students.
 - There was an increase in the most recent three quarters (from 05/01/11 thru 01/31/12) for increasing the percentage of students rotating in the following disciplines: licensed practical nurse, registered nurse, qualified medical assistant and behavioral health.

- Prenatal Patients
 - At the end of November 2009, Union Hospital Clinton, the critical access hospital serving Vermillion and Parke counties, terminated its maternity services. This impacted the number of pregnant women that were seen at the Cayuga clinic, which in turn reduced the number of pregnant women being educated, screened and enrolled in Healthy Families Indiana at this site. The objectives centered on pregnant women did not change though the volume of women was significantly reduced as a result of this service line being eliminated at Union Hospital Clinton.
 - From 09/01/09 thru 07/31/11, 95% of patients, or 21 out of 22 patients, who presented during their prenatal period were given information about Healthy Families Indiana (HFI). There were 3 patients out of 22, 13.6% of patients were screened and enrolled with HFI. There were 3 additional patients screened but not enrolled into HFI. There were no documented patients present during the prenatal period from 08/01/11 thru 02/29/12.

- Mental Health
 - From 09/01/09 thru 02/29/12, there were 85 patients documented having presented with a newly diagnosed mental health disorder. Educational materials specific to mental health disorder were given to 57.6% of patients, or 49 out of 85 patients. Fifty-four percent (54%), or 46 out of 85 patients, were offered counseling upon diagnosis of new mental health disorder. There were 2 out of 89 patients, or 2%, completed 2 counseling sessions. There was an adjustment to tracking of newly diagnosed mental health patients within the EMR during the project period that along with provider compliance issues that impacted the outcomes as compared to goals for the above measures.

Challenges & Innovative Solutions

To date, there have not been any significant changes to the work plan, the consortium members, or the basic tenets of the WE CAN program. The only change has been the staff changes at Richard G. Lugar Center for Rural Health and the ownership change for the Cayuga clinic from Union Hospital, Inc. to the Vermillion Parke Community Health Center (FQHC).

Continued implementation of this project came with some challenges, both external and internal. External challenges that were anticipated included transportation barriers, lack of time for providers to travel among sites, the stigma associated with being enrolled in

a behavioral health program and funding for sustainability. The first challenge was the lack of public transportation systems in most Indiana rural areas. This is the case in our targeted service area of Vermillion and Parke counties and is particularly problematic for residents living at or below the poverty level who must often depend on family members or neighbors to provide transportation. This is one of the main reasons this program included a telehealth component. The second challenge involved the stigma associated with being enrolled in a behavioral health-related program. This can be especially challenging to overcome in small communities where anonymity can be nonexistent. Through this initiative, we delineated activities to address these barriers through education of our patients, providers, community, and future providers. Finally, funding was also a challenge in our community that is rural, high-poverty, and high-need, particularly with regard to primary and mental health care services. This challenge is addressed further in the Program Sustainability section.

An unexpected external challenge did arise during Year 2. At the end of November 2009, Union Hospital Clinton, the critical access hospital serving Vermillion and Parke counties, terminated its maternity services. This impacted the number of pregnant women that were being seen at the Cayuga clinic, which in turn reduced the number of pregnant women being educated, screened and enrolled in Healthy Families Indiana at this site. The objectives centered on pregnant women did not change though the volume of women was reduced as a result of this service line being eliminated at Union Hospital Clinton.

We were able to address challenges as they arose. Our methods for addressing such challenges included incorporation of ongoing project partner meetings to examine protocols, structures, baseline data, and comparison data being collected through the process and outcomes measures delineated in the work plan table as well as below in the evaluation section. This portion of the project was recognized by the partners as the ongoing "Check" aspect of the project as a part of the "Plan-Do-Check-Act" quality improvement process. These meetings, and this "Check" component, was in place to ensure issues were identified early and strategies developed in partnership to overcome barriers encountered and ensure both short- and long-term project success. In addition, there was both an executive team for this project as well as a staffing team. The executive team included the project director from the VPCHC, Elizabeth Morgan Burrows, as well as the two project partner leads, Dr. Robe Fazekas from Hamilton Center and Brooke Lockhart from Lugar Center. This executive committee was responsible for ensuring smooth development, implementation and ongoing success for this project from all angles, including public relations, internal staff relations, programming, financial, and overall reporting.

Sustainability

On-going Services and Activities:

We used a multipronged approach to ensure sustainability. This included having the FOHC designation which allowed for cost-based reimbursement. We incorporated programs and have selected types of providers in place to ensure we are able to bill for at least a portion of the components of this overall initiative. This should continue to bring in program income for long term sustainability. We continually work with our partners and communities to seek outside funding, such as for donations of needed supplies (e.g., diapers, etc.). The leadership from each of the partner entities remains committed to ensuring this project's success. All services initiated by this project will continue to be provided, including student education and referral to HFI. Behavioral health services in Cayuga will continue for Parke County as VPCHC has placed a psychologist in the clinic to continue to provide mental health treatment once the Hamilton Center's therapist has terminated services.

Sustained Impact:

The long term effect on the community in the target population can be best emphasized in the working relationship between consortium partners through a sharing of resources and professional expertise. The piece of the project that made the most significant impact was the placement of a behavioral health provider into the rural community health center. Fortunately, the FOHC was able to secure a licensed psychologist to fill the need of that community once the grant period ended. Another significant impact through this grant was the educational piece provided through the rotation of health professions students through the FOHC (e.g., nursing, medical students, psychology). This aspect of the grant was an excellent learning experience for the healthcare professionals entering their respective fields, and could potentially lure more of these individuals into rural practice where the need is especially great

Implications for Other Communities

We have established a successful collaboration model which included education regarding variables that can contribute to the maltreatment of children for health professions students as well as educational resources for patients receiving collaborated services. Establishing this same model in other underserved and rural areas could facilitate a more comprehensive treatment model as well as provide awareness of factors that lead to childhood abuse and neglect.

IOWA

Hancock County Memorial Hospital

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12698 |
| Grantee Organization | Hancock County Memorial Hospital |
| Organization Type | Hospital |
| Address | 532 1 st Street NW, Britt, IA 50423-1227 |
| Grantee organization website | www.trustHCHS.com |
| Primary Contact Information | Laura Zwiefel CNO/Director of Clinical Services Phone number: 641-843-5000 Fax number: 641-843-5100 zwiefell@mercyhealth.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,993 May 2010 to April 2011: \$124,978 May 2011 to April 2012: \$99,990 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|----------------------------|---------------------|
| Mercy Medical Center—New Hampton | New Hampton/Chickasaw/Iowa | Hospital |
| Ellsworth Municipal Hospital | Ellsworth/Hamilton/Iowa | Hospital |
| Mitchell County Regional Health Center | Osage/Mitchell/Iowa | Hospital |
| Franklin General Hospital | Hampton/Franklin/Iowa | Hospital |
| Palo Alto County Health System | Emmetsburg/Palo Alto/Iowa | Hospital |
| Kossuth Regional Health Center | Algona/Kossuth/Iowa | Hospital |
| Regional Health Services of Howard County | Cresco/Howard/Iowa | Hospital |

Community Characteristics

Area:

The project served the following eight counties in North Central Iowa: Hancock, Chickasaw, Hamilton, Mitchell, Franklin, Palo Alto, Kossuth, and Howard.

Community description:

Our project covers an eight county region in north central Iowa that is predominantly agricultural. Recent statewide statistics (which are not available by county) indicate that the numbers of people in poverty or number of people who lack insurance are growing across Iowa. Between 2003 and 2005, the percentage of Iowans under age 65 living in poverty almost doubled from 7.6 percent to 13.4 percent and the percentage of the total population that lacked health insurance increased from 9.5 percent to 11.3 percent (*March 2005 U.S. Census Current Population Survey*). North central Iowa is still a very racially homogeneous area with 96.9% of the total population classified as non-Hispanic white.

Most area businesses employ less than 15 workers and wages are generally low with the median annual wage approximately \$34,000. The new jobs that have been created in the state since 2000 pay less than the jobs that are being lost and less frequently provide health insurance. Between 2000 and 2005, Iowa saw job-based insurance coverage disappear (and the Medicaid population grow) at rates near the worst in the nation (U.S. Census Bureau, 2000 – 2005 & Iowa Policy Project report, "The State of Working Iowa," September 2006.) Approximately twenty-five percent of low income, non-elderly Iowa adults have no health insurance and far more are underinsured because they are self-employed, work for small businesses, or have seasonal work.

Need:

North Iowa has an exceptionally high and rapidly growing rate of diabetes. Synthetic estimates of Iowa BRFSS indicate approximately 8.3% of north Iowa adults have been diagnosed with diabetes compared to 6.8% across the state and the U.S. median of 7.3%. BRFSS estimates also indicate over 62% of all adults in these eight counties are overweight or obese as are 65% of Hispanic adults. The Iowa Department of Public Health estimates at least another 3.2% adults in our service area have undiagnosed Type 2 diabetes and up to 40% of Iowa adults are at high-risk for developing Type 2 diabetes or already have pre-diabetes – which means their body can only partially control blood glucose.

Although concrete figures are not available regarding Type 2 diabetes or pre-diabetes rates among children and adolescents in north central Iowa or across the state, primary care providers are reporting increased incidents and Iowa public health leaders estimate that up to 40% of all Iowa children are at high-risk of being diagnosed with diabetes over their life time due to obesity and unhealthy lifestyles. National statistics indicate that Latino adolescents are also more likely to have pre-diabetes and to develop Type 2 diabetes than Anglo youths.

The Iowa Department of Public Health links the skyrocketing prevalence of diabetes in our project service area and across the state to unhealthy lifestyles associated with very high and growing high obesity rates. The 2005 BFRSS revealed that 62.9% of all Iowans were obese or overweight as were 65% of Hispanic adults. In 2007, the CDC ranked the state of Iowa 16th in the nation in obesity rates with 26.9% of the state population classified as obese.

Iowa BRFSS data indicates that no racial/ethnic group of Iowa adults is following the recommended guidelines for exercise or fruit and vegetable consumption. But Hispanics have even poorer rates for these two key risk factors. In 2005, 76% of white/non-Hispanic Iowans reported some leisure physical exercise in the last month – although only 46.6% reported getting the recommended levels of regular moderate or vigorous physical activity each week. Only 63.4% of Hispanics reported any leisure physical exercise and 39.7% reported the recommended levels. Only 14.1% of Hispanics said they ate 5 or more portions of fruits and vegetables per day compared to 19.5% of white non-Hispanics.

Unfortunately many of Iowa’s children have adopted the same unhealthy lifestyles as their parents, and obesity is increasing at even higher rates among Iowa children and youth than among the state’s adults. The 2005 Iowa Child and Family Household Health Survey found almost 30% of children and adolescents in Iowa are obese or significantly overweight. Most surveyed parents also said their children were not following public health recommended consumption of fruits and vegetables or physical exercise. On average, parents reported their children ate two to three serving of fruits and vegetables per day and these numbers declined as the children grew older. Parents also indicated only one-third of their children did moderate activities for at least 30 minutes every day. A separate 2005 survey conducted with Iowa adolescents (The Iowa Youth Risk Behavior Survey) found females reported far less physical activity than males and average physical activity rates declined between grades 9 and 12.

The Iowa Department of Public Health Bureau of Health Statistics determined that in 2003, total charges for inpatient hospitalizations in Iowa with diabetes as a primary diagnosis were \$44,426,567, total charges for inpatient hospitalizations with diabetes as an additional diagnosis were \$808,022,143, and total charges for outpatient hospital visits with diabetes as a primary diagnosis was \$6,949,057 while outpatient visits with diabetes as an additional diagnosis were \$135,556,303. These figures do not include the enormous additional economic and quality of life costs associated with disability, work loss, and premature death. However the good news is that numerous research studies have shown that Type 2 diabetes is largely preventable through relatively small lifestyle changes and complications of diabetes can be minimized when diabetes is diagnosed early and patients are taught to self- manage their blood glucose levels, control their weight, take medications appropriately, and follow healthier life habits.

Program Services

Focus Areas

Chronic Disease Management:
Health Education and Promotion

Target Population

School aged children - elementary
School aged children - teens
Adults
Elderly
Caucasians
Uninsured
Underinsured
Hispanics

Description:

Screening for people at high risk for pre-diabetes was done utilizing a tool developed by the diabetes educators using other validated screening tools as a template. Diabetic educators (nurses and dietitians) and their designees were present at a variety of venues and access points including work sites, schools, grocery stores, surveys, county fairs, public access channels, radio, email, and health fairs. All people present at these venues were encouraged to fill out a screening tool. Diabetic educators provided information to those filling out the tool as needed to help them understand any questions they had. The developed tool had a scoring system and those individuals that screened as being at high risk on the screening tool were contacted by telephone after the event. In addition, some referrals were made by health clinics concerned about high risk patients and their families. A diabetic educator then invited high risk individuals and their families to participate in a series of classes designed to provide pertinent pre-diabetes information and promote healthy lifestyles by enhancing exercise, nutrition, and stress reduction. The classes were held at the eight hospitals that were members of the consortium. Each class was two hours in length and four classes were held. Each site conducted five total class sessions totaling 160 sessions over the course of three years. The classes were attended by families of all ages and ranged from a family of one to a family of five. A total of two class sessions (eight classes total) were focused on the Hispanic population concentrated in one of the eight counties participating in the grant.

The curriculum for the classes was developed by the diabetes educators during and following steering committee meetings. One of the educators functioned as the curriculum coordinator and developer. The curriculum used at the eight sites was identical in content. Class participants were asked to fill out evaluations of the curriculum as well as take pre- and post- tests/surveys to evaluate learning and confidence as well as changes in lifestyle. Participants also gave feedback as to curriculum and the feedback was used to revise the curriculum. Some sites beta tested new curriculum components prior to adopting a component into the general curriculum. The classes were led by one or two diabetic educators comprised of registered nurses and dietitians. Some sites used activity assistants to help with activities for younger class participants as needed.

Role of Consortium Partners:

The Consortium Partners met several times a year at a central site and planned the grant activities. The partners collaborated and decided on a universal written screening tool for pre-diabetes. A certified diabetes educator at one of the partner sites functioned as the curriculum coordinator. Each site gave input into the curriculum which was changed several times throughout the course of the grant period based on instructor and class participant feedback. The sites collaborated on sustainability activities as well. Each site was responsible for their own screenings, recruitment of class members, teaching of classes, paperwork, and documentation. The information was given to our project evaluator for analysis at the end of each year.

Outcomes

Indirect encounters (people that had the ability to be screened) in the first two years totaled 101,140. Out of that number, 1616 people consented to fill out the screening tool. In the first two years, 361 people attended the pre-diabetes classes. Year two participants rated their health status as follows: Changes in ratings from pre to post class ratings of health status by participants are as follows:

- Excellent 8.6 % to 12.6%; Very good 32.8% to 43%; Good 45.4% to 38.5%; Fair 13.2% to 5.9%; and 0% Poor both years.
- Self- efficacy rating in confidence rose from 6.7% to 7.6%.
- Average BMI dropped 1.3%; and body fat composition decreased 1.20%.
- Return on investment was calculated at \$452,529.

Challenges & Innovative Solutions

One of the challenges throughout this grant cycle was the recruitment of high risk families. Parents with children 18 years of age and younger are very difficult to recruit. They often feel too busy to take a brief written survey much less devote eight plus hours to classes. Even if they were recruited to attend the classes, due to busy activity schedules it was difficult to get families to attend all or most of the sessions. We used a strategy of doing small class giveaways to encourage attendance. This was somewhat effective in encouraging attendance. The better way we encouraged attendance was to cover information the participants did not want to miss and working with participants on the most convenient class times.

The online data collection forms were frustrating. The first year, we did not know what we needed to collect but by year two, we decided on information to collect. However, the data submission and collection website worked very inconsistently, sometimes allowing for electronic submission and sometimes not. Continuous improvements were made and by year 3, the site was working much more consistently.

Keeping instructors accountable to the curriculum that was decided on was also difficult. We did go back to the group and discuss any deviations noted. The group did agree to use the developed curriculum and a few sites were allowed to beta test new segments. The overall curriculum was revised based on participant and instructor feedback.

Sustainability

On-going Services and Activities:

We have created computer learning modules from the curriculum that was developed to use in the future to provide some of the education for pre-diabetes patients. To conserve time and resources, pre-diabetic patients and families can see the diabetic educator briefly in the beginning and end of the education cycle and view the rest of the information on the computer either at the hospital or emailed to them in their own home. Each of our hospital sites has budgeted time and resources to provide ongoing pre-diabetic education to patients and their families. Diabetic educators and health coaches will share in the management of pre-diabetic patients in the future. Drug companies and grocery stores may be used to provide some incentives or educational supplies in the future.

Sustained Impact:

The long-term effect of this project is that the patients and families educated may delay or prevent their own development of diabetes and will tell others about the education they have received. Pre-diabetic patients who are newly referred in the future will have the advantage of a proven curriculum to utilize to provide them with cost effective education.

Implications for Other Communities

Other communities could utilize our curriculum and screening tool to identify and work with pre-diabetics patients and families. Working with a consortium of educators is beneficial in many ways. The group can share best practice ideas and strategies to identify pre-diabetics, effective venues to target for screenings, an effective curriculum to use to educate, and various evaluation tools to identify success and improvement strategies.

KENTUCKY

Ephraim McDowell Health Care Foundation, Inc.

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12773 |
| Grantee Organization | Ephraim McDowell Health Care Foundation, Inc. |
| Organization Type | Non-profit organization |
| Address | 217 S. Third St, Danville, KY 40422 |
| Grantee organization website | N/A |
| Primary Contact Information | Anita Yatso Program Director Phone number: 859-239-2364 Fax number: 859-239-6760 ayatso@emhealth.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$173,517 May 2011 to April 2012: \$178,105 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|------------------------------------|------------------------|
| Boyle County Health Department | Danville, Boyle County, KY | Health Department |
| Casey County Health Department | Liberty, Casey County, KY | Health Department |
| Garrard County Health Department | Lancaster, Garrard County, KY | Health Department |
| Lincoln County Health Department | Stanford, Lincoln County, KY | Health Department |
| Mercer County Health Department | Harrodsburg, Mercer County, KY | Health Department |
| Washington County Health Department | Springfield, Washington County, KY | Health Department |
| Brenda Cowan Coalition of Kentucky, Inc. | Lexington, Fayette County, KY | Coalition |
| Ephraim McDowell Health Community Service Department | Danville, Boyle County, KY | Hospital Health Center |

Community Characteristics

Area:

List the communities/counties that the Outreach project served.

The coverage area for the Outreach grant is a six-county area in Central Kentucky, Boyle; Casey; Garrard; Lincoln; Mercer and Washington.

Community description:

Boyle, Casey, Garrard, Lincoln Mercer and Washington counties are Health Professional Shortage Areas and Casey, Garrard, Lincoln and Washington counties are Medically Underserved Areas (MUAs). African-Americans make up 4.5% of service area populations and Hispanics make up 3.25% of the population. In these sub-populations, high rates of obesity, other chronic illnesses, breast and cervical cancers are higher and exceed rates for other racial groups in the population service area.

Need:

Breast and cervical cancers are prevalent in Kentucky, and this project targeted six counties in which residents have significant difficulty obtaining screenings due to the lack of health insurance, the absence of financial assistance for screenings, and the lack of awareness about available resources. The project also targeted women with low health literacy, many of whom may be unaware of

risks and the need for routine screenings. In short, Woman to Woman targets low-income, uninsured or under-insured rural women who lack healthcare access in a variety of ways.

Program Services

Focus Areas

Maternal/Women's Health

Target Population

Adults (Females)

Elderly (Females)

Uninsured

Underinsured

Description:

The grant activities were coordinated and implemented through Ephraim McDowell Regional Medical Center's Community Service Department, with staffing support and clinical care provided by the consortium partners. In conjunction with the six area health departments, the Outreach grant supported the implementation of the following activities:

1. Our primary focus was to provide mammograms and pap smears to the rural, low income women, some of which are Central Appalachian woman residing in "distressed counties", having chronic poverty, unemployment, low educational attainment, and low per capita income. To date we have provided 152 mammograms and pap smears. Given the provision of community health screenings for blood pressure, cholesterol, glucose, height, weight, bone density scan, derma-view, lung capacity, smoking cessation, nutrition and one-on-one counseling provided by a licensed nurse, allowed us to serve those that we would not have reached otherwise. Health screenings were organized through collaboration between the medical center's community service department and the health departments. A total of 42 screening events were held over the course of three years, serving 1296 women in the six area county health departments.
2. APRN's counseled the clients to follow up diagnostic and treatment services for those women who received positive finding. Registered nurses counseled the clients relating to modifications of health risk behaviors, from the screenings. The grant funds were used to pay participating health departments and staffing to conduct the screenings. Nine to 15 screening techs and registered nurses participated in the program.

Role of Consortium Partners:

The grant program had a very active consortium. This three year program provided an important opportunity for the consortium partners to develop stronger working relationships and to plan and implement multiple activities. Each consortium partner played an active role in the program:

Brenda Cowan Coalition Inc. Roles and Responsibilities:

- (1) Under contract with Ephraim McDowell Health Care Foundation, Inc., to provide a .50 FTE Project Coordinator assigned to the Rural Health Care Services Outreach Grant project.
- (2) With this staff member and a .50FTE Community Outreach Specialist to be employed by Ephraim McDowell Health Care Foundation and assigned to this project, to provide community awareness, outreach activities, planning of screening fairs and other activities as described in the funding proposal, including media and other information dissemination, brochures, posters, mailings, speakers, etc.
- (3) To participate in data collection, monitoring and reporting as needed for evaluation, continuous quality improvement, reporting, dissemination and other needs as requested by Ephraim McDowell Health Care Foundation, Inc.
- (4) To provide expertise, training and experience in implementing the replication of the Brenda Cowan Coalition's Sister-to-Sister program in the 6-county target area.

Boyle County Health Department, Casey County Health Department, Garrard County Health Department, Lincoln County Health Department, Mercer County Health Department, and Washington County Health Department Roles and Responsibilities:

- (1) Under contract with Ephraim McDowell Health Care Foundation, to provide community awareness, outreach activities,

screening fairs and other activities, including media and other information dissemination, brochures, posters, mailings, speakers, etc.

- (2) To work with Ephraim McDowell Health Care Foundation and other collaborators as needed to plan and conduct the annual Health Fair in their respective county.
- (3) Provide and participate in cross-training to familiarize staff with each program and help staff to most effectively cooperate and coordinate efforts to serve the target population.
- (4) Participate fully in the planning phase and implementation phase activities, including evaluation, continuous quality control and project sustainability efforts.

Outcomes

For each health screening fair we utilized both a participating evaluation form as well as a health screening informational form. Through the use of these forms we were able to capture important participant information regarding demographics, personal health, insurance coverage, and the frequency of clinical exams. The evaluation form, recording motivation levels and screening participation, has enabled us to see our strengths and opportunities so far, and will help us improve the program for future events.

By the end of the grant period, we had screened 1,296 women, provided 152 mammograms and pap smears. We also have provided screenings, consisting of blood pressure, cholesterol, glucose, height weight, bone density scan and Derma-view, which ultimately were the main motivation for attendance. Colorectal cancer or fecal blood at-home screening kits were made available to each participant in compliance with CDC guidelines with the results returned to the participant and health department for appropriate follow up. One-on-one counseling to explain screening results and to provide additional educational information was given by either a RN or ARNP.

The six county health departments are a valuable resource for project dissemination. Two of these are associated with larger Health Districts: Washington County, which is part of the seven-county Lincoln Trail District; and Casey County, which is part of the 10-county Lake Cumberland Health District. It is anticipated that both districts will want to replicate the project, expanding it to 17 additional counties.

Challenges & Innovative Solutions

The challenge has been reaching the targeted population. We had a huge decline in participation in years 2010 and 2011. Another challenge faced was the loss of the mobile mammography unit, due to a vehicular accident that put this unit out of service.

In 2012 we revamped our advertising campaign, created a targeted direct mailer, sent flyers home with school students, placed radio interview spots as well as newspaper media advertisements, and have gone out into the counties to local establishments to inform potential candidates of the service that will be provided. We also have reached out to the county government, state offices and local Chamber of Commerce's to post on their websites, newsletters and other media correspondences. With our 2012 spring screenings of 4 counties we have seen vast improvements in our numbers. On an average we had a 248 percent increase of participants from our October 2011 fall health fair and an overall increase of 43.5 percent from October 2009 until March 2012. Two counties had remarkable increases, one being Washington county with an increase of 280 percent and an overall increase of 46 percent. Casey County had a 638 percent increase and an overall increase of 64 percent.

Sustainability

On-going Services and Activities:

The goal of the program was to cohesively work with each county health department in Boyle, Casey, Garrard, Lincoln, Mercer and Washington Counties. We have worked to filter all of our participants through the partnering health departments to create a lasting impact for the patient's future healthcare. During this process, we have tried to impress upon the participants that good, reliable healthcare can be obtained from the local county health departments by hosting each health fair at the health departments, so the

patient is familiar with the location and services offered. We hope that each health department will be seen as the gateway to reliable annual exams as well as mammogram services.

Each Consortium member remains very committed to the Woman-to-Woman program and has seen the success of the program thus far after only six months. Sustainability planning is a priority which is why the Consortium meets regularly to map out long-term goals. Since each health department currently operates on a sliding fee scale for gynecological exams, we believe the mammography screenings will naturally follow the same guidelines by the end of the project in each of the six counties through new or maintained contracts with Ephraim McDowell Health's digital mammography services in Stanford and Danville, Kentucky. The sliding fee scale ensures financial commitment from the health departments. Also, by recruiting and training volunteer Community Health Advisors the program will have a solid foundation of individuals who believe in the program and who will strive to spread the program's mission, ensuring referrals to the health departments.

Sustained Impact:

The health fairs have been very effective as a means of outreach and education to our targeted population. We anticipated pre-screening women to schedule appointments for mammograms and gynecological exams prior to the days of the health fairs. However, we have found that pushing for attendance at the health fairs, drawing the women in for additional services and then counseling them on mammogram service has led to more women getting screened than only offering the mammogram screening on actual day of the health fair. We have seen an increase in mammogram and pap smear screenings enrolled at each of the six locations. Many of the health departments have had an increase in other services as a result from the Woman to Woman health fairs. This type of increase is what we hoped would happen through the Woman to Woman program. We have been able to educate the community about health department services and help several individuals with their healthcare needs who might not have otherwise received treatment.

Implications for Other Communities

In rural regions, medical centers and health departments can collaborate effectively in screening low-income, uninsured and under-insured populations for early detection of many health concerns. If these screenings are offered in conjunction with "health fairs" or other types of "appealing" health events, rural populations are more likely to attend. Using "goody bags" is an effective means for distributing a combination of health-education literature and health-related giveaways, and these "goody bags" also help attract rural participants—particularly women—to such events.

Among low-income families, women frequently place a lower priority on taking care of their personal health needs, such as mammograms or gynecological exams, in deference to spending money on needs that their children or spouses/significant other may have. Programs like Woman to Woman help such women meet their own health needs without sacrificing the needs of their families.

Overall, Ephraim McDowell Health's digital mammography program has experienced substantial growth during the years that Woman to Woman has functioned in EMH's primary service area. This growth is due not only to referrals coming from the Woman to Woman consortium partners but also from an expanded awareness of women's health issues, boosted by the efforts of Woman to Woman.

KENTUCKY

Lotts Creek Community School

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12680 |
| Grantee Organization | Lotts Creek Community School |
| Organization Type | Non-profit organization |
| Address | 5837 Lotts Creek Road, Hazard, KY 41701 |
| Grantee organization website | www.lottscreek.org |
| Primary Contact Information | Alice Whitaker Program Director Phone number: 606-785-4461 Fax number: 606 785 4850 alice.whitaker@yahoo.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$120,020 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|---------------------------|--|
| UK North Fork Valley Health Clinic | Hazard, Perry County KY | Health Department |
| Knott County Extension Agency | Hindman, Knott County, KY | Government Agency |
| The Alliance for a Healthier Generation | Portland, Oregon | Non-profit organization (National Organization) |
| Lotts Creek 21 st Century Program | Hazard, Perry County, KY | After School Program |
| Knott County Board of Education | Hindman, Knott County, KY | School |

Community Characteristics

Area:

The coverage area for the Outreach grant is a two-county area in Southeast Kentucky: Perry and Knott Counties.

Community description:

Located in a jig-sawed, mountain community, the population of the target area is 47,289 of which Knott County has a land area of 352 miles with 50 people per square mile. Perry County is similar with 342 miles with 85 people per square mile. Lotts Creek Community School is located near the border of the two counties and is 30 miles from the closest consolidated school system. According to the U.S. Census Bureau Quick Facts the demographics of the two counties are similar with Caucasians accounting for 97-98% of the population and African Americans accounting for 0.7% and 1.8% respectively (Knott/Perry). The Hispanic population is only 0.6-0.7% with all other races including American Indian, Alaska Native, Asian, Native Hawaiian, Other Pacific Islander, and multi-racial persons all less than 1% each. The percentage of females and males is quite similar with a ratio of approximately 50%. Children under 18 years old account for a large percentage of the population with 21.3% in Knott County and 23.5% in Perry County. The percentage of persons 65 years and older is 12% for Knott, climbing to 16% for Perry, which is above the state at 11% and 13% for the nation.

Of note, many students live in single parent families and in families where grandparents are the responsible custodians of the children. In Knott County, 86.4% of the families with children under age 16 are single parent families (female heads of households) and in Perry County 63.5% are single parent families. In the two counties, 932 grandparents live in a household with one or more of their own grandchildren under 18 years of age. Of these 932 families, 502 grandparents or 54% have sole responsibility for their grandchildren.

The Rural Health Outreach Program expanded the delivery of new health care services through: 1) a school-based health program; 2) school-based oral health care; 3) in-home health and nutrition education; 4) monthly and in-depth, hands-on nutrition classes; 5) referrals to primary, oral and mental health services as necessary; 6) an annual health fair; and 7) establishment of a fitness center for use by the school and community.

Need:

Kentucky is above the national average for diabetes of which both Knott and Perry Counties top out at 12% versus 9% for the state and 7% in the nation. Cardiovascular disease is the leading cause of death in Kentucky. There are 113 counties with rates above the national average with Knott County at 455 deaths per 100,000 and Perry at 511 per 100,000 compared to 409 for the state and 326 for the nation. Kentucky's cancer death rate is also above the national average with 112 counties having rates above the national average – of which Knott is slightly below the state (232 vs. 237) although above the nation (202). Perry County exceeds all places at 252.

Kentucky's mortality rate for all counties exceeds the national rate with Knott County experiencing 1,022 vs. 987 for the state and 842 for the nation (+180). Perry County is even greater at 1,255 (+413 over nation). Premature death rate is a good indicator of overall health status and a high rate reflects a decrease in work productivity and economic development. The premature death rate is 7,968 for Knott County jumping to 13,137 for Perry compared to Kentucky at 9,111 and the nation at 7,562.

The project served Knott and Perry Counties in eastern Kentucky which are part of the United States's Central Appalachian region. The target area is characterized by high levels of poverty, low educational attainment and many health disparities. The project annually targeted 325 students in grades K-12 through the Lotts Creek Community School-based health program, 730 students through oral health services, and 176 community participants through health education and nutrition education services.

Program Services

Focus Areas

Health Education and Promotion
 Oral Health
 School Health

Target Population

School aged children - elementary
 School aged children - teens
 Adults
 Elderly
 Caucasians
 African Americans
 Latinos
 Uninsured
 Underinsured

Description:

The grant activities were coordinated and implemented through the Lotts Creek Community School Wellness Program and its partners.

1. The provision of school and community health screenings for diabetes and heart disease indicators (glucose testing, blood pressure, cholesterol, etc.) were done for faculty/ staff screening days, as well as Wellness Fairs at the school.
2. Referrals to UK North Fork Valley Community Health Center for sliding scale medical, dental, and vision care. Over 500 of these referrals were done over the 3 year period.
3. Starting programs such as Zumba and karate for the community and students to take advantage of using the school grounds as a safe environment to host the events.
4. Hosting events such as Wellness Fairs, 5k run/walks, cooking classes, Wellness Series, the mobile dental unit, and career days to get the students and community members' better access to care and increasing awareness to a healthier lifestyle and health care choices.
5. Providing equipment and curriculum for the school to increase health education and physical activity.
6. Joint use of the fitness center to the school and community free of charge, as well as having a personal trainer on site 3 days per week to discuss health and nutrition with patrons.

Role of Consortium Partners:

- Lotts Creek Community School was the host partner and provided the space for offices and the fitness center, as well as the joint-use agreement for the community. In addition, Lotts Creek coordinated the Medical Assistance Program (MAP), which helped provide referrals, and the 21st Century Program, which exposed students to the Wellness Program.
- The Knott County Board of Education allowed the Wellness Program into the school day, and the site- based counsel was very helpful in allowing the Wellness Program to suggest and make policy changes to what the students were eating and how much physical education time they received. They also allowed the Wellness Program to pay for a second physical education teacher to increase the activity of our kids.
- The Knott County Extension Agency provided in class curriculum work with the students on various topics from healthy eating to canning foods. They also provided the healthy cooking classes to our community, as well as at the monthly food bank giveaways.
- The Alliance for a Healthier Generation provided technical support for improving the food and physical education policies of our school, after school, and community. They also provided the framework for our school to become the first K-12 health bronze school in the United States, and the first Silver medal school in Kentucky.

Outcomes

We collected evaluation data in one main area- focus groups.

Focus Groups:

The three (3) focus groups displayed consistent feedback both in terms of observations and personal affect. The tone was positive and comments tended to be highly complementary of the program and program leadership and staff. Participants freely shared their experiences in the program and proudly bragged on their personal achievements (weight loss, improved conditioning, health nutrition regimens, etc.). Conversely, some useful and timely suggestions were made regarding desirable elements that could be added to the program. It was clear that these participants were vested in the program and were reaping the benefits from their active participation.

We also had over 700 people sign waivers to use the fitness center, with an average use of 13 per day. We also average 6 walkers on the grounds daily, including weekends. We sponsor 4 dedicated free and reduced lunch students in Karate, with an overall average class size of 25 per week.

Challenges & Innovative Solutions

One of the biggest challenges in an Appalachian Community is getting people to participate in events such as Wellness Fairs, 5k runs, and cooking classes. People in our community are very much "home bodies" and even when using door prizes and food to motivate participation, our numbers were often low. We oftentimes had to combine our event with another- usually a school event. If we have a Wellness Fair on parent/ teacher night our numbers were huge. By itself the Wellness Fair may have 10 folks. Our cooking classes had no one show up, but when we do a class on the same day as the food bank giveaway, we have 100-190 attend. Synergy and using our children as draws seemed to be the best solution to our issues.

Sustainability

On-going Services and Activities:

The main components of the grant-funded program will continue after the grant period ends, though they will be much reduced in scope.

- Referrals to the UK North Fork Valley clinic will continue through the Lotts Creek MAP program for medical, dental, and vision. This comes through funding by the WebMD Health Foundation.
- Karate classes will continue to take place at Cordia via the joint-use agreement, but we will no longer be able to sponsor the free and reduced lunches for children.
- Healthy cooking classes given by the Knott County Extension Agency will continue to take place monthly at the food bank during give away days.
- The fitness center will still be used by the school, afterschool, and community through volunteers. There will no longer be a personal trainer on site, and hours will be reduced.

Sustained Impact:

Our community has been impacted in significant ways since this program was funded. Over 500 hundred community members now use the sliding fee scale at UK North Fork Valley to receive medical, dental, and eye care where before they went without treatment. Lotts Creek Community School's food pantry will continue to showcase new skills to our 190 families on the food bank by our monthly cooking classes provided by the Extension Agency. The faculty and staff of our school will continue to walk during their breaks, and use our fitness center. The students will still have the positive, healthy lifestyles that they have learned through or classes and programs and the school itself will keep its healthy food and physical activity policy changes.

Implications for Other Communities

The lessons we learned about how a school can be the center of a community can be transferred to other locations. If a working joint-use agreement can be made, a school can be the center of many exciting health and fitness activities. Also, we were able to show that even though our school operates in the heart of Appalachia- some of the poorest counties in the United States, we were able to eliminate all food-related fundraisers and become an award winning healthy school.

KENTUCKY

Montgomery County Health Department

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12774 |
| Grantee Organization | Montgomery County Health Department |
| Organization Type | County Public Health Department |
| Address | 117 Civic Center, Mt. Sterling, KY 40353 |
| Grantee organization website | Montgomerycountyhealth.com |
| Primary Contact Information | Jan Chamness Public Health Director Phone number: 859-497-2422 Fax number: 859-498-9087 janmchamness@ky.gov |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|---|---|
| Montgomery County Health Department St. Joseph Mt. Sterling Hospital | Mt. Sterling, KY Mt. Sterling, KY (headquarters in Lexington, KY) | Public health department Hospital |
| Connie Smith, ARNP Pathways, Inc. | Mt. Sterling, KY Mt. Sterling, KY (headquarters in Ashland, KY and with offices in other service areas counties as well) | Individual provider Mental health provider agency |
| Dr. A.M. Vollmer III Montgomery County Cooperative Extension Service Mt. Sterling Public Library Mt. Sterling/Montgomery County Council of the Arts Mt. Sterling/Montgomery County Parks and Recreation Chris Groeber, CHES Solutions Group | Mt. Sterling, KY Mt. Sterling, KY Mt. Sterling, KY Mt. Sterling, KY Mt. Sterling, KY Mt. Sterling, KY | Dentist County Cooperative Extension Public library Arts council Parks and Rec Evaluator |

Community Characteristics

Area:

Montgomery County
Menifee County
Bath County
Fleming County
Powell County

Community description:

About 93 percent of the service region's residents are Caucasian, with the remainder split evenly between Latino and African American. However, the fastest growing group is Latinos, who face significant barriers to health care access. The Consortium service area is seeing the same health care issues that are so prevalent in other parts of Appalachia including high rates of death from chronic

disease that directly correlate with high rates of risk-related behaviors and conditions such as smoking, obesity, lack of physical activity and lack of regular preventive medical care. In 2006, Kentucky ranked 1st in adult smoking prevalence, 9th in obesity prevalence and 4th in the percent of the adult population that did not participate in physical activity in the last month. Several other factors exist that negatively affect health care access and the overall health status of the population in the service region including poverty, lack of providers, and lack of medical insurance.

Need:

Provide a brief description of the need that your Outreach program was designed to address.

This project was designed to improve access to primary care, dental care and mental health care services among low-income, uninsured and underinsured residents, with a special emphasis on providing outreach services for the unmet needs of an expanding Latino population.

Program Services

Focus Areas

- Access: Primary Care
- Behavioral/Mental Health
- Community Health Workers/Promotoras
- Health Education and Promotion
- Oral Health

Target Population

- Infants
- Pre-school children
- School aged children - elementary
- School aged children - teens
- Adults
- Elderly
- Pregnant Women
- Caucasians
- African Americans
- Latinos
- Uninsured
- Underinsured

Description:

Through the program created by this grant and by a previous outreach grant, 620 medical encounters, 513 dental encounters, and 80 mental health encounters have been provided. The extensive outreach program using a promotora model has been successful in reaching the Latino population and in overcoming barriers to care often faced by the population. To date, 33 promotoras (Community Health Workers) have provided 726 home visits and outreach encounters.

Role of Consortium Partners:

The following chart outlines the roles and responsibilities of each Consortium member:

| Member Org. and Membership Date | Representative | Credentials | Roles / Responsibilities |
|--|--------------------------------------|---|--|
| Montgomery County Health Department , 2006 | Jan Chamness, Public Health Director | Non-profit governmental agency providing basic public health services | Administrative oversight of grant funds, grant activities and preventive health care services through the local health department; ensuring compliance with the federal office of Rural Health Policy with regard to the outreach grant and the management associated with it; housing the Project Director, Outreach Coordinator, Clinical Coordinator, promotoras and CHWs; providing supervisory functions of overall Consortium programs; providing financial and activity reports to Consortium and to HRSA |
| Connie Smith, ARNP, 2011 | Connie Smith, ARNP | Advanced Nurse Practitioner License | Provides administrative oversight and direct primary care services |
| Dental practice of A.M. "Dutch" Vollmer III, | A.M. "Dutch" Vollmer III, DMD | Licensed dentist | Provides administrative oversight and direct dental care services |

| | | | |
|---|---|--|--|
| DMD, 2006 | | | |
| St. Joseph Mt. Sterling Hospital, 2006 | Cinda Fluke | Accredited by the Joint Commission on Accreditation of Health Care Organizations and licensed by the KY Health Facilities and Health Services CON Board. | Provides administrative oversight and day-to-day management of direct health care services provided by the hospital. |
| Pathways, Inc., 2008 | Sie Powell, MA, LPA | Incorporated mental health facility with licensed social workers, psychologists and psychiatrists on staff | Provides full range of mental health services for the project |
| CHES Solutions Group, 2008 | Dr. Kay Hoffman, PhD., CEO | Doctoral level social worker faculty and former dean at University of Kentucky School of Social Work | Provides expertise in planning, program evaluation, data collection, analysis and sustainability issues |
| Montgomery County Cooperative Extension Service, 2006 | Ron Catchen, County Extension Agent for Agriculture and Natural Resources | Multi-purpose agricultural and rural development resource center affiliated with the USDA and the UK College of Agriculture | Provides expertise in locating the target population and will assist promotoras in making contact with these families. Also provides health education services related to farm health and safety |
| Mt. Sterling/ Montgomery County Industrial Authority, 2006 | Sandy Romenesko, Executive Director | A quasi-governmental agency creating employment opportunities | Will assist in coordinating and promoting economic development activities with community health planning projects. |
| Mt. Sterling/ Montgomery County Arts Council, 2008 | Cay Lane, Executive Director | Not-for profit organization funded by city and county government and other public and private funding | Will assist in coordinating and promoting cultural awareness activities through the arts |
| Mt. Sterling/ Montgomery County Public Library, 2008 | Melissa Smathers-Barnes, MLS, Director | Public library, under the governance of Kentucky Department of Libraries and Archives and a local board of trustees | Will coordinate and promoting cultural awareness activities through computer training for promotoras and through providing Spanish-language materials and activities for the public. |
| Mt. Sterling/ Montgomery County Parks and Recreation Department, 2008 | John High, Director | Not-for profit organization funded by city and county | Will assist in coordinating and promoting cultural awareness activities through soccer camps for Latino children and by providing free and low-cost opportunities for physical activity |
| Montgomery County Schools, 2011 | Josh Powell, Superintendent | Superintendent of schools for Montgomery County School District | Will assist in coordinating project services based at six school sites in the county |
| Sterling Health Solutions, 2011 | Jennifer NeSmith, MBA | MBA with a strong history of working in rural health | Will assist with assessment and sustainability activities |

Outcomes

Several significant findings have been discovered in the first five years of this program including:

- The population is willing to pay for care once they are linked to services.
- When you engage one participant, that person will tell family and friends, expanding the network exponentially.
- Participants are willing to make changes in their own personal health activities.
- Participants can be responsible for making their own appointments and following through with what are traditionally "American" schedules.
- English as a Second Language (ESL) has become very important as participants begin to integrate into the community.

- Participants are becoming more self-sufficient, doing it themselves rather than waiting for it to be done for them.

The following quotes, taken from surveys that were distributed to El Puente participants, convey the success of the program:

“It is easier to use health care services now after using the promotora program. I can go to the dentist or doctor on my own.”

-Quote from a participant survey respondent

“I thought I was going to die until the promotoras convinced me to go to get help from this program.”

-Quote from a young Latino man who thought he had tuberculosis and was very ill...now doing regular checks with the doctor

“I want to tell people how much better I feel because I got treatment for my diabetes.”

-Quote from a 40-year-old man who was tested for diabetes and had a blood sugar level over 400. He now sees the dietitian and doctor regularly.

We expect the availability of health care services to continue to increase. We currently have 10 providers who collaborate with the program, however, this number continues to increase as more providers become aware of the program and as barriers to providing services are removed. Before the inception of this program in 2006, many providers did not know how to provide services for this population. Once the communication barrier was removed, they realized they could provide these services and now the population has a “face with real needs.”

Challenges & Innovative Solutions

The key challenge that has been experienced by the Consortium in the past and that is likely to continue to be an issue is change in the immigration environment that exists in Kentucky and across the nation. U.S. Immigration and Customs Enforcement (ICE), the interior enforcement arm of the Department of Homeland Security (DHS), the federal agency charged with enforcing immigration laws, has markedly increased the pace of worksite raids in the past few years to apprehend undocumented immigrants. The number of undocumented immigrants arrested at workplaces increased more than sevenfold from 500 to 3,600 between 2002 and 2006 and has continued at this pace. With several states passing new immigration laws, it is becoming more difficult for Latinos to access services and they are more fearful of doing so.

When the Consortium first received a HRSA grant in 2006, the work plan contained activities designed to highly publicize the needs of the Latino population living in our community and to also highly publicize the program and services being provided to this population. However, due to several incidents in Kentucky including the arrests and detention of 76 Latinos by ICE agents in May 2006 at a construction business in Northern Kentucky, the arrests of several landlords in nearby Lexington who were charged with providing housing for illegal immigrants, and other immigration-related incidents in the state, the Consortium, under advisement of our HRSA project officer and our Technical Adviser from the Georgia Health Policy Center at Georgia State University, made the decision to lower the intensity of publicity and only promote the program among the target population, key leaders and stakeholders.

Sustainability

On-going Services and Activities:

The health department has already implemented plans to continue and expand the services funded through this project. Using a mixed model based on the work of the Harvard Family Research Project and The Finance Project, the Consortium created four key strategies for initiating its sustainability planning, including obtaining broad based community support, being results oriented, planning for targeted visibility in the community and having a strategic finance orientation. In addition to sustainability planning activities, the program work plan included activities such as outreach, marketing and collaborative relationships that support ongoing sustainability. The project is also using a sustainability tool developed by the George Health Policy Center at George State University in planning for sustainability. The project received a grant from the Foundation for a Healthy Kentucky in 2010 that will allow us to support an expansion of this project and we are also seeking continued funding from HRSA and other funding agencies.

Sustained Impact:

Because this project uses innovative outreach and collaborative partnerships, we believe health care access and the overall health status of Latinos living in the Consortium service area has significantly improved. We expect the availability of health care services to continue to increase now that local providers are more culturally competent to deal with the population. We currently have 10 providers

who collaborate with the program, however, this number continues to increase as more providers become aware of the program and as barriers to providing services are removed. Before the inception of this program in 2006, many providers did not know how to provide services for this population. Once the communication barrier was removed, they realized they could provide these services and now the population has a "face with real needs." We also expect the HRSA grant to have an impact on providers who are not members of the Consortium. This would include other primary medical care providers, dentists and mental health providers in the three-county region. We believe this project has increased social awareness of Latinos among area health care providers brought about a sense of greater social and ethical obligation to treat Latinos.

Implications for Other Communities

Regarding national scope and replication, one innovative aspect of this project is its use of a promotora model within a majority Anglo population in Appalachia. To our knowledge, very few communities in Appalachia have attempted to implement a promotora program for their growing Latino population. While many programs have been developed in metropolitan areas and in US-Mexico border-states, we believe this model is also adaptable to Appalachia. Thus, we would hope that other health departments and service providers in Appalachia will look toward the success of the Western Appalachia Kentucky Health Care Access Consortium.

KENTUCKY

Ohio County Hospital Corp.

Organizational Information

| | |
|---|---|
| Grant Number Grantee Organization Organization Type Address Grantee organization website Primary Contact Information | D04RH12681 Ohio County Hospital Corp. Critical Access Hospital 1211 Main Street Hartford, KY 42347 Jeanie Ranney Hunter Program Director Phone number: 270-730-5360 Fax number: 270-298-5140 jhunter@ohiocountyhospital.com |
| Project Period Funding Levels | 2009 - 2012 May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|------------------------------------|---------------------------|--------------------------|
| Ohio County Hospital | Hartford/Ohio County/KY | Critical Access Hospital |
| Family Wellness Center | Hartford/Ohio County/KY | Local Business |
| Green River District Health Dept. | Hartford/Ohio County/KY | Health Department |
| Ohio County School Systems | Hartford/Ohio County/KY | School Systems |
| Dept. of Community Based Services. | Beaver Dam/Ohio County/KY | Government |
| Together We Care | Beaver Dam/Ohio County/KY | Community Coalition |
| Ohio Health Council | Hartford/Ohio County/KY | Community Coalition |
| Chaplaincy Association | Hartford/Ohio County/KY | Faith Based organization |

Community Characteristics

Area:
 Grantee Ohio County Hospital's *Health Improvement Program (OCH –HIP)* serves the residents of Ohio County in the central portion of western KY. Ohio County is KY's fifth largest county in area, with 596 square miles and 75% of the county is rural. Some of the communities served are as follows: Beaver Dam, Hartford, Dundee, Fordsville, Cromwell, Centertown, Horse Branch and Pleasant Ridge.

Community description:
 According to the study "The Health of Kentucky: A County Assessment" conducted by the Kentucky Institute of Medicine in 2007, Ohio County ranked 74th out of 120 counties in health status (129th being the least healthy). This report revealed that some of the health challenges faced by Ohio County residents include high rates of smoking, obesity, occupational fatalities, and deaths from breast and lung cancer. In addition the study found that Ohio County had high rates of physical inactivity. Moreover, the report also continued by stating that many Ohio County residents do not get the preventative medical screens in order to detect many types of cancer and other chronic health conditions.

The Green River District, which includes Ohio County, has a higher percentage of adults lacking health care coverage (21.5%) than both the state and national numbers (18.2% and 14.1% respectively). Affordability seems to be a key component in lack of coverage. 36.7% of those making less than \$15,000 lack health coverage. 34.5% of those making between \$15,000 and \$24,999 lack coverage.

As the incomes go up, the percentages lacking coverage go down – 20.4% for those making between \$25,000 and \$34,999; 2.2% of those making between \$35,000 and \$74,999; and 4% for those making \$75,000+. Source: BRFSS 2002.

Plainly stated, another factor related to the health culture of Ohio County is that there are multi-generations of poor health status and limited physical fitness. Therefore OCH-HIP strives to break through the culture barriers related to health that is so ingrained in many of our families and the community. A healthy lifestyle often requires being viewed as “different” from the norm of our geographical area. OCH-HIP supports these individuals, offering the support needed to fight this community menace.

Need:

The program has provided no or low cost medical care for eligible residents, as well as free transportation to and from health care facilities. In addition, we engage participants in wellness activities that include: health screening, health educational classes/information, access to a fitness facility, health advocate, and access to select prescriptions. In a nutshell, we encourage people to become healthier overall and proactive in maintaining their own health needs.

Program Services

Focus Areas

- Access: Primary Care
- Access: Specialty Care
- Chronic Disease Management: Cardiovascular
- Chronic Disease Management: Diabetes
- Chronic Disease Management: Other
- Coordination of Care Services
- Health Education and Promotion
- Maternal/Women’s Health
- Pharmacy Assistance
- Physical Fitness and Nutrition

Target Population

- Pre-school children
- School aged children - elementary
- School aged children - teens
- Adults
- Elderly
- Pregnant Women
- Caucasians
- African Americans
- Latinos
- Uninsured
- Underinsured
- Disabled

Description:

Each program participant receives the following services as prescribed by their primary care physician or nurse practitioner.

Enrollment Services

- Health Risk Assessment
- Basic Laboratory Testing
- Medical Provider History
- Complete Physical
- Review of Finding
- Enrollment
- Program Overview

Provider Directed Services

- First and Six month Physical Visit
- Follow up Maintenance Care
- Limited Laboratory Testing
- Prescription Assistance
- Limited Formulary at local Pharmacy for Maintenance Medications

Preventative Services

- Health Coach/ Advocate
- Wellness Center Membership
- Nutrition Counseling
- Diabetes Counseling

- Rehab Counseling
- Health Education Programs
- Smoking Cessation Assistance
- Exercise Programs
- Limited Transportation
- Community Screenings
- Mammogram and PAP screening

We have shared our program services everywhere: Doctors and office personnel, school system employees, retired teacher meetings, pre-school employees, hospital employees, numerous churches, and health fairs and forums. We have held events with hospital auxiliary, senior centers, Little Friends Playhouse, Ohio County Public Library, Family Resource Centers, Walk and Run Summer Sizzle, school teachers, and health clinics. In addition, we have placed flyers and brochures all throughout the community in various businesses – pharmacies, general stores, and grocery marts.

We have participated in multiple wellness activities. The activities are in addition to the basic services provided. I would like to highlight a few of the activities. A hugely successful activity has been our Alternative Healthy Cooking Classes. These classes have been in a series of three - breakfast, lunch and dinner menus with not so “southern” traditional fare. Healthy tips in making and preparing tofu, info concerning oils, healthy grain-based snacks with a focus on MyPlate.gov. These classes have been set in an “Emeril” style taste-testing venue. We hold two classes per day, per event, and have an average of 50 attendees each day. The success has been so phenomenal that Ohio Co. Hospital will continue this healthy outreach service to our participants and community members as well.

Role of Consortium Partners:

Our local community is “close knit” in terms of our relationships. Most of the consortium members are on numerous other boards and councils. OCH-HIP’s Consortium members often discussed details of the program weekly (sometimes more often). However, we often found it challenging to have numerous formal monthly meetings; although we did have several meetings. Many of our best exchange of information happened with a group gathering before other community coalitions meetings. Without exception, all consortium members participated in over five other coalition work sessions. This informal process would not work in all counties. However, given the strong connection and frequency of our interaction, it worked well. We often asked consortium members to make comments and give regular feedback related to program implementation. Our consortium members are made up of people who have an interest in helping people and/or improving health. We found that their input was not only useful, but important in making use of our resources and considering the overall direction of our program.

Outcomes

Each participant receives a health risk assessment which measures the following clinic measures: BP, BMI, Total Cholesterol, Triglycerides, HDL, LDL and Blood Glucose. In addition, we tracked emergency room visits, in order to assess if preventive services improves their overall health status.

We are pleased to note that emergency room visits have decreased by our participants while enrolled in OCH-HIP. This important fact is due to the fact that our participants need less emergency care. There have been 510 less emergency room visits from our participants. This is a great saving to our patients. If we consider that the average ER visit costs \$1100, this is a potential savings of \$561,000. This is a large impact to a community that has so many citizens under the federal poverty guidelines.

As stated earlier, we also track other clinical measures. Each participant is given a health risk assessment at the beginning of their enrollment and again in six months. We are excited by the health progress of our participants in glucose levels, LDL, HDL, TRIG, BMI, Tchol and BP numbers.

Challenges & Innovative Solutions

We noticed early in our programs development that if we did not engage each participant's entire family that they often did not have as good a health outcome. Therefore, we quickly began health activities that would encourage the entire family towards health. For example, “A Family Walk in the Park” was designed to teach participants that physical fitness does not have to cost a lot of money and it promotes family wellness.

Other challenges that we faced were related to the need for specialty medical care, although Ohio County Hospital donated a large amount of primary medical care and some specialty care. The need for specialty care has been overwhelming. We found that our program doctors even had a hard time understanding the limitations of our program. Therefore we implemented a form that resembles a "doctor's order" for each service. On that form it had the services that a doctor could choose from. This helped to communicate to the doctor and participant the true scope of our program. We also created easy fact sheets for the doctors and their offices in order to give them "talking points" related to discussing the OCH-HIP program.

Sustainability

On-going Services and Activities:

OCH-HIP as a program has gained the confidence of the Ohio County Hospital Board over the past three years of grant funding. This board has agreed to sustain our program moving forward. Some of the services that we will provide are as follows: Case management, donated medical visits, donated lab services, prescription assistance, health education classes and health advocacy.

One of the areas of change that we have identified is the usage of the Family Wellness Center. We are working towards giving participant's choices of community physical fitness options. We feel that it is important to teach people how to exercise without a gym membership. Some of these activities may include, walking in parks, local 5k walk/runs, biking, dancing and home based activities.

We also plan on utilizing more medical school students for health related topics for our participants. This will help not only to create a partnership with nearby universities but will also get student excited about community health service.

Another area of change is to focus our attention on more accountability for our participants by encouraging the submission of physical fitness logs and health education classes attended. It is our intention to encourage participants to utilize the great variety of services offered with less staff prompting.

Sustained Impact:

OCH-HIP has impacted our community in many ways. One such way is in community partnership, for example, our relationship with Green River District Health Department. As a hospital we have had a professional relationship with them in the past. But since the beginning of OCH-HIP the health department has been a close partner in helping with program design and implementation. This is helpful and beneficial to our participants, because it increased their abilities to get a wider array of services. Because of this relationship we were able to share tools, document templates, share ideas and enthusiasm for OCH-HIP success. We plan on continuing this relationship with the health department in the future. We have also developed countless other partners such as faith based community, school systems, hospital employees, fitness facilitates and other coalition collaboration.

OCH-HIP also changed the culture of the hospitals communication about health. In the past our hospitals was like most hospitals with their primary focus being related to the treatment of the sick. However, since the beginning of OCH-HIP there is more communication related to how can we prevent the onset of various chronic health conditions. We were able to utilize our hospital Dieticians, RN, Rehab Unit and Physicians as "wellness experts", to target educational offerings, answer questions and increase awareness about prevention. This heightened awareness about health prevention, has created an environment within our hospital that allows for every management roundtable discussion there is conversation about wellness and prevention.

It has created a stronger relationship within our hospital, because our program "rallies" all hospital departments to work together under one cause - prevention and better health. Most of our participants show health progress and this helps the staff to feel rewarded by their efforts. Furthermore, it has been a spectacular situation witnessing professionals working together and participants benefiting from these strong collaborations.

Implications for Other Communities

We believe that the advantage of our program conceptualization is multi-faceted. One it helps participants become aware of prevention as a lifestyle. But also our program is discussed as "not a hand out" but a way for you (as the participant) to give back." This philosophy is key in getting more long-term commitment and service back to our program/community. In return we hope that this philosophy allows us to serve more people (the Cinergy effect).

Another factor is that impact of partnerships/relationships. We have found that without key community partnerships, our good outcomes would not have been possible. In return, we are able to celebrate successes of OCH-HIP with an entire community.

Moreover, we have found that it is important to establish strict guidelines and expectations related to programing for participants. By doing so, it helps all participants to understand what is expected. We have observed that the more organized, consistent and specific instructions became, the more progress occurred.

KENTUCKY

People's Clinic Foundation, Inc.

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12682 |
| Grantee Organization | People's Clinic Foundation, Inc. |
| Organization Type | Free Clinic |
| Address | West First Street, P.O. Box 962, Morehead, KY 40351 |
| Grantee organization website | N/A |
| Primary Contact Information | Mattie Burton, PhD, RN Project Director Phone Number: 606-207-7423 Fax Number: None listed mburton@shawnee.edu |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$134,580 May 2010 to April 2011: \$124,400 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|------------------------------------|----------------|------------------------|
| St. Claire Regional Medical Center | Morehead, KY | Hospital |
| JourneyWell | Morehead, KY | Mental Health Provider |
| Morehead ChristWay Church of God | Rowan Co, KY | Church |
| Elliottville Baptist Church | Rowan Co, KY | Church |
| Christ Community Church | Carter Co, KY | Church |
| New Beginnings Church | Carter Co, KY | Church |
| Mud Lick First Church of God | Bath Co, KY | Church |
| Sharkey Freewill Baptist Church | Rowan Co, KY | Church |
| Clearfield Tabernacle | Rowan Co, KY | Church |
| Salt Lick First Church of God | Bath Co, KY | Church |
| Garrison Baptist Church | Lewis Co, KY | Church |
| South Shore Church of God | Greenup Co, KY | Church |

Community Characteristics

Area:

Counties in northeastern Kentucky in the Central Appalachian region to include:

| | | |
|---------|---------|---------|
| Bath | Greenup | Menifee |
| Carter | Fleming | Morgan |
| Elliott | Lewis | Rowan |

Community description:

The target population of the *Lasting Changes* program is people throughout this multi-county Appalachian region, ages 19 through 64, without health insurance and who are not eligible for Medicaid coverage. They also meet an additional requirement for treatment at The People's Clinic, income 250% of federal poverty level. The Clinic's experience is that 80% of these people are employed, but their employers either do not offer health benefits or they do not offer affordable health insurance benefits. In the final year of the project as the economic decline deepened, the Program admitted individuals who were underinsured. These people had crisis health insurance with huge deductibles that precluded any possibility of wellness care.

Need:

The target population encounters the following barriers to obtaining health care: lack of insurance, few low-cost or free healthcare providers, geographic and cultural isolation, poverty, lack of education and high transportation costs. Regional data show that the most frequent causes of death in these counties are cancer, cardiovascular diseases, cerebrovascular diseases and unintentional injuries related to farm, occupation and auto accidents. In many cases, these diseases (cancer, cardiovascular diseases, cerebrovascular diseases) can be linked directly to unhealthy lifestyle choices, such as smoking, obesity and inactivity and also to health literacy issues.

Relevant barriers to health care addressed by *Lasting Changes* were transportation problems, the lack of health literacy, cultural resistance to change and lack of access to primary healthcare. *Lasting Changes* addressed transportation problems in two ways: first, by using gasoline cards as incentives to participate and second, by bringing nurse-managed care and health education opportunities to locations within people’s communities, using the local church as a meeting place with trained Wellness Coaches. In addition, people were scheduled to see providers at the Clinic during the evening after day work shifts had ended to avoid missing work. The screening provided immediate feedback so decisions could be made at the time of the Clinic visit. Results, when they were not immediately available tests, were sent to Wellness Coaches so participants were not required to arrange transportation for a second visit.

Program Services

Focus Areas

- Access: Primary Care
- Access: Specialty Care
- Behavioral/Mental Health
- Chronic Disease Management: Cardiovascular
- Chronic Disease Management: Diabetes
- Community Health Workers/Promotoras
- Health Education and Promotion
- Physical Fitness and Nutrition

Target Population

- Adults
- Caucasians
- African Americans
- Latinos
- Uninsured
- Underinsured

Description:

To address health needs in the communities served by People’s Clinic, Mattie Burton, PhD, RN (community volunteer at People’s Clinic), developed the *Lasting Changes* program, a self-directed, community-based health initiative that teaches people the skills they need to change habits and behaviors that are detrimental to their physical and mental health. To move this program into the community, she approached People’s Clinic, Journey Well, St. Claire Regional Medical Center and the Morehead Ministerial Association to develop the *Lasting Changes* Consortium.

People who were receiving services at People’s Clinic were asked if they would like to participate in the program. If they agreed, they received a Health Risk Appraisal, mental health screening, physical health work-up, medical history and a consultation to help them select health goals. The participant was then connected with a local church that sponsored the Program and had identified a Wellness Coach from their membership.

Monthly meetings were held at each church site with two objectives: first, provide an opportunity for the Wellness Coach (WC) and the participant to review the participant’s progress toward his/her specific health goals and second, for the participant to attend an educational session aimed at improving knowledge about specific facets of health. During additional one-to-one meetings with their WC, participants received guidance and referrals to appropriate community-based resources, as needed. Educational sessions were open to everyone and WC was encouraged to advertise their meetings to the church and the community through a variety of media.

Role of Consortium Partners:

In 2008, a series of focus groups were convened throughout the community to investigate the perceptions of ministers, medical professionals and community leaders about the health needs of people throughout the community. Each person was given a list of Healthy People 2010 Leading Health Indicators: physical activity, obesity, tobacco use, substance abuse, responsible sexual behavior, mental health, injury and violence, environmental quality, immunizations and access to healthcare. They were asked to circle the top three indicators that they believed reflected the health needs of the community then, in a discussion facilitated most often by the Project Director, group members worked in focus groups to come to consensus. Clients of the People’s Clinic (members of the target

population) used the same list (available in the waiting room) as community members to elicit their perceptions of the most needed health services based on the Leading Health Indicators.

In September 2008, *Lasting Changes* Consortium members Morehead State University and St. Claire Regional Medical Center hosted a town meeting. The hospital administrator and the University president co-facilitated the meeting that intended to address the results of People's Clinic over the years, its impact on the community, and its future. More than 45 community leaders from several local counties including mayors, bank presidents, judge executives, school system administrators and other well-known community activists attended the meeting. During this meeting, these leaders discussed the health needs of area residents in terms of the Healthy People 2010 Leading Health Indicators. The results of this meeting yielded results similar to those expressed by people during recently convened focus groups.

St. Claire Regional Medical Center has supported the People's Clinic from the beginning. Hospital staff was available to provide financial administration and oversight of the grant funds, graphics work, and marketing of the *Lasting Changes* program. St. Claire initially provided discounted laboratory support and helped with a grant to subsidize more point-of-care testing available for the program participants.

Initially, a local mental health provider from JourneyWell, assisted the *Lasting Changes* program by providing a nurse specialist in mental health, to negotiate wellness contracts. When the company went out of business, an Advanced Practice Nurse from the community continued the service.

Local churches assisted the program by recruiting Wellness Coaches and participants from their membership. They also provided space and often refreshments and printing for the program.

Outcomes

Through March 2012, at least 284 participants attended the education sessions. Contact was made with an additional 287 people using community presentations, phone conversations and personal interaction. The 284 people who attended the community-based education sessions completed the evaluation forms. Based on these data, 80% of participants were enrolled in *Lasting Changes*, 10% were not and 10% did not specify. More than 95% of participants identified two or more things they learned in the session. Ninety-four percent (94%) identified two or more ways they could use the information from the session in their lives and 91% identified one "most useful" thing they learned. People who wrote comments were overwhelmingly positive, praising the coaches and expressing their interest in the presented material.

Challenges & Innovative Solutions

Lasting Changes has worked to resolve the following challenges and barriers:

- The churches that agree to participate sometimes have not followed through effectively.
- It is difficult to bring new churches into the program.
- The Health Risk Appraisal takes too long to complete during intake at the clinic.
- People's Clinic had managerial and financial difficulties.
- People who are un/underinsured have difficulty making changes.

The churches throughout the targeted region of northeastern Kentucky are struggling with lower attendance, lower revenue and fewer members, related to the poor economy. This situation has affected participation in *Lasting Changes* for both churches and program participants. Churches are not encouraging participation in *Lasting Changes*, as they are struggling to involve people in their own programs. Pastors who originally agreed to add *Lasting Changes* to their programs are now asking to postpone their involvement. *Lasting Changes* is increasing marketing efforts within its participating churches and toward new churches to reinforce the effort and to attract the additional target population of underinsured people. Carry-over funds were used to support marketing of New Year's resolutions to include *Lasting Changes* in all seven counties.

There were two difficulties associated with People's Clinic. First, the Health Risk Appraisal takes 30 to 60 minutes to complete, depending on the participant. The admission clinic visit takes approximately two hours by design and participants refused to take extra time to complete the appraisal while they were at the clinic. The Project Director visited each church site early in 2011 and worked with those cohorts to negotiate new wellness contracts based on a participant's data generated using the Health Risk Appraisals. To resolve

the problems associated with the extra time, the appraisals will be completed at the church sites for those participants who want to continue but do not need repeat lab work.

The second challenge related to People's Clinic, was financial problems that nearly required it to close. People's Clinic is an entirely free clinic that has only volunteer service providers. There were management and fundraising problems that resulted in insufficient funds to operate the clinic. As a result, the board made changes to the management structure and it acquired additional donations to maintain operations. There is a new clinic director and the original director has been reassigned to fundraising and marketing. The clinic is currently on solid ground.

Lasting Changes is experiencing two challenges related to the community participants. The first is, participants who live in poverty are hit disproportionately hard by the economic downturn. They may seem motivated during intake, and often come to one or two monthly educational sessions but then drop out. Most have pay-per-use mobile phone service which they cannot continue as their financial situation worsens, making it difficult to maintain consistent communication. As a consequence, *Lasting Changes* has been most successful when participants are church members and seen regularly by Wellness Coaches.

Sustainability

Subsequent to April 2011, local churches and Wellness Coaches will continue the *Lasting Changes* program. Training and continued support of these nurses is vital to meeting sustainability goals. During the summer, the Project Director convened a committee of health professionals who are experienced in and knowledgeable about health ministry to develop a continuing education event. On November 5th, 2010, thirteen nurses from the community received a full day of training in how to establish a Health Ministries program in their churches. All participants gave the event favorable ratings and comments. This group is determined to hold the event annually.

Nurses who are involved in the *Lasting Changes* program have been meeting monthly since May 2010 to establish the Northeast Kentucky Health Ministries Collaborative. They have decided to collaborate with a local non-profit that will provide fiscal management to support future projects. Nurses who attended the November educational event will be asked to join the January meeting and to help the Collaborative grow. Officers will be elected and a strategic plan will be developed to continue the group's work. A grant has been written to support a diabetic health fair in the summer and that funding is pending.

Sustained Impact:

The *Lasting Changes* program has increased awareness of many people throughout the region about the People's Clinic. The Clinic has realized funding opportunities that will further support the mission to bring health care to marginalized citizens in northeastern Kentucky.

Churches that had never worked together have become collaborators to maximize resources in ways that cross county and denomination boundaries. Wellness Coaches have worked together and through the developing consortium will continue to enhance health and wellness in one of the unhealthiest areas in the United States. In turn, churches have received training and support to continue Health Ministry programs internally long past the grant period.

Implications for Other Communities

Lasting Changes is realizing two accomplishments that will be significant to the community and to the Appalachian region. First, it has established the Northeast Kentucky Health Ministries Collaborative. This collaborative effort is one that is sustainable and that can be easily replicated across Appalachia. As it develops and grows, it will help change regional cultural values to support healthy lifestyles and wellness.

Second, scheduled late April 2012 is a regional conference, *Faith Based Linkages for Health*, which is meant to be the first of an annual opportunity for churches in central Appalachia to come together to share best practices in Health Ministry. The program also includes a primer in health ministry meant to gear up new programs so the *Lasting Changes* program can continue into the future.

LOUISIANA

Hospital Service District No 1-A of the Parish of Richland

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12686 |
| Grantee Organization | Hospital Service District No 1-A of the Parish of Richland |
| Organization Type | Critical Access Hospital |
| Address | 407 Cincinnati Street, Delhi, LA 71232 |
| Grantee organization website | http://www.delhihospital.com/ |
| Primary Contact Information | Jinger Greer Project Director Phone number: 318-878-6457 Fax number: 318-878-6469 JGreer@delhihospital.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,828 May 2010 to April 2011: \$124,828 May 2011 to April 2012: \$99,282 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-----------------------------------|------------------------|--------------------------|
| Delhi Rural Health Clinic | Delhi, Richland, LA | Rural Health Clinic |
| Start Community Clinic | Start, Richland, LA | Rural Health Clinic |
| Northeast Louisiana Health Center | Rayville, Richland, LA | Rural Health Clinic |
| Abraham Medical Clinic | Mangham, Richland, LA | Physicians Clinic |
| Rayville Sherriff Department | Rayville, Richland, LA | Parish Sherriff's Office |
| Southern Smile | Mangham, Richland, LA | Dental Clinic |
| Senator Francis Thompson | Delhi, Richland, LA | LA State Senator |
| Delhi Mayor's Office | Delhi, Richland, LA | Mayor's Office |
| Guaranty Bank | Delhi, Richland, LA | Bank |

Community Characteristics

Area:

The target population consisted of those who live, work or play in rural Richland Parish.

Community description:

Richland Parish is located in the northeastern part of Louisiana and has a population of 20,981. Richland Parish is 576 square miles, which estimates at 36 people per square mile. This is an economically underdeveloped region with high rates of poverty and unemployment compared to other regions in the Louisiana and the United States. Residents of the parish experience higher mortality rates, lower health care utilization and poorer access to health care compared to other residents of the state. Richland Parish is a rural farming community in which one of the greatest challenges in prevention education is reaching those located in the most rural areas of the parish. Richland Parish has been classified as a Health Professional Shortage Area and a Medically Underserved Area.

Need:

The Richland Pre-Diabetes Program is an outgrowth of the hospital's initial TRAC Program - the Cardiovascular Disease Prevention Initiative funded by HRSA from 2006 to 2009 to identify and educate those with cardiovascular disease risk factors. The screening data during this time revealed a recurrent theme - the rates of elevated blood sugars were higher than the state and national averages, and those participants with elevated blood sugars were not concerned about reducing them. In addition, our program staff continually

encountered resistance when elevated blood sugars were discovered. Further research showed that our rate of pre-diabetes in Richland Parish approximately doubled the national average and that we were at great risk of an explosion of true Diabetes Mellitus Type II that would far outpace that of the United States population as a whole. In addition to the greater risk for pre-diabetics to progress to full-blown diabetes, the staff found that it was difficult to obtain reductions in the blood sugar elevations in these individuals by using only point-of-contact education and simple lifestyle changes alone, which had been the case with elevations in other risk factors. It became evident that a more extensive protocol would be required to achieve a reduction in levels of blood sugars.

Program Services

Focus Areas

Access: Primary Care
 Chronic Disease Management: Diabetes
 Health Education and Promotion
 Physical Fitness and Nutrition

Target Population

Adults
 Caucasians
 African Americans
 Latinos
 Native Americans
 Uninsured
 Underinsured
 Migrant Workers

Description:

The Diabetes Prevention Program (PDP) implemented by the TRAC Program Staff is based essentially on this protocol: early detection of pre-diabetic BS levels; repeated screenings; more extensive health education involving behavior modification and self-management; a program of physical activity; and medical management with pharmacological intervention as required. Specific program activities that were implemented include:

- Health Assessment & Screening – Comprehensive Health Screenings & Assessments were provided in various locations and settings throughout Richland Parish. Screenings were conducted at many local businesses, physicians' clinics, civic group meetings, and faith-based group meetings and were held in locations that would reach uninsured and minority populations.
- Health Education– Health Education targeting Diabetes Prevention and the dangers of Pre-Diabetes left unchecked was provided to all participants of the community health screenings. More intensive health education followed for the participants enrolling in the TRAC Pre-Diabetes Program. Examples of the health education activities included monthly participant newsletters and phone calls from a TRAC Health Educator to encourage participation and to answer questions that participants may have had.
- Pre-Diabetes Intervention Program – Screening participants identified with pre-diabetes risk factors were enrolled in the TRAC PDP Program on a volunteer basis. Further blood sugar and glucose tolerance testing were conducted to verify the diagnosis of pre-diabetes. Follow up screenings were conducted annually on the PDP Program participants, and individual sessions scheduled as needed.
- Primary Care Referrals – A primary care referral system was developed with the help of the Consortium Members. Community screening participants with elevated blood sugars were referred to their Primary Care Physician and were provided assistance in accessing a PCP if they had none.

Role of Consortium Partners:

Richland Parish Hospital was the lead agent for the project and served as the fiscal agent and employer of the primary program staff. The Program Team included a coordinator/registered nurse, a medical director, a certified diabetic educator, and exercise physiologist, a certified health educator, and other support personnel. Over half of the program staff time was provided as in-kind by the hospital.

Other consortium partners played a critical role in securing the locations for the community screenings and providing advertising or additional help as needed for the screenings. The consortium partners are also playing a vital role in the sustainability of the program by committing to sponsoring future community health screenings.

Outcomes

An intensive evaluation strategy was implemented from the beginning of the project. It was developed and conducted by an outside evaluator who evaluated program processes, outputs, and outcomes over the project period. Program Outcomes identified include:

- The development of a highly successful best-practice model rural community-based Diabetes Prevention Program targeting the clinical progression of those diagnosed as Pre-Diabetic.
- 100% of Clinical Providers in the parish have received education as to the importance of the treatment of pre-diabetes and the applicable protocols using evidence-based guidelines.
- Statistical significance was met. PDP Program participants with a follow-up screening within fourteen months of their initial screening had a Zero (0) progression rate to full-blown diabetes.
- Community awareness of diabetes and Pre-Diabetes has increased. It is now common for us to receive two to three calls per week with requests for program staff to attend and screen at community events, and we have seen the numbers of PDP Program participants increase over the project period.

Challenges & Innovative Solutions

We have encountered several challenges to our program design which required modifications to our processes, but we believe these modifications have strengthened our project.

- Initially, we utilized fasting blood sugar (FBS) tests for screening, but due to the variation in screening times, many people would not be fasting. For those participants with an elevated blood sugar, we added an A1C test as part of the screening. Also, the time requirements for the 2-hour oral glucose tolerance test proved to be a deterrent for many potential program participants. The medical director subsequently removed the requirement for the OGTT in follow-up testing, which increased participation in re-screening.
- We found it necessary to begin to schedule health screenings outside the typical workday hours in order to reach all populations and locations throughout the parish. We were willing to screen at any location when presented with the opportunity.
- While the Participant Newsletters proved effective, we found the addition of a bi-monthly phone call added a personal touch that helped to keep participants engaged and accountable for the lifestyle choices they were making.

Sustainability

On-going Services and Activities:

We anticipate the **Richland Parish Hospital** will continue to provide in-kind and cash support for the program when at all possible. RPH hosts community screening and health education events and will incorporate the diabetes screenings into those events.

We are working diligently with our Consortium Partners to identify methods for providing the services provided by the existing Richland PDP Program. We anticipate that while we will continue to provide some of the services at the present levels, some will be provided on a smaller scale. We have identified several local businesses that have committed to sponsoring community health screenings, which will be held at either the sponsoring business or at a designated location central to the community. As part of the Community Screening Opportunity Package we have developed, the sponsoring business or community organization will receive individualized marketing for the event.

In Year Three of the project, the TRAC Program Staff organized the first 5K Run held in Richland Parish. The race was held as both a fundraiser for the TRAC PDP and Community Wellness Programs and a means to raise awareness of the TRAC Programs. Over 100 runners of all ages and from all over Northeast Louisiana participated in the race. The Second Annual "Grin & Bear It" Race is already scheduled for October 2012, and many local businesses have committed to providing sponsorships for the race.

Sustained Impact:

We continue to struggle with how to measure the true long-term community impact of this program. For every one person we have helped to make positive lifestyle changes, we anticipate several more will be also positively impacted. For every spouse or parent

there is another spouse or children or friends that are also touched. We know this because we hear the personal testimonies of those in our program. Our community has definitely become more conscious of the need to improve their health. We see many more people out walking in the community than we did when our program first began. Many more are aware of the causes and effects of elevated blood sugar and the impact that even small lifestyle changes can have on these numbers. More of our local businesses are beginning to encourage their employees to participate in community health screenings and to follow up with wellness exams. We believe the businesses are realizing the importance of a healthier workforce and community. Even competing businesses are coming together to sponsor community health screenings.

Implications for Other Communities

When our Medical Director first began researching programs specific to delaying or deterring the progression to Diabetes for Pre-Diabetics, he could find no rural community-based models. The TRAC PDP Program has worked through many issues and has developed a Tool-Kit to enable others to replicate our program as a model.

We have learned that the success of the program depends greatly on the partnerships forged with community businesses, civic organizations, and the medical clinics and physicians that are in direct contact with potential participants. Relationships are continually developing and reflect our commitment to improving health outcomes and the trust of our community members, which is critical to improving health outcomes.

LOUISIANA

Innis Community Health Center, Inc.

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH16498 |
| Grantee Organization | Innis Community Health Center, Inc. |
| Organization Type | Non-profit organization |
| Address | 6450 La Highway 1, Innis, LA 70747 |
| Grantee organization website | N/A |
| Primary Contact Information | Linda Matessino Program Director Phone number: 225 492-3775 Fax number: 225-492-3782 Linda@inchc.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,882 May 2010 to April 2011: \$124,790 May 2011 to April 2012: \$99,922 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|-----------------|---|
| LA State Univ School of Dentistry , Dept. of Pediatrics | New Orleans, LA | Academic State University |
| Iberia Comprehensive CHC | New Iberia LA | Federally qualified community health center |
| Morehouse Community Medical Centers, Inc. | Bastrop LA | Federally qualified community health center |
| Pointe Coupee Parish School Board | New Roads LA | School system |

Community Characteristics

Area:

The coverage area for the Outreach grant is a three Parish (county) area in Southwest Louisiana. The parishes are: Pointe Coupee, northern Iberville and southern Avoyelles.

Community description:

The service area is rural with pockets of farming which also brings in a small migrant Mexican population to work in the sugar cane farming. The economic situation in the service area continues to be a challenge due to its rural status highly dependent on agriculture as its primary source of business. The major employers such as the hospital, school system and government have experienced retrenchment in its jobs over the last 12 months. Unemployment for the target service area (July 2011) was 9.9%, up from the previous reported rates of 9.5% July 2010. The number of individuals below 200% of poverty is 40.3% compared to the U.S. at 29.6%.

This rural population continues to suffer from some of the highest death and disease rates in the state of Louisiana which as a state is ranked 50th in the US in health indicators. The high incidence rates of diabetes, heart disease, cancer, obesity, children living in poverty continue since the poverty rate has remained significant which contributes to the overall health status. The percentage of uninsured continues to grow and exceeds national norms.

The need for increased access to primary care services which includes primary oral care continues to be significant to the well-being and improved health status of the community. Barriers to care continue to include lack of any public transportation system especially to gain access to the FQHC and local area medical/dental providers closing panels to any new Medicaid patients as well as no providers accepting the un-insured into their medical or dental practices. The target area is considered a dental and medical HIPSA shortage area for primary care services.

Need:

Our children’s overall health status is compromised by a series of lifestyle and economic factors in this area of the state. The State is ranked 48th in children living in poverty and is ranked as one of the unhealthiest states in the country (49th) by the United Health Foundation (UHF). Poor access to healthy foods due to the lower socioeconomic issues contributes to the early onset of chronic disease in children such as obesity and hypertension.

This rural area has high rate of unemployment, and lacks the people, money and skills necessary to support community resources that are necessary for the development of healthy children. There are fewer health promotion programs in this rural area and barriers include lack of transportation, shortage of dentists, as well as the inclusions of dental care within existing health clinics or in school based health centers. It is well documented that children living in rural areas do not receive the same level of preventive health care such as dental care and have greater long-term health problems and less access to dental care than their urban counterparts.

In addition the circle of poverty continues in the adult population with low levels of health literacy (only 69% of our residents complete high school and less than 10% have college degrees). Low educational attainment has important implications for health such that those with lower education levels experience higher levels of health problems. The issue of improved oral health is also impacted with this low educational level attainment and the value of good dental care having been absent in the adult’s life is often overlooked in the child’s life.

In the area of Oral health, which is the focus area for this project, dental caries is reported common among all childhood age groups. Many parents use the emergency rooms as the primary source for their children’s dental care due to inadequate access to affordable oral health services. Dental pain is often the presenting symptom with child describing the pain as “water even hurts my teeth”.

Obtaining dental health care services has been an increasing challenge and the ability to educate and influence early prevention has been almost nonexistent. Louisiana and this specific target area follows the national statistics reported by the Centers for Disease Control and Prevention recently reporting a 15.2% increase in caries among children ages 2 through 5 years receiving Medicaid. The contrast between those living below or at poverty level as compared to above the poverty level is also stark – nearly 30% of poor preschool children have untreated dental caries compared to only 6% of preschool children from families above 300 percent of the federal poverty level. Louisiana is consistently ranked at or near the bottom in all health determinants including oral health.

At 23.5%, the rate of uninsurance in our region is almost twice as high as the state’s average. More than 30% of adults report not having a primary source of medical care and an even greater percentage have no access to dental care. Children in Louisiana covered under the LA Medicaid program continue to have access problems in receiving a mandated benefit. This low utilization rates of dental services among Medicaid eligible families is the excessive difficulty in finding a dentist willing to treat them. Medicaid eligible children in LA are 3-5 times more likely to have untreated dental decay than non-eligible. In Louisiana only 1% of the Louisiana Medicaid budget is spent on dentistry as compared to a national rate of more than 5%.

After intensive evaluation of the problem in this parish the project prioritized four urgent needs in this population:

- A need to target children at an earlier age with oral prevention strategies.
- A need for intensive oral health education about the importance of oral health screening and referral among medical and allied healthcare providers
- A need to expand oral health education beyond parents to care providers as many vulnerable children are raised by multiple individuals.
- A need to increase the numbers of dentists able and/or willing to treat children.

These priorities were met through early intervention in the primary care setting during routine medical visits where, together with the care giver and the providers, oral health could potentially be influenced through education and demonstration. The intervention included screening exams and the application of evidenced based fluoride varnish in infants, toddlers and children up to age six.

Program Services

Focus Areas
Oral Health

Target Population
Pre-school children
School aged children – elementary

Description:

"Building Tomorrow's Smiles" provided for early intervention in the form of oral screening exams and fluoride varnish applications for infants, toddlers and children up to age six. This group of children were significantly underserved and generally outside the age range of patients seen by dentists. In addition, education was provided to the parents and care-givers on the importance of oral health for primary teeth, emphasizing that through the application of fluoride varnish as a preventive measure dental caries can be reduced.

Getting children linked to a dental home was also an additional objective in this grant. This population experienced access barriers to regular dental care not only due to age but also due to their status as a LA Medicaid insured patient. The dental provider community often restricts their practices to the commercial insured or private pay types of patients. A dental home was provided through the FQHC dental program, which serves schools through their mobile dental unit and has a school based health center.

The grant also focused on development of professional education for healthcare providers and staff in a primary care delivery setting. This emphasized that oral health can be influenced by medical and allied health professionals, and that children can receive preventive care through the primary care venue and not just by a dental professional.

Role of Consortium Partners:

The grant program had a very active consortium. This was made up of LA State University School of Dentistry, two federally qualified community health centers located in other rural areas of the state (Morehouse CHC and Iberia Comprehensive CHC) and the Pointe Coupee Parish School system.

Relationships were established in the beginning of the project and continued to solidify throughout the grant period. Each consortium partner played an active role in the program:

- Innis community Health Center (INCHC) acted as the grantee and fiscal agent for the grant. A program Coordinator was identified and staffed for the grant with 1.0 FTE. INCHC coordinated the oral health training which accompanied the establishment of an oral health focus within the primary care visit. The Coordinator helped plan and staff the health screening events.
- The LSU School of Dentistry provided a Pediatric Dentist to conduct the onsite training sessions focusing on children's oral health assessment and application of fluoride varnish. Periodically throughout the year, educational sessions were held on site of the additional consortium partner FQHCs that participated in this grant.
- The Pointe Coupee Parish School System worked with INCHC to allow for the Coordinator to work with the various teachers to get parental permission for the application fluoride varnish through the school based health center. In addition, INCHC also participated in a community wide health screening event sponsored by "FUEL," a local organization reaching out to the community. This health fair event offered dental screening as well as the application of fluoride varnish on the children's teeth during this health fair. It also provided for oral health education of the community attendees. During the school year, the Coordinator worked with local Headstart personnel within the School system to attend the Parents Advisory meetings to educate this population regarding improving oral health status of their children.

Outcomes

Data collected from the evaluations included: the application of 319 fluoride varnish treatments. Further detail on the report of evaluation will be forthcoming.

Challenges & Innovative Solutions

Challenges in this grant centered on gaining access to the children in a well-child visit in a primary care medical setting. It became very clear that compliance with scheduled appointments for the well child visits in the three FQHC settings was poor. High no-show rates to these appointments, especially in rural areas, continues to be a significant challenge to organizations dealing with this impoverished population. Re-evaluating the approach to gain access to these children in need was done early on in the project period. The goal to reach 200 children was still a reasonable goal if the approach to access could be redefined. Further planning led to the involvement of the INCHC's school-based health center. INCHC implemented inventions in the school-based health center in place of attempting these interventions in the primary care clinic, viewing this as a good comparison with the other two consortium partner FQHCs to see if school-based access proved more successful.

Sustainability

On-going Services and Activities:

The Innis Community Health Center is planning on continuing its approach to provide the children at risk with the preventive strategy of fluoride varnish application. The costs of the varnish will be integrated within the FQHC's current dental clinic program. The School Based Health Center will continue to be the portal in which access to these children is best achieved. The education of staff within the primary medical setting will continue to be done with the use of video completed with Dr. Townsend the Pediatric LSU Dental Faculty.

The consortium partners, the other 2 FQHC's, are also planning to incorporate this varnish program into their school based health center programs. Innis CHC will continue to seek out additional grant funds and in-kind donations to support the provision of preventive oral health care services to the children in the community. .

Sustained Impact:

The long term benefit of this project as now incorporated into our school based health center program is that we are impacting directly the oral health status of our children in the community. In addition we are able to steer them into a dental home within our federally qualified community health center dental program. Integration of the school based health clinic with an oral health improvement campaign is an ideal fit. There are numerous opportunities for increased education not only to providers but also to students, guardians and parents and teachers. In the grantee host community, the integration of Headstart into the main school system allowed for increased access to the children in this vulnerable age group. Many federal requirements exist in the Headstart program for parents to be involved and attend sessions at the school and so access to them in an educational session became easily accessible due to the strong working relationship with the Headstart Program Coordinator in the Pointe Coupee Parish School system.

Integration of this program with our current approach of providing dental care to the children through our mobile dental unit is also tremendous. Ultimately the organization believes that incorporation of the oral health assessment within the primary medical visit no matter what setting it is in whether primary medical clinic or school based health center visits. In addition we believe through this program the awareness of oral health early preventive care with fluoride varnish has increased and through the receipt of our newest oral health grant for 2011 we will continue to focus on impacting the status of oral health in our children for the community.

Throughout this project period, relationships among consortium members have strengthened and will continue to remain strong for future projects together. Collaboration with the state School of Dentistry opened doors for future collaborative projects. Even though the idea of a student placement in a rural rotation seemed out of the question with the Dean of the School due to faculty constraints the communication path is open for additional other avenues in which to collaborate. Through the consulting services of the LSU Pediatric Dept. within the Dental School, a solid professional relationship has begun and a new appreciation of each other's focus in improving the oral health status of children in our state has grown stronger.

Implications for Other Communities

The Innis Community Health Center, Inc. is a member of the LA Primary Care Association and has communicated regarding this project to its members and perhaps in the future more of the other FQHCs may do a project and initiate this approach with prevention within their primary care or school based health programs.

The lessons learned on how to gain access to children no matter where you can reach out to them is important. Creativity of approach was accomplished by INCHC taking the program forward in another access venue. It was through this action that the organization was able to reach out to 319 children and exceed the target goal of 200. Oral health Education was also offered to Head start families who have the youngest of the vulnerable population. Only time will tell when children are seen through the years in our dental program if the rate of caries has declined.

LOUISIANA

Louisiana Tech University

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12685 |
| Grantee Organization | Louisiana Tech University |
| Organization Type | School and Faith Based |
| Address | 251 Adams Blvd Ruston, LA 71272 |
| Grantee organization website | N/A |
| Primary Contact Information | Dr. Mary Murimi Professor of Nutrition and Dietetics Phone number: 318-257-3026 Fax number: 318-257-4014 murimi@latech.edu |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---------------------------------------|--------------------------|----------------------------|
| Fellowship Baptist Church | Simsboro / Lincoln/ LA | Church |
| Greater Pleasant Grove Baptist Church | Dubach/ Lincoln/ LA | Church |
| St. Matthew Baptist Church | Athens/ LA/Claiborne/ LA | Church |
| Dubach High School | Dubach/ Lincoln/ LA | School |

Community Characteristics

Area:
 Dubach/ Lincoln Parish (county)
 Simsboro/ Lincoln Parish (county)
 Athens/ Claiborne Parish (county)

Community description:
 Lincoln and Claiborne parishes are rural parishes in north Louisiana designated by HRSA as "Medically Underserved Areas" with populations of 41,857(41% African-American) and 16,210 (48.4% African-American) respectively. Despite the presence of two higher education institutions, Grambling State University and Louisiana Tech University, about 20% of Lincoln parish population and 35% of Claiborne parish population do not have a high school diploma. Additionally, 21.5% of people all ages in Lincoln parish and 23.4% of people of all ages in Claiborne live below the poverty level. The leading causes of death in Lincoln and Claiborne parishes are: 1.) Heart disease (55% and 56%) 2.) Stroke (28% and 9%) and 3.) Diabetes (19% and 10%). They are due to diet and inactivity.

Need:
 The purpose of DIATECH (Diabetes Intervention to Enhance Total Community Health) outreach project was to reduce the incidence and prevalence of diabetes and related risk factors by increasing the participant's self-efficacy in the control and management of diabetes and its related complication among African-American adults residing in Lincoln and Claiborne Parishes in Louisiana. Lincoln and Claiborne Parishes healthcare providers concentrate on emergency medicine and primary care. Currently, very limited preventive healthcare is offered in the parish, especially in rural settings. In addition, assessment and referral services are inadequate for communities in rural settings due to lack of clear communication lines between healthcare providers and the low income population.

The target population has a history of mistrust of treatment within the health care systems in the area. This faith based project served the target population that is at risk for lifestyle related behavioral diseases through preventive services and health education.

Program Services

Focus Areas

Community Health Workers/Promotoras
Health Education and Promotion
Physical Fitness and Nutrition
School Health
Other: **

Target Population

School aged children - teens
Adults
Elderly
Caucasians
African Americans
Uninsured
Underinsured

**Diabetes prevention through improved dietary pattern and increased physical activity. The diabetes prevention project mirrored the Diabetes Prevention Program (DPP) curriculum, and involved screening for risk factors and point of testing counseling related to the identified risk factors. The education included the importance of taking medication as prescribed and how to get the best care by informing the physician of your progress and asking relevant questions.

Description:

The target population was a local high school and African American churches in the area. Individuals in the community were screened for risk factors for heart diseases, diabetes and obesity every 6 months (March/April and September/October) for the three years of the program. The risk factors assessed included weight status, lipid profile, blood pressure, and dietary habits and physical activity. All screened participants were encouraged to participate with their church or school for exercise and educational meetings. Community Health Mentors (CHM) who were selected by the respective sites were trained in leading an exercise and nutrition group with 10 -15 participants. Sessions were held at Louisiana Tech with physical fitness experts and professors in Human Ecology who teach dietetics to provide training for the mentors in a day long session. Exercise groups led by CHM, who documented attendance, met several times per week with their group at the church or school. In addition to leading the exercise, the mentors also provided a 10 – 15 minute 'mini -talk 'on a topic that was part of the Diabetes Prevention Program (DPP) curriculum outlined in the program. Monthly meetings (one (1) meeting per month in the school and the three churches) were led by the project director. The monthly meetings, which were an hour and a half, consisted of presenting information for the 'mini-talks' the mentors would cover in their group weekly meetings, provide diabetes and nutrition education, cooking demonstrations (healthier alternatives to culturally favorite foods), and serving a healthy meal for the participants at the end of the meetings. Approximately seventy-five participants attended the monthly meetings held at the school and churches.

Role of Consortium Partners:

The Church leaders and school administrators played a pivotal role in the development of the proposal as well as ongoing input. The willingness of the partners to volunteer in-kind support signifies a community ready for health solutions. The Consortium exists specifically to provide community input into the day-to-day operation of the health outreach project. The Consortium is the link between the communities and the outreach project, providing meeting facilities and encouraging participation. All the consortium partners were part of the advisory board that met twice a year.

There were a total of four (4) Consortium Partners as follows:

1. Greater Pleasant Grove Baptist Church in Dubach: The church provided the space for screening participants every six months and provided transportation when needed. The church announced the program and screening times in their church bulletins and recruited community members to attend the screening.
2. Fellowship Baptist Church in Simsboro: The church provided the space for screening participants every six months and provided transportation when needed. The church announced the program and screening times in their church bulletins and recruited community members to attend the screening.

3. St. Mathew Baptist Church in Athens: The church provided the space for screening participants every six months and provided transportation when needed. The church announced the program and screening times in their church bulletins and recruited community members to attend the screening.
4. Dubach High School: Dubach high School provided space and time from their schedule to conduct the screening for their students and people in the community. Teachers helped filling out the questionnaires during class time and collected consent forms from the students and their parents.

Outcomes

This program conducted two screenings per grant year beginning in October 2009. In addition to the screenings, each facility; Fellowship Baptist Church, Greater Pleasant Grove Baptist Church, St. Matthew Baptist Church and Dubach High School, the Mentors led weekly exercises and once per month an educational meeting was held. A total of two hundred seventy-two (272) participants were screened during this program; one hundred sixty-two (162) adults and one hundred ten (110) students ages 11-18. During the 3 year grant period, screenings were held in the spring (March/April) and fall (September/October) of each year (first screening completed in October 2009 and final screening completed in April 2012). The total number of screening encounters (an individual may have been screened multiple times during the program period) is six hundred ninety (690). Individual participants were screened for obesity, blood sugar, hypertension, and cholesterol, dietary and physical activity and dietary habits. Before taking any baseline screening measurements, the research team explained the program and screening procedures to all participants and obtained informed consent for participation. Demographics such as age, gender, income level and level of education were collected on all participants. Body weight was measured using a calibrated digital scale with participants wearing light indoor clothing and no shoes and body mass index (BMI) was calculated. Waist circumference was measured using guidelines of the National Obesity Expert Panel Report. Blood pressure readings were taken in accordance with American Health Association (AHA) recommendations by the nurse. The techniques used for glycemic control and lipid measurements are well established. A fasting capillary glucose greater than or equal to 140 mg/dl was used (has entrance criteria for referral. Approximately fifty percent of the adults who were screened more than once (62 participants) demonstrated a decrease in weight and waist circumference. This decrease was documented over the three year program period which began with screening in September, 2009 and ended April, 2012. The remaining participants showed a modest increase of approximately (2.7) pounds over three years, which is equivalent to maintenance. During this same time period, there was also a reduction in total cholesterol and glucose values in approximately 50% of the returning participants. Over thirty (30) percent showed a decrease in blood pressure; both systolic and diastolic readings.

As reported by the participants in monthly meetings, they significantly reduced the amount of fried food prepared and consumed and the majority of clients replaced white rice with brown rice and white bread with whole grain or wheat bread. Each Wednesday evening after midweek service, a meal is prepared and served at the church. The community health mentors (CHM) reported a change to a healthier offering of food selection for meals served at the churches for 'potluck'. The change to a more nutritious option occurred over the grant period. The first change, according to the CHM, occurred in November 2009 after the grant project director, Dr. Mary Murimi, was asked to come and give feedback and recommendations for the meal prepared by the members of the church. In January 2010 one of the other churches resolved to begin serving nutritious meals.

When each participant was given an opportunity to discuss what they had gained from the study over the three (3) years of the program during the March 2012 educational meeting, participants consistently said they felt empowered to deal more effectively with issues of diabetes prevention and management, hypertension. In addition they reported that they felt better equipped to interact with health care providers because they know their numbers and what they mean due to the education delivered through the program.

Although the student data has not been fully analyzed, the level of activity through planned and scheduled exercise increased during the program.

Challenges & Innovative Solutions

One of the challenges was lack of transportation for the community participants to attend exercise and monthly meetings. The church leaders and/or Mentor provided transportation to their members as needed, but it was not always convenient for the participants. Schedule conflicts with the school programs was at times a challenge

Sustainability

On-going Services and Activities:

Because there are currently other organizations in the communities that provide free health screenings and information to the population served by the grant (Health Hut – mobile clinic), there are no plans to continue these services and activities.

Sustained Impact:

All participating churches developed a 'Wellness' Ministry implementing activities and principals from the program. The Community Health Mentors (CHMs) have been trained and are utilized to continue exercise programs in the churches and school. A Wellness Ministry document developed with the help of the Project Coordinator provides the churches with a written program that includes the role and purpose, duties and responsibilities and programs as well as monthly activities. The document also provides a list of available community resources and the services provided (Fire Department provide free session on CPR; Extension Service available for gardening tips and soil evaluations, etc.) The churches are including a line in their budget for exercise equipment and garden tools and supplies.

The main sustained impact of this project is change of dietary behavior and establishment of wellness in the churches. The trained mentors will continue to be a resource to the community long after the project period. The participating churches have formed networking relationships.

Implications for Other Communities

This program is a model of best practices, in that it translates the principles of the evidence- based Diabetes Prevention Program to the participants through a culturally appropriate approach. The use of participatory approach allowed participants to set their own measurable goals from the beginning of the program. Training the mentors will help in sustainability of the project as the mentors are already leaders in their communities. The participating churches incorporated wellness into the existing ministries making wellness in the churches sustainable and self-sufficient. Therefore the maintenance part of the program does not necessarily need external funding. In conclusion, the parts that make this program best practice is use of evidence- based practice, use of community mentors, working with the churches, and emphasis on behavior change.

MAINE

Medical Care Development, Inc.

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12692 |
| Grantee Organization | Medical Care Development, Inc. |
| Organization Type | Non-profit health agency |
| Address | 11 Parkwood Drive, Augusta, Maine 04330 |
| Grantee organization website | N/A |
| Primary Contact Information | Margaret Gradie Project Director Phone number: 207-622-7566 ext. 298 Fax number: 207-620-8283 mgradie@mcd.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,336 May 2010 to April 2011: \$124,944 May 2011 to April 2012: \$99,978 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|-----------------------------------|---|
| The State of Maine Office of Employee Health and Benefits (SOM) | Augusta, Kennebec, Maine | Employer- oversees health benefits for employees, dependents and early retirees |
| Anthem Blue Cross Blue Shield of Maine (BC/BS) | South Portland, Cumberland, Maine | Private health insurance plan.- Third Party Administrator for the SOM. |
| Maine Municipal Association – Employees Health Trust (MMEHT) | Augusta, Kennebec, Maine | Non-profit organization providing health insurance to Maine municipal employees |
| Medical Care Development, Inc (MCD) | Augusta, Kennebec, Maine | Employer-Non-profit public health agency |

Community Characteristics

Area:

The service area for this proposed project covers all of the 16 counties in Maine, which include 39 designated health professional shortage areas (HPSA).

Community description:

In Maine, the percentage of population living in rural areas is double the national average making it the most rural state east of the Mississippi. Approximately 42 percent of the population, almost half a million people, live in rural parts of the state. Travel from the most remote northern part of the state to the lower, more populated takes approximately six hours. Insured, as well as nonelderly uninsured (9%) and Medicare (20%) populations, need to overcome this barrier to access specialty health care services.

Need:

In the ten-year period between 1994 and 2004, the annual incidence of diabetes increased by 23 percent, while the prevalence increased by 62 percent. In 2005 the Maine CDC, Diabetes Prevention, and Control Program estimated that about 7.4 percent of the adult population in Maine had diabetes. That meant more than 77,000 people, a figure that has been increasing each year since 2000, a trend that the CDC says will continue through at least 2020.

One would assume that diabetes self-management education (DSME) would be very popular in light of the inconvenience geographic distances often pose. Surprisingly, this is not the case. In September 2006, the Maine Department of Health and Human Services, Diabetes, Center for Disease Control and Prevention published its Diabetes Self- Management Education Barrier Study. This report found that, although the estimated numbers of persons in Maine with diabetes had tripled since 1982, only “one in four people newly diagnosed attend a Maine DSME program and less than 3 percent of all Maine adults with diabetes participate in any given year”. The 2006 Maine CDC study went on to document the barriers to DSME participation in Maine. Barriers included: (i) an aversion to group classes, (ii) lack of perceived need for the information, (iii) group sessions offered at times/dates that are not convenient, (iv) transportation challenges, and (v) lack of information about the program.

Program Services

Focus Areas

Chronic Disease Management: Cardiovascular
 Chronic Disease Management: Diabetes

Target Population

Adults
 Caucasians
 Native Americans

Description:

In response to the 2006 MeDPCP barrier study, Medical Care Development, Inc. (MCD) developed the Telephonic Diabetes Education and Support® (TDES®) Program. The program concept was that the convenience and flexibility afforded by a telephone-based intervention would significantly increase participation in DSME and improve health outcomes. TDES® is offered through a partnership with employers and their insurance plan to support an incentive of waived pharmacy co-pays for actively engaged enrollees and access to calls during work time.

Each January/February, the employer's health plan mails TDES® program invitations to eligible members over 18 (not on Medicare) being treated for Type 1, Type 2 diabetes and/or Prediabetes, who have been identified through medical claims analysis. Additional promotional activities continue all year as members can complete and submit application/authorization forms to MCD on an ongoing basis. MCD processes these applications, gains physician approval, and forwards the application packet to the self-selected DSME program for scheduling the first in-person contact. Enrollment starts at this contact when diabetes educators complete the Pre-assessment, and works with the participant to develop and carry out an individual diabetes education plan via subsequent 11 monthly telephone contacts. Self-reported outcomes data and satisfaction surveys from participants who complete at least 6 contacts and the Post-assessments are used for program evaluation.

The results demonstrated that TDES® is an effective methodology for increasing access to Diabetes Self-Management Education (DSME) with improved clinical health outcomes and increased use of preventive health care. Participation was indeed 3 to 4 times annual participation rates in traditional services with an equal number of male and females. Participants self-reported increased knowledge and confidence in their self-care as well as medication adherence. Moreover, an ROI conducted by an outside consultant in 2008 showed an average COST SAVINGS of \$1300/Participant/year as compared to counterparts who did not participate in the program. The subsequent ROI in 2009 found a flat cost difference with significantly HIGHER Medication Adherence and Use of Preventative Care.

The Outreach grant helped MCD expand and enhance TDES® to serve more people with diabetes and further improve outcomes by broadening the scope of the TDES® intervention to persons with diabetes and hypertension and/or high cholesterol. This new program, named TDES® /+Cardiovascular Disease (TDES® /+CVD) also offered means to learn more about long- term behavior change using a simple tool for counting barriers to individual health action plans.

Role of Consortium Partners:

A consortium was developed among employers and others who were committed to seeing the intervention expanded and enhanced. Members included the State of Maine Office of Employee Health and Benefits, Maine Municipal Employees Health Trust, and Medical Care Development, and Anthem Blue Cross/Blue Shield of Maine. Each consortium member offered the expanded services to their employees/health plan members. MCD participated as a member filling both roles as an employer and grantee. Members then critiqued outcomes to assure a robust evaluation enabled both local sustainability and replication in other areas. Subsequently Consortium members integrated TDES® /+CVD into their ongoing employee health benefit plan.

Outcomes

Eighteen months following program start-up, a total of 191 members or about 12% of the original 1,587 eligible individuals, enrolled in the new TDES[®]+CVD program. This rate is four times the 3% of Maine persons reported participating in diabetes education in a year (2006 Maine Barrier Study). A total of 94 participants completed the full 12-month program, 87 individuals remain enrolled but had not yet completed, two (2) enrollees became ineligible and had to leave the program, and only 10 did not complete the program for other reasons. Enrollment continues to be notable in the equal proportions of men and women in contrast to national programs in which women are typically more likely to enroll.

- PARTICIPANT HIGHLIGHTS (n=94): 46% Male, 54% Female 86% Active employees, 14% Early-retirees, avg. age 54.7

Most of the data presented reflects outcomes from the 94 participants who completed 6 or more (of all 12) contacts and their Post-Assessment interview. This number (n) supported statistical analyses and is representative of the likely outcomes documented for this report.

KEY FINDING: Outcomes for State of Maine (SOM) members who completed the TDES[®]+CVD program suggest that participants experienced improved health and higher productivity while SOM should experience reduced overall costs for participants compared to eligible non-participants.

CLINICAL OUTCOMES

- a) Improved Health - A statistically significant number of participants met the clinical goal for LDL cholesterol. Of those who did not reach their health goals, significant improvements were made in two key health measures, HbA1c, and BMI with positive changes observed in the remaining clinical measures, excepting Triglyceride levels. National studies suggest these improvements may result in an overall savings of 27% from baseline (Fonseca, 2006). Savings rates from national studies are comparable to the State of Maine's past health plan savings of more than \$100 per member per month on average (*unpublished data*).
- b) Reduced Hospitalization Costs-The number of reported in patient hospital days for diabetes-related problems went down from 11 to 6 and from 24 to 18 Emergency Care Visits among all participants. This represents a new total of savings of up to \$60,448 based on national expense rates in published reports.

NON-CLINICAL OUTCOMES

- c) Knowledge significantly increased in nine (9) of the 10 educational topics for diabetes and CVD.
- d) Self-Efficacy significantly improved – Participants are more confident that they can manage their conditions.
- e) Inroads were made in overcoming life's real barriers to meeting individual health goals- participants reported an overall 44% decrease by the end of their program services. Although the total number of barriers decreased, subtotals for issues related to coping with multiple diagnoses, cost/insurance and depression/distress/grief remained high.
- f) Participant Satisfaction was very high and all who returned surveys (46%) would recommend this program to family members, friends, and coworkers.

Only the employer can document actual cost savings, but based on national data there is every reason to believe that TDES[®]+CVD works for participating members and can save employers money.

Challenges & Innovative Solutions

Outreach represented a challenge because confidential information on eligibility for the program is held by the employers' Third Party Health Plan Administrators. Mailings and their contents were not under our direct control. The TDES[®] program staff worked hard to listen to the needs of our partners and make available to them attractive, informative materials that followed health literacy guidelines. Ultimately, we focused on word-of-mouth (peer-to-peer) as the most effective means of communication and cultivated participants who had successfully completed the program and were willing to speak to their fellow employees about its value. Another innovative solution was to recognize that pharmacists also know which of their customers are eligible for the program and ask them to include information on TDES[®] when they fill a prescription for those customers. The important role pharmacists could play was pointed out by our partners during the development of our communications plan.

A second challenge was changes in leadership at the organizations participating in the consortium. New personnel did not necessarily share the commitment to the program of their predecessors. It is important that partnerships are institutionalized at several levels of each organization and are not reliant on personal relationships, as important as personal relationships are.

Finally, the business model that we envisioned at the start of the project proved to be insufficient. A more comprehensive plan is needed to distinguish our program from telephonic services offered by major insurers that might appear similar, but differ substantially in fact. Direct comparison of outcomes is impossible as we do not have access to their data which makes effective marketing plans expensive, at best. We also need to establish a means to price the service reasonably for small employers such as group purchasing and/or through a supportive underwriter/insurance broker. We have learned, however, that for employers above a certain size a case can be made for inclusion of this service in the menu of options available to employees dependent on how the terms of the Affordable Care Act are implemented.

Sustainability

On-going Services and Activities:

MCD offers TDES[®] services to employers/clients for a range of management fees. MCD is seeking to expand services for each current client as well as new employers with a number of activities such as:

- Demonstrating a quality, credible evaluation process;
- Optimizing participant and partner satisfaction;
- Utilizing the translational quality of the TDES[®] program to address other chronic conditions;
- Utilizing the translational quality of the TDES[®] program to address other populations and settings; and
- Increasing revenue to support sustainability by licensing and disseminating the TDES[®] program outside of Maine.
- Continue to invest in marketing strategies
- Establishing the program as one of the CDC's evidence based programs.

Sustained Impact:

Sustainability of service delivery was an important consideration for TDES[®] staff all through the project and we anticipate we will be able to generate sufficient income to continue services for the near future. It is clear that the project has had additional impact beyond the participants in the program. We have seen institutional change in our consortium partners in their approach to wellness. Nearly all diabetes educators in Maine have been given access to skills and knowledge relating to increasing self-efficacy of their clients and have increased awareness of the importance of evaluation in order to improve their programs. A stated goal of the project was to increase the evaluation capacity at Medical Care Development and that has certainly been the case. Staff has improved computer and analytic skills enabling us to provide our partners with solid evidence of the effectiveness of the TDES[®] program.

Implications for Other Communities

MCD's Telephonic Diabetes Education & Support[®] Program (TDES[®]), DSME via a telephonic modality, was deemed a success with participation rates 3 to 4 times participation in traditional DSME programs. Furthermore, outcomes found improved health and health care with decreased medical costs.

In some states, the definition of Telemedicine excludes services provided by telephone. Agencies contemplating telephonic service delivery of services should be aware of legislation and reimbursement policies that affect the definition of telemedicine and their staff. At the same time, most residents of rural areas continue to find telephone service the most reliable and convenient means for accessing information and assistance. Employers, especially those with multiple work sites, are starting to recognize the value of "local" services as compared to standard health plan telephonic care management services. Moreover, satisfied participants complete the full program and ask for extended services.

Communities who invest in employee health services, would find the TDES[®] model easily replicable beyond Maine. MCD staff is available to provide training and consultation on how to implement the model.

MAINE

St. Andrews Hospital

Organizational Information

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|------------------------------|--|
| Grant Number | D04RH12754 |
| Grantee Organization | St. Andrews Hospital |
| Organization Type | School Based Health Center |
| Address | P.O. Box 417, 6 St. Andrews Lane, Boothbay Harbor, ME 04538 |
| Grantee organization website | www.lchcare.org |
| Primary Contact Information | Catherine K Cole Program Director Phone number: 207-563-4830 Fax number: 207-563-2344 cathy.cole@lchcare.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$135,756 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$120,211 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|--------------------------------------|---|
| AOS 98 Rocky Channels School System (formerly named Boothbay Region School District) | Boothbay/Lincoln County/Maine | School System |
| Lincoln Medical Partners—Pediatrics | Damariscotta/Lincoln County/Maine | Provider Practice |
| MaineHealth/Lincoln County Healthcare CarePartners | Damariscotta/Lincoln County/Maine | Healthcare Access Partnership |
| MaineHealth Mental Health Integration Program | Portland/Cumberland County/Maine | Integrated Healthcare System |
| Miles Memorial Hospital | Damariscotta/Lincoln County/Maine | Hospital/Provider Practices |
| Spring Harbor Hospital | Portland/Cumberland County/Maine | Hospital, Inpatient & Outpatient Mental Health |
| St. Andrews Hospital | Boothbay Harbor/Lincoln County/Maine | Critical Access Hospital |

Community Characteristics

Area:

The coverage area for this Outreach grant is Lincoln County, Maine in the Boothbay Peninsula Region which includes the towns of Boothbay, Boothbay Harbor, Edgecomb, Georgetown, Southport, and Westport.

Community description:

Located on a peninsula in rural Maine, the Boothbay Region is home to slightly more than 7,000 year-round residents. A highly rural area located on the coast, its key sources of employment are tourism, fishing, lobstering and construction. Due to the seasonal nature of these jobs, unemployment for the region is higher than the state average. These are also industries which have seen significant economic downturn in the past 3-5 years. Another factor contributing to the poverty level is the high cost of living. Being on the coast, the Boothbay Region is a desirable location for second home buyers and seasonal residents. This has resulted in higher than average housing costs and tax rates which present affordability challenges for year-round residents. The use of the free and reduced lunch program has nearly doubled at each of the local schools and tripled at one. Nearly 50% of children in the area are eligible for Medicaid or have no insurance coverage.

Need:

The focus of this grant program was to improve the physical and mental health of students in grades K-12 in the Boothbay Peninsula Region School System, AOS 98 Rocky Channels School District, through collaborative and integrated approaches to the delivery of school based care. Through shared staffing, contractual agreements and collaboration, the Boothbay Region School Based Health Center would expand capacity to address primary care needs of uninsured and underinsured students, and increase student access to integrated mental health services. Mental health services are limited in this rural community with no access to child psychiatric care. Accessing child psychiatric services is a challenge as there are no local services with closest services being over an hour one-way trip away. Additional challenges are that there is no access to public transportation, and child/adolescent mental health services state-wide are very limited.

Program Services

Focus Areas

Access: Primary Care
Behavioral/Mental Health
Children's Health
School Health

Target Population

School aged children - elementary
School aged children - teens
Adults
Pregnant Women (Teens)
Caucasians
African Americans
Latinos
Native Americans
Uninsured
Underinsured
Other: Asian

Description:

The grant activities were coordinated and implemented through St. Andrews Hospital with medical and mental health care provided by Lincoln Medical Partners with additional consulting and financial support from consortium partners. The Outreach grant supported the implementation of the following services and activities through the Boothbay Region School Based Health Center (SBHC):

- 1) Expansion of school-based Licensed Clinical Social Worker (LCSW) services to provide daily access to behavioral health services which include mental health counseling, substance abuse counseling and support groups for school-aged children and adolescents. A psychiatric nurse practitioner provided medication management services and consultation for students with complex mental health disorders. Added a medical director position to oversee the School Based Health Center's medical and mental health services.
- 2) Engaged high school students in a student-led Advisory Board which does outreach within the school and implements health promotion activities such as health fairs, drug awareness programs, promotion of physical activity and healthy nutrition, and anti-tobacco education.
- 3) Expanded hours of the School Based Health Center's nurse practitioner so that students would have daily access to comprehensive health care services such as acute illness visits, chronic illness management, preventive care, lab tests, reproductive health care services and health education. The Nurse Practitioner also provided support in linking parents/guardians with primary care services if their child did not have a primary care provider.

Role of Consortium Partners:

Consortium members contributed in many ways to the planning and implementation of services and activities of the Boothbay Region School Based Health Center.

- St. Andrews Hospital acted as grantee and fiscal agent for the grant contracting with consortium members to provide SBHC services and staffing. St. Andrews Hospital provided the majority of medical and office equipment to set-up the SBHC.
- Lincoln Medical Partners Pediatrics provided the services of the Medical Director who oversaw the medical and mental health services of the SBHC as well as provided on-site medical care and consultation.
- AOS 98 Rocky Channels School System provided financial support to the project through partial funding of the Nurse Practitioner. AOS 98 also provided the on-site facilities which included office, clinic and therapy rooms. Administration and staff supported the activities of the SBHC and participated in planning of health oriented events such as an annual health fair.

The AOS 98 School Nurse collaborated with SBHC staff to support appropriate referrals for service and ease of access to services for students.

- Miles Memorial Hospital's subsidiary Lincoln Medical Partners (LMP) contracted with St. Andrews Hospital to provide services of Nurse Practitioner, LCSW and Office Assistant. LMP's Physician Billing Department worked with the SBHC to set-up a billing process and provides insurance billing services at no charge.
- MaineHealth/Lincoln County Healthcare CarePartners provided support to parents/guardians of AOS 98 students enrolling in Medicaid services. If it was found that a student did not qualify for services, CarePartners assisted parents/guardians in setting up an income-based discount for services, if qualified.
- MaineHealth Mental Health Integration Program provided guidance in setting up a model for integrated medical and mental health services. The Program also provides ongoing training.
- Spring Harbor Hospital, through a contract agreement with St. Andrews Hospital, provided the part-time services of a psychiatric nurse practitioner who worked with the SBHC's LCSW in consulting on the care of students with complex mental health needs.

Outcomes

Evaluation data was collected in the areas of utilization, clinical outcomes and student satisfaction. Targeted efforts to market the SBHC services were partially responsible for increased enrollment and use of services. A focused effort to update immunization records and verify accuracy of records with primary care providers and the Maine immunization tracking system have had a significant impact on increasing immunization rates. Highlights of the evaluation outcomes are listed below.

Enrollment in SBHC services increased by 15% between school years 2009/10 and 2010/11; increased by 35% between 2010/11 and 2011/12. Visits for medical services provided by nurse practitioner increased by 130% between the first and second year of implementation; based on numbers to-date when annualized, an additional 36% increase is expected for the third year. Visits for mental health services provided by LCSW have been at 100% capacity for the last two years. Without additional social worker coverage, these services cannot increase. 100% of students without a primary medical home have been linked with a primary care provider.

Student satisfaction surveys for the past two years have shown that 100% of students reported "satisfied or very satisfied" with SBHC staff and services received.

As of Dec 2011, 81% of identified students missing immunizations (primarily students on Medicaid or with no insurance coverage) have been brought up to date with state recommended immunizations through administration of vaccine at the SBHC.

Challenges & Innovative Solutions

The SBHC has experienced a few challenges during implementation and the following describes those challenges and solutions to overcoming them.

The first challenge was confusion about the difference between the SBHC and primary care provider. AOS 98 staff and student's parent/guardian were uncertain why or how to use the services of the SBHC. The SBHC Program Director and staff worked with St. Andrews Hospital's marketing department to create clear messages and informational materials to clarify the services and role of the SBHC in their child's healthcare. The message was delivered in multiple ways for the greatest coverage and impact. With this consistent messaging and personal contact, enrollment has increased as well as appropriate use of services.

The second challenge was addressing the issue of financial sustainability of services. The SBHC Program Director, LMP Physician Billing Manager, and a consultant from an accounting firm specializing in healthcare reimbursement worked together to explore models which would support insurance reimbursement. With restructuring of SBHC services and through meeting of other requirements, the SBHC is in the process of becoming an independent clinic site. Through this model, the SBHC can bill insurances for reimbursement of services rendered to students.

The last key challenge is access to child psychiatric services. These services are limited state-wide and are located quite a distance away from the Boothbay Region. Lincoln Medical Partners continues to work with a regional mental health organization, Maine Mental Health Partners, to set-up a long-term plan for access to on-site child psychiatric services.

On-going Services and Activities:

It is anticipated that the core components of the SBHC will continue after the grant period ends, though the scope of services may be adjusted pending outcomes of federal/state reimbursement changes in the coming year.

- AOS 98 has agreed to continue current level of funding of the SBHC Nurse Practitioner position and to provide clinical, therapy and office space at no charge.
- Miles Memorial Hospital and Lincoln Medical Partners will continue to provide in-kind support of program management and financial support of Medical Director, LCSW and Office Assistant. However, the final level of ongoing services has yet to be determined because of pending federal/state mental health reimbursement changes. These changes may have an impact on what services can be provided without seeking other funding such as grants or donations. We are also working with a regional mental health organization on restructuring the SBHC mental health services similar to that used in our primary care practices.
- Health education and awareness programs will continue through the support of community organizations and the school system.
- The Boothbay High School Student Advisory Board is expected to continue taking a leadership role in engaging peers in healthy behaviors through its education and awareness initiatives.

Sustained Impact:

The work of the Boothbay Region School Based Health Center's has had a significant impact in a number of ways including timely, appropriate and convenient access to high quality, comprehensive physical and mental health care, as well as preventive care and health education. Sustained impact includes:

- Increased access to health services by assisting parents/guardians and homeless students in enrolling in Medicaid, accessing other financial support options and linking with a primary medical home.
- Enhanced health care outcomes and chronic illness management with a seamless model which supports closer communication about the needs of individual students among the Nurse Practitioner, Social Worker, School Nurse, Primary Care Provider and Parents/Guardians.
- Strengthened working relationships among consortium members that has resulted in a stronger focus on determining social and health care needs and finding solutions.
- Increased understanding of student's perceptions and health attitudes. High School students are educated about accessing health care services and understand the process for requesting appropriate services.
- Increased student responsibility for personal health through knowledge about access to health services and impact of choices on health.

Implications for Other Communities

A School Based Health Center (SBHC), such as ours, may be a viable model in a rural community where access to health care services and resources are limited. Significant financial support, whether through reimbursement, grants, in-kind support or donations, is needed to provide these services. Therefore, garnering support from across many sectors of the community is critical. Building strong relationships between the SBHC, school system, students, parents/guardians, community organizations and primary care providers have been key to the success of the program. Collaboration and communication across varied community groups and members is important in moving initiatives forward and achieving goals.

MARYLAND

Allegany Health Right, Inc.

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH16341 |
| Grantee Organization | Allegany Health Right, Inc. |
| Organization Type | Non-profit organization |
| Address | 600 Memorial Avenue, Suite 103, Cumberland, MD 21502 |
| Grantee organization website | N/A |
| Primary Contact Information | David Stewart Program Director Phone number: 301-777-7749 Fax number: 301-777-5162 david@allhealthright.org |
| Project Period | 2009 - 2012 |
| Funding Levels | Sept 2009 to April 2010: \$149,691 May 2010 to April 2011: \$124,908 May 2011 to April 2012: \$99,999 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|---------------------------------|--|
| Western Maryland AHEC | Cumberland, Allegany County, MD | Area Health Education Center, non-profit |
| Tri-State Community Health Center | Cumberland, Allegany County, MD | Federally Qualified Community Health Ctr |
| University of Maryland School of Nursing | Cumberland, Allegany County, MD | State-funded health program |
| Governor's Wellmobile-Western Maryland Region (Wellmobile) | | |

Community Characteristics

Area:

The coverage area for the Outreach grant is Allegany County an Appalachian county located in Western Maryland.

Community description:

Located in far Western Maryland's Appalachian Mountains, the area served by this grant is one of notable poverty and health disparity. According to the 2010 US Census data, Allegany County has the lowest income in the state with a median income of \$37,747 and 36 % of the population is at or below 200% of the Federal Poverty Level. The population is predominantly white (88%). Only 16% of the population aged 25 or older has a bachelors or higher degree as compared to 36% for Maryland as a whole.

The county is ranked by the State's Primary Care Office in the bottom quartile of all Maryland jurisdictions. On a scale of 1 to 24 with 24 being the worst outcome, Allegany County ranks: Low Birth Weight – 21; Heart Disease – 21; Adult Smoking – 22; High Cholesterol – 22; High Blood Pressure – 22; Received 1st Trimester Pre-Natal Care – 23; Received Pap Smear – 23; Stroke – 23; Fair to Poor Health – 24; Diagnosed Anxiety Disorders – 24; Diabetes – 24; and our Obesity Rate is 30%. We have the highest prevalence of complete natural tooth loss and the largest number of adults who have not seen a dentist in 5 or more years. Allegany County is both a Medical and Dental Health Professional Shortage Area with a dental score of 18.

Need:

For adults with Medicaid, dental ranks as the number 1 presenting issue at the Western Maryland Health System's Emergency Department. At the time of our grant application, over 50 people per month were requesting help from the Emergency Dental Program at Allegany Health Right and the County Health Department's monthly adult extraction clinic was receiving over 100 calls for

assistance. The need far outstripped the resources to address it. Since the grant was awarded, Allegany County has hosted two Mission of Mercy Free Dental Clinics where over 800 patients were served each year.

Program Services

Focus Areas

Oral Health

Target Population

Adults
Elderly
Pregnant Women
Caucasians
African Americans
Latinos
Uninsured
Underinsured
Other: Low-income

Description:

The focus of the grant program was to address the unmet oral health needs of the low income adult population of Allegany County Maryland. In order to accomplish this our goals were: to form a consortium to develop and maintain services to address the oral health needs of the target population; increase access to oral health care for low-income Allegany County adults; and to improve awareness of the body/mouth health connection for both providers and consumers in the target area.

The grant activities were coordinated and implemented through Allegany Health Right, with staffing support and clinical care provided by the consortium partners. The Outreach grant supported the implementation of three main activities:

1. Form a consortium to develop and maintain services to address the oral health needs of the target population. The grant paid for a full-time Program Coordinator to provide the administrative duties and logistics for Consortium and Workgroup meetings. The Coordinator worked with Allegany Health Right to expand participation in the Consortium. The Coordinator also attended relevant meetings which included local and long-distance travel. Other duties appropriate to grant were performed as well. The initial name of the consortium was "The Allegany County Oral Health & Prevention Consortium." The initial members were: Allegany Health Right, Tri-State Community Health Center, Western Maryland AHEC, Allegany County Health Department, Allegany College of Maryland Dental Hygiene Program, Workgroup on Access to Care, a local physician and a retired local dentist.
2. Increase access to oral health care for low-income Allegany County adults. The grant paid for direct oral health services to low-income adults through Allegany Health Right's Emergency Dental Program. During the course of the grant, Health Right was able to increase both the scope of care provided as well as increase the number of clients served. The grant also paid for the training of primary care providers at Tri-State CHC to perform simple oral health exams. Tri-State CHC conducted these exams and then if further oral health care was indicated referred clients to either their own dentist, Allegany College of Maryland Dental Hygiene or Allegany Health Right.
3. Improve awareness of the body/mouth health connection for both providers and consumers in the target area. The consortium paid for the production of an oral health resource brochure that listed sources of care and good oral health habits for county residents. This brochure was distributed widely. It also paid for the production of videos that stressed the relationship of oral health to body health and provided information on sources of care. The first video was titled, "Oral Health Affects the Rest of Your Body." Another video is in production and will be completed by grant end. The grant also paid for a 6 contact hour Continuing Medical Education course titled, "The Systemic Impact of Periodontal Disease: Engaging the Medical & Nursing Professions in Interprofessional Care." This course presented the latest information on the systemic effects of periodontal disease, the epidemiology and etiology of cardiovascular disease, the association of periodontal disease with atherosclerosis and then case studies that were discussed in forum designed to include interprofessional collaboration.

Role of Consortium Partners:

The grant program had a very active consortium. This three year program provided an important opportunity for the consortium partners to develop stronger working relationships and jointly plan and implement multiple activities. Each consortium partner played an active role in the program:

- Allegany Health Right was the grantee and fiscal agent for the grant and provided the case management for direct services. Health Right also provided assistance as required to the other consortium partners.
- Western Maryland AHEC provided full-time program coordination as well as curriculum development for health literate patient education. AHEC also provided the script for the first video.
- Tri-State Community Health Center agreed to perform the primary care provider oral health exams and referred patients accordingly.
- The University of Maryland Governor’s Wellmobile Program: Originally planned as a consortium partner, the Western Maryland Region Wellmobile was defunded by the state just prior to our receiving the grant award and did not participate.

Outcomes

- Two oral health education videos that stress the importance of oral health to body health
- 8 FOHC Primary Care Providers trained to perform oral health exams
- 124 medical and dental professionals trained in the systemic effects of periodontal disease
- 561 unduplicated dental treatment encounters provided to 401 individuals
- 2,370 unique dental treatment procedures of which 1,225 were extractions
- Mountain Health Alliance (MHA) formed to expand group membership and carry on the work of increasing access to oral health care for the region
- Recent focus groups conducted by MHA show that awareness of oral health’s connection to body health is increasing.

Challenges & Innovative Solutions

Our challenges were mostly internal ones. We struggled with leadership issues for most of our first year and part of the second. Our first Project Director was unable to engage Consortium partners effectively and made poor personnel decisions. Many of the grant activities were able to start in spite of this, but the consortium did not make significant progress as group until both the Project Director and Program Coordinator changed. We had one partner become defunct due to state budget cuts. Another of our partners did not have an executive director for most of the first year and then their new executive director died in the second year of the grant. This left us without an active partner for most of the first two years of the grant. Our external evaluator turned out to be a poor choice as they had no prior experience with a HRSA Outreach Grantee. They were able to provide accurate data on all the details of activities, but they were unable to provide us with any useful “big picture” perspectives and thus missed the larger purpose of having an external evaluator.

Even so, we were able to change the leadership and the group began to function very effectively. The one overriding lesson for us was that our focus was too narrow. We realized that in order to improve access for Allegany County, we had to include surrounding areas and dramatically increase the number of groups represented at our meetings. Our group was too small and our solution was going to be too small as well. In fact, we could not really come up with a solution. Guided by this experience one of our partners (AHEC) applied for and received a 3 year Network Grant titled the “Mountain Health Alliance (MHA).” In our case, the solution was to join the Mountain Health Alliance. At the beginning of Year 3 of this grant, we formally voted to merge with the Mountain Health Alliance and replace our name with theirs. All of our existing partners joined the MHA and we quickly had more than double the partners of the first Consortium.

Sustainability

On-going Services and Activities:

The main components of the grant-funded program will continue after the grant period ends.

- Our consortium will continue as the Mountain Health Alliance which is vibrant and active while making significant progress on our goal of increasing access to oral health care.
- Dental services will continue at Allegany Health Right through its own fundraising. Health Right’s participation in the continuing Network has in fact strengthened its ability to find resources for its clients.
- The videos produced will be displayed at various doctors’ offices and will become available online in the near future.
- Tri-State Community Health Center will continue to perform oral health exams.

- Much of our work will continue because we have received a second Outreach grant.

Sustained Impact:

This grant significantly deepened our community's ability to collaborate and focus its energy on the issue of oral health. Allegany County has a history of good collaboration among its public health organizations and safety-net organizations. The knowledge gained and lessons learned from simply implementing this grant will live on to improve our future efforts. We have gone from a very general "good collaboration" mode to very specific collaborations that have dollar and time values attached. We are also now more willing to ask for these "dollar and time values" to be attached.

People in the leadership of our Consortium were willing to grow beyond their narrow scope to bring more partners to the table, partners who developed a trust in one another and formed a regional network, Mountain Health Alliance. Leaders were willing to think progressively and very differently from the way they did in the past, often stepping out of comfort zones to work effectively in new types of partnerships in this region. While the Mountain Health Alliance is focusing on oral health right now, it will focus on other health initiatives once it feels that it's done what it can to increase access to oral healthcare.

So the benefit is regional strategic thinking and partnerships to solve common problems. Some of the examples of community benefit are the fundraising efforts of the AHEC partner on behalf of the Mission of Mercy dental clinic, and shared grant and proposal writing for other projects. Partners are truly sharing resources, and most met in the our Consortium.

Implications for Other Communities

When we started, there was consensus in our Consortium that the solution would ultimately be to establish an FQHC dental clinic in Allegany County. For the first two years we were unable to find any path to making that happen. So we let go of that idea. But by Year 3, we finally had the right people at the table with the proper decision making authority. In Year 3, we were able to dramatically increase the size of our group. In that larger group was a second FQHC, but not our local FQHC. Within a couple of months, it became clear that our local FQHC would not be able to establish a clinic. Our second FQHC already had an existing clinic. The FQHCs got together and decided that the new FQHC member could move their clinical operations to Allegany County and the path that had eluded us for two years was suddenly there.

But, the clinic that will happen now will not be the same one that we first envisioned. Along the way we decided that we want resource navigation built into the clinic, we want prevention education and we want a classroom onsite (among many other things).

The lesson is that we could not really see the full solution to the problem in the beginning even though many of us thought that we could. The lesson is that it can come together really well after a poor start -- as long as you get the right people to the table with open minds.

MARYLAND

Eastern Shore Area Health Education Center

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12650 |
| Grantee Organization | Eastern Shore Area Health Education Center |
| Organization Type | Non-profit organization |
| Address | P.O. Box 795 814 Chesapeake Dr. Cambridge, MD 21613 |
| Grantee organization website | www.esahec.org |
| Primary Contact Information | Jacob F. Frego Executive Director Phone number: 410-221-2600 Ext. 110 Fax number: 410-221-2605 jfrego@esahec.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--|---------------------------------|
| University of Maryland School of Dentistry | Baltimore, City of Baltimore (county-equivalent), MD | School |
| Choptank Community Health System, Inc. | Cambridge, Dorchester County, MD | FQHC |
| Three Lower Counties Community Services, Inc. | Goldsboro, Caroline County, MD | FQHC |
| Shore Health Systems, Inc. | Princess Anne, Somerset County, MD | FQHC |
| Chester River Health Systems | Cambridge, Dorchester County, MD | Hospital |
| Kent County Health Department | Chestertown, Kent County, MD | Hospital |
| | Chestertown, Kent County, MD | Health Department (gov. agency) |

Community Characteristics

Area:

The Service Area for the Outreach grant is an eight-county area on the Eastern Shore of Maryland: Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico and Worcester Counties. The primary service area is the Upper Shore consisting of Kent and Queen Anne's counties. Secondary area of service, primarily educational outreach is Dorchester, Caroline, Somerset, Talbot, Wicomico and Worcester counties.

Community description:

The Eastern Shore of Maryland is a 3,324 square mile peninsula bordered by the Chesapeake Bay to the west and Delaware and the Atlantic Ocean to the east. The Eastern Shore is subdivided into three regions: Lower Shore counties—Wicomico, Somerset, and Worcester; Mid Shore counties—Talbot, Caroline and Dorchester; and Upper Shore counties – Kent, Queen Anne's and Cecil. According to HRSA, the Eastern Shore has insufficient capacity to meet the dental care needs of the area. The eight county Service Area is short 25 dental health professionals. Five of the eight counties in the service area are designated as a Dental Health Professional Shortage Area (HPSA) for the entire county while the other three counties have several census tracts that are designated as a Dental HPSA.

Compared to the rest of the State, the Service Area has higher levels of poverty, especially for children; lower median income; higher unemployment rates; more children eligible for free and reduced meals; and a higher percent increase in the Hispanic population in the past 10 years. Of the 74,000 children (0-18 years old) residing in the eight county service area, fifty-two percent are enrolled in Maryland Medical Assistance. As with other relatively poor, rural areas, the recent economic downturn has had a profound effect on the residents in the Service Area, resulting in a significant rise in the number of low income residents.

Need:

On the Eastern Shore of Maryland, dental disease and lack of access to dental care is one of the most critical health care issues. Considerable oral health disparities remain in this area especially among the low-income and pediatric populations. School-aged children in Maryland have three times the national average of untreated tooth decay. Children on the Eastern Shore have the highest percentage of untreated dental decay in Maryland. Most of the Eastern Shore is considered dentally underserved. Historically, local dentists have not participated in the Medicaid program because of the low reimbursement rates and the complexity of processing claims, creating additional access barriers to dental care for low-income patients.

Program Services

Focus Areas

Children's Health
 Health Education and Promotion
 Oral Health

Target Population

Pre-school children
 School aged children - elementary
 Adults
 Pregnant Women
 Caucasians
 African Americans
 Latinos
 Native Americans
 Uninsured
 Underinsured

Description:

The grant activities were coordinated and implemented through the Eastern Shore Area Health Education Center (ESAHEC), with staffing support and clinical care provided by Consortium partners. The focus of the grant program was to expand office-based, hospital-based, and community-based dental services into the Upper Shore, with a focus on Hispanic children and their families and continue to provide oral health educational outreach programming in the Mid Shore and Lower Shore. The target population of the program is low-income children who are uninsured or enrolled in Medical Assistance, with a focus on Hispanic children and their families. The Outreach grant supported the implementation of four main activities:

1. *The development of innovative partnerships for referrals and transportation to oral health services:* The shortage of dental providers who are willing to accept new Medicaid (MA) patients in the Upper Shore results in lengthy travel time to participating providers. Choptank Community Health System, Inc. (CCHS) developed a new dental center in Goldsboro (Caroline County) which borders the Upper Shore counties. This new dental center provided access to a dental home for low-income children in the Kent and Queen Anne's county area.

The development of a referral system between Kent County Health Department's (KCHD) Children's Dental Health Program (which serves both Kent and Queen Anne's counties) and CCHS's Goldsboro Dental Center allowed children to remain on the Eastern Shore for oral health care needs rather than travelling to urban centers across the Chesapeake Bay. As of May 2011, 1,001 children have been referred to the GDC from Kent and Queen Anne's counties for a total of 2,220 visits.

Prior to the grant there was no public transportation available in the Upper Shore. Transportation services were organized through collaboration between ESAHEC, Chester River Health Systems, Inc. (CRHS), Kent County Health Department (KCHD) and CCHS. A handicapped accessible passenger van was purchased with grant funds in May 2009 to be used in the Upper Shore region to improve access to oral health services; the van is maintained by Chester River Health Systems, Inc. As of May 2011, 732 children have been transported from Kent and Queen Anne's counties for 2,410 visits to CCHS's dental office in Goldsboro (GDC) and nearly 50% were Hispanic.

2. *The expansion of hospital-based pediatric dental services to the Chester River Health Systems, Inc. (CRHS):* Grant funds were used to develop hospital-based services for children requiring sedation for restorative and rehabilitative care at CHRS. This expansion of services to the Upper Shore has drastically reduced wait time. In July 2010, a pediatric dentist was hired; equipment was purchased and installed and operating room services commenced. Eighty-six (86) children with severe dental disease have been completed at CHRS as of September 2011. Three Lower Counties Community Services, Inc. in partnership in with Peninsula Regional Medical Center recently started up a similar hospital-based pediatric oral health program to service children residing in the Lower Shore.

3. *The development of innovative partnerships for workforce development and training:* Since 2009, 17 dental hygiene students have completed training at the Goldsboro Dental Center (GDC) for pediatric experience; currently six dental hygiene students are in the program and will complete their training in May 2012. Additionally a Registered Dental Hygienist (RDH) was hired by CCHS with grant funds in April 2010; as of October 2011, 1,206 patients have been serviced by the RDH at GDC for a total of 1,421 visits.

4. *The expansion of oral health educational outreach services to the Hispanic population:*

There is a growing Hispanic population in the Service Area. Since 2003, there has been a 57 percent increase in Hispanic students enrolled in Kent County schools despite a 13.5 percent decrease in total enrollment. Many in this Hispanic population have immigrated from Mexico and Guatemala for employment in poultry processing. In addition to the immigrant population, migrant farm workers arrive each Spring to harvest truck crops in the area. In 2007, the CCHS Migrant Health Program registered 637 migrant farm workers in the service area. Ninety percent of the migrants were native Spanish-speakers and eleven percent were children.

A needs assessment prior to the grant showed that among low-income children in the area, 26% of the hospital-based dental cases at Shore Health System, Inc. were Hispanic children. To increase the availability of and access to preventive oral health services and education to the Hispanic population in the Upper Shore an interpreter was hired to serve at both GDC and CCHS's Cambridge Dental Center; bi-lingual education materials/oral health kits were developed and distributed; linkages with community organizations were established and preventive oral health education was provided. As of May 2011, 11,509 children and their families in all eight counties have received outreach education/materials/oral health kits.

Role of Consortium Partners:

The grant program has a very active consortium. This three year program provided an important opportunity for the consortium partners to develop stronger working relationships and jointly plan and implement multiple activities. In the undertaking of this oral health program expansion, the ESAHEC was fortunate to incorporate the services of two new partners while retaining the involvement of existing partners. Eastern Shore Area Health Education Center acted as the grantee and fiscal agent for the grant and staffed the program with a .14 FTE Program Director; .40 FTE Oral Health Outreach Education Coordinator. New partners included:

- Chester River Health Systems (CRHS) established a new service directed at pediatric oral health care requiring operating room time and general anesthesia. Additionally, with grant funds CRHS purchased a multi-unit passenger van with wheelchair lift capability. The van is utilized by CRHS and Kent County Health Department, to transport Kent and Queen Anne's county children to CRHS and to other sites such as the Goldsboro Dental Center.
- Kent County Health Department through its Children's Dental Health Program refers Upper Shore children for oral health services to either Chester River Hospital or CCHS's GDC.

Existing Partners included:

- Choptank Community Health System, Inc. (CCHS), a federally qualified community health center established the Goldsboro Dental Center and maintains the Cambridge Dental Center in Dorchester County. Further, CCHS's Dental Director, Scott Wolpin, DMD serves as the grant funded program's Dental Liaison. Grant funds provided the GDC a .80 FTE Registered Dental Hygienist whom also serves as a preceptor for dental hygiene students. Additionally, a Pediatric Specialist was hired to provide hospital-based restorative oral health services.
- Shore Health Systems, Inc.'s Dorchester General Hospital serves as the site of the Mid-Shore pediatric oral health care requiring OR time and general anesthesia.
- Three Lower Counties Community Services, Inc., a federally qualified community health center provides assistance in the educational outreach of the Lower Eastern Shore. Furthermore TLC is partnering with Peninsula Regional Medical Center to start-up a pediatric program at the hospital to better serve Lower Shore children requiring operating room time and general anesthesia for oral health needs.
- University of Maryland School of Dentistry serves on the Children's Regional Oral Health Consortium and provides direction and guidance on oral health issues.

Outcomes

We collected outcome and process measures during the three year grant period. The process measures collected were included in Section C (above) in the description of program activities. Child and parent evaluation tools have been created and will be reported to ESAHEC after program completion in May 2012 by an external evaluator.

The outcome measures used to assess the Program include the measurement of 1) the proportion of low-income children in Dorchester County who receive at least one dental encounter during the past year; 2) the proportion of untreated dental decay in 6 to 8 year old children on the Eastern Shore during the program year and 3) the proportion of low-income Kent County children with at least one dental encounter during the program year.

1) In 2003, 36.7 percent of low income children in Dorchester County received at least one dental encounter during the past year. Utilizing data generated by the Maryland Medical Assistance Program 51.8 percent of low-income children in Dorchester County received preventive dental services in 2010, a significant improvement of the utilization of dental services in the area.

2) In the 2005-2006 school year 37.3 percent of 6 to 8 year old children on the Eastern Shore had untreated dental decay. The Survey of the Oral Health Status of Maryland School Children is conducted by the University of Maryland School of Dentistry every five years, at the time of this report the 2011-2012 school year data is not yet available.

3) In 2006, 34.1 percent of low-income children in Kent County received at least one dental encounter during the past year. According to the Maryland Medical Assistance Program, in 2010 48.2 percent Kent County received at least one dental encounter. The program goal was by 2011, at least 50 percent of low-income children in Kent County will have at least one dental encounter. ESAHEC expects that the 2011 data, once available, will show that the 50 percent will be met or even surpassed.

Challenges & Innovative Solutions

Two major challenges were encountered in striving to accomplish program objectives: 1) securing the services of a pediatric dental specialist to serve Upper Shore children at Chester River Health System; and 2) best strategies to reach the Hispanic population with a culturally appropriate educational message on oral health care. To varying degrees these challenges have been overcome – not necessarily by innovative solutions but in our case through persistence in pushing the ball forward.

Pediatric Oral Health Specialist: Kent County on Maryland's Eastern Shore, home of Chester River Health Systems, is rural and without the services of a pediatric dental specialist – the skill set necessary to serve children requiring hospital-based restorative oral health care. Further, anticipated patient volume did not support recruiting a full-time specialist to the community. The Children's Regional Oral Health Consortium, in this instance led by Scott Wolpin, DMD – cast a net over the Eastern Shore community attempting to find a pediatric dental specialist or a corps of specialists who would be willing to participate – even on a part-time basis – to enable the program to both become operational and maintain this status. This persistence was successful and today a pediatric oral health specialist provides hospital-based services at CRHS 2 days per month – some months 3 days serving 3 children per day on average.

Reaching the Hispanic Population: One of the objectives of this outreach program was to reach Hispanic children, and their families with an oral health educational message. This has not proved easy. Language and other cultural differences among immigrants are major obstacles to both access to care and to developing positive relationships between patients and health care educators/providers. Viewing medical professionals as “superior” and “authoritative” is very common in certain cultures and among those with low health care literacy. The alternative perspective, in which an immigrant patient does not trust or respect Western medicine, can also create a barrier to developing a strong provider-patient relationship. Thus no matter how well intervened, relationships are hard to make and maintain.

Therefore, to reach the children and their parents, the dental hygienists have concentrated efforts on reaching the children at schools and other venues where they may congregate – such as churches, health fairs and community events. Oral health kits including toothpaste, toothbrush, timers, floss and an oral health message in Spanish are distributed to the Hispanic population on the Eastern Shore.

A registered dental hygienist meets with the families that are in the hospital-based pediatric oral health program to discuss the procedure and educate the family on methods to prevent future decay. An interpreter or language-line is available for the Hispanic families. These efforts have made a difference.

Sustainability

On-going Services and Activities:

Many of the service-directed elements of the Eastern Shore Children's Regional Oral Health Consortium will remain operational to continue to serve low-income children on the Eastern Shore of Maryland. The Federally Qualified Community Health Center (FQHC) in Cambridge and Goldsboro will remain operational; the hospital-based pediatric oral health program at Shore Health System and Chester River Health System will also remain operational. These services will be augmented by our FQHC partner on the Lower Shore, Three Lower Counties Community Services, Inc. and Peninsula Regional Medical Center as discussed earlier. Therefore, the clinical services to the region's children should remain at a satisfactory level.

Partners will continue to work together to connect children to dental homes and to necessary oral health care. The referral program and the use of the grant-funded van will continue to assist low-income children accessibility to oral health care services in the region in a timely manner. University of Maryland dental hygiene students will continue to train at the Goldsboro Dental Center to acquire both pediatric and rural health clinical experience.

However, what will be reduced is the community-based educational outreach associated with the program. Some outreach efforts will continue with the Registered Dental Hygienists at the FQHCs as part of their work regime – but this will be an indirect effort. To maintain a direct educational outreach, the ESAHEC has submitted grant requests to continue oral health outreach educational programming and start-up new preventive oral health services to WIC children on the Eastern Shore. Additionally, ESAHEC has entered into a Service Agreement with Choptank Community Health System, Inc. for a twelve-week demonstration project. ESAHEC's Oral Health Outreach Education Coordinator will continue community-based outreach activities in a five county region to educate the public on the importance of oral health and help connect low-income families to a dental home or to a dental case manager to increase their access to oral health care services. CCHS will reimburse ESAHEC for these outreach services. To support the need and value of a community-based oral health educator, ESAHEC will assess if utilization rates of dental services improves in the counties that are receiving a consistent oral health message.

Sustained Impact:

It was discussed above that children's clinical services directly resulting from this program are expected to continue. This can only be viewed in the most positive of terms. Further, ESAHEC's partnership with CCHS to provide educational outreach services is a start for long-term sustainability strategies to continue to provide this important piece of the program to the region's low-income population and may be expanded to our FQHC partner in the Lower Shore.

What is also expected to continue is the ESAHEC serving as a facilitator of the Eastern Shore Children's Regional Oral Health Consortium. The Consortium has served as an exceptional local, regional and statewide forum for informational sharing and a catalyst for ideas and new opportunities. Partnerships have strengthened and a needs assessment of the current oral health status on the Eastern Shore conducted by ESAHEC has allowed the Consortium to work together to address ongoing oral health care needs. The Consortium is now focused on preventive strategies in alignment with the newly formed Maryland Dental Action Coalition, particularly in pregnant women and children from birth to five years old.

A new partnership with WIC Centers on the Eastern Shore can be credited to the excellent relationship building the ESAHEC Oral Health Outreach Education Coordinator developed with local WIC administration, staff and its members when implementing the grant's educational outreach programming. MidShore WIC, CCHS and ESAHEC are working together on a pilot program to reach young mothers and their children at WIC Centers. Outreach will consist of an educational message, oral screening and fluoride varnish to WIC children. Pregnant mothers will be educated as well and referred to a dental home. CCHS's registered dental hygienist will be reimbursed by Medicaid for these services to help sustain this outreach effort.

Additional efforts the Consortium will address are the uninsured or under-insured adult population. ESAHEC and its partners will be hosting the first Mission of Mercy on the Eastern Shore to serve the oral health care needs of adults in the Spring of 2013.

The Pew Center on the States has recognized Maryland as the top performer in the nation when it comes to oral health care. Maryland was the only state to reach 7 of the 8 benchmarks. The funds provided for this three year grant have helped meet these benchmarks.

This is all very positive news, but we still have much more work ahead of us and current programs must remain in place to continue to better serve the children in the region beyond the grant period.

Implications for Other Communities

The most significant lesson we can share with others is the value of relationships of partners. The ESAHEC in the funded oral health program did not perform a single clinical service – but our partners did! ESAHEC was able to bring groups to the table for the purpose of program planning, implementation, maintaining and sustaining. Our partners' then accomplished program objectives which reflected positively on the AHEC Center. The value of partnerships is also seen in the WIC Pilot Program where we were able to develop a new and innovative approach to serving a segment of the population which up to this effort generally remained underserved for their oral health care needs. When working with partners make every effort to publically praise them and extol their role in accomplishing program objectives. This makes a "win-win" for all participants and keeps the project flowing smoothly even though from time to time there may be a bump or two.

MARYLAND

MedStar St. Mary's Hospital

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH16343 |
| Grantee Organization | MedStar St. Mary's Hospital |
| Organization Type | Non-Profit Hospital |
| Address | 25500 Point Lookout Rd., Leonardtown, MD 20650 |
| Grantee organization website | www.medstarstmarys.org |
| Primary Contact Information | Lori Werrell, MPH, IBCLC Director of Health Connections Phone number: 301-475-6019 Fax number: 301-475-6143 Lori_Werrell@smhwecare.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$108,316 May 2010 to April 2011: \$106,569 May 2011 to April 2012: \$97,729 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|--------------------------------------|---|
| St. Mary's County Department of Aging and Human Services | Leonardtown, St Mary's County, MD | Local Government Agency |
| Minority Outreach Coalition | Lexington Park, St Mary's County, MD | Non-Profit Community Organization |
| Walden Sierra Inc. | Lexington Park, St Mary's County, MD | Non-Profit Behavioral/Health/Substance Abuse Provider |

Community Characteristics

Area:
St. Mary's County, Maryland

Community description:

St. Mary's County is a federally designated rural area, and heart disease, cancer, lower respiratory, strokes and diabetes are the chronic conditions that are the leading causes of death. There are 1,723 citizens per 1 physician in St. Mary's County, which is more than double the state (713:1) and national (631:1) ratio. St. Mary's County experienced a 22% increase in population from the 2000 to the 2010 U.S. census. With the already limited number of primary care providers in the county, physicians are not accepting new patients and uninsured residents are forced to seek crisis care in MedStar St. Mary's Hospital's Emergency Department or forego care for chronic conditions, ultimately decreasing their quality of life and life expectancy. Insured residents also experience difficulties in receiving timely and appropriate care continuum for chronic conditions. The lack of accessible primary care to the entire population has a direct impact on the rates of chronic disease in St. Mary's County.

Need:

Approximately 15% of adults in St. Mary's County are uninsured. Uninsured individuals with a chronic condition are at greater likelihood for decreased ability to manage their disease, which increases their need to access health care at the cost of the local health care system. Providing preventative health classes free of charge to the uninsured assists in improving their conditions, which in turn decreases the need of the uninsured to obtain extensive, costly health care for manageable conditions.

Respiratory and circulatory conditions are leading causes of preventable hospital readmissions at MedStar St. Mary's Hospital which serves St. Mary's County, Maryland. Lack of education and support on certain conditions contributes to preventable readmissions and

preventable hospital stays. Through HealthLink, the hospital has the ability to assist patients and community members struggling with chronic conditions to better manage symptoms/conditions, thus decreasing preventable hospital readmissions and decreasing the impact on the individuals and the local health care system.

Program Services

Focus Areas

Chronic Disease Management: Cardiovascular
Chronic Disease Management: Diabetes
Chronic Disease Management: Other
Health Education and Promotion

Target Population

Adults
Elderly
Caucasians
African Americans
Latinos
Uninsured
Underinsured
Low-Income
Medically Underserved

Description:

The mission of HealthLink is to improve health through increased access to health education in St. Mary's County by promoting community involvement. Community health awareness is provided to empower self-management skills in a way that reduces disparities while encouraging individuals to actively partner with their healthcare provider, family members and caregivers. HRSA Rural Health Care Services Outreach Grant funds were used to implement the following classes and workshops as part of the Health Link Program:

Living Well with Chronic Conditions is a six-session workshop for anyone with a chronic or recurring illness and/or living with someone with a chronic condition. Designed by Stanford University, this program develops practical skills for living a healthy life. Topics covered include pain, fatigue, nutrition, communication, mental wellness, and working with the healthcare system through interactive problem solving and action planning. The workshop is evidence-based and is taught by Lay Leaders from within the community. The program is free and all materials are provided.

Living Well with Congestive Heart Failure is a 2.5 hour class offered to heart failure patients, family members and caregivers. Topics covered include heart failure causes, prevention, disease management, nutrition tips, reading food labels and basic lifestyle changes sure to improve quality of life. The program is free and all materials are provided.

7 Healthy Habits of People with Diabetes is a 2.5 hour diabetes self-management workshop offered to diabetics, family members and caregivers. The workshop is based on the seven healthy habits of self-management, including healthy eating, being active, self-testing, risk management, problem solving, medication and health coping. The workshop is taught by Certified Diabetes Educators and a Registered Dietitian. The program is free and all materials are provided.

Diabetes Self-Management is an individual assessment provided to diabetics, family members and caregivers to assist with meal planning, monitoring, treatment options and day-to-day coping with diabetes. This program is recognized by the American Diabetes Association and is taught by a Certified Diabetes Educator. A physician's order is required and the assessment is covered by most insurance plans. Uninsured diabetics are referred to the Seven Healthy Habits of People with Diabetes.

Stroke Survivors is a 2.5 hour support group that meets monthly to discuss the causes of stroke, recovery and how to prevent future problems. Participants are provided the opportunity to speak with experts in rehabilitation and have the ability to create friendships and support networks with other stroke survivors and their families. The program is free and all materials are provided.

Steps to a Fit & Healthy You is a ten-week weight management program featuring nutrition education, exercise guidance and behavior modification. Classes are presented by experienced instructors including a Registered Dietitian, Exercise Specialist and a Behavioral Health Educator. There is a \$100 enrollment fee which covers all associated materials.

Better Breathers is an 8 to 12 week program that provides individualized assessment, monitored exercise sessions, and education on how to manage your illness for patients that are diagnosed with Chronic Obstructive Pulmonary Disease (COPD). This is a group program that allows for patients to develop support systems that will help to build maximum wellness throughout the course of the disease. A doctor's referral is required and the class is free to participants.

Role of Consortium Partners:

MedStar St. Mary's Hospital is the lead organization for all aspects of the Health Link program, which was established under the HRSA Rural Health Care Services Outreach Grant Program. The hospital led the consortium through program development and sustainability processes and conducted monthly consortium meetings to keep partners informed and engaged through the three year grant performance period.

Original Consortium Partners

The Department of Aging and Human Services provides class room space, program advertisement and dedicates Lay Leaders for the Living Well with Chronic Conditions class and allows MedStar St. Mary's Hospital to provide diabetes self-management education within local Senior Activity Centers.

The Minority Outreach Coalition (MOC) provides program advertisement within the minority and faith-based community and dedicates Lay Leaders for the Living Well with Chronic Conditions class.

New Consortium Partners

Walden Sierra Inc. is the counties trusted source for mental health and substance abuse programming. As part of program sustainability, Walden was approached to partner with the Living Well with Chronic Conditions class. Walden will provide space in one of their offices located in Lexington Park, which is the area where the greatest numbers of citizens are living with health and economic disparities. Clients of Walden that are struggling with additional health issues beyond behavioral will be referred to MedStar St. Mary's Hospital's Health Link program.

St. Mary's County Recreations Department and the College of Southern Maryland will provide free advertisement of classes and will provide space when requested to hold Living Well with Chronic Conditions classes.

Outcomes

Living Well with Chronic Conditions

In years two and three of the Living Well with Chronic Conditions classes, over 75 individuals successfully completed the six-week program, where pre, post and 3-month surveys were completed to measure health status related to their experience with this program. The Living Well with Chronic Conditions program yielded a 79% success rate of participants reporting an increase in health from the pre-class survey to the 3 month follow-up survey.

Living Well with Heart Failure

Participants of this program were asked to set a goal related to their condition using the information and tools provided during the program. The Living Well with Heart Failure program has a 98% success rate, with 44% of participants stating that they were able to maintain their goals at least half of the time and 54% stating they were always able to maintain their goals.

Seven Healthy Habits of People Living with Diabetes

Over 60 individuals received group diabetes self-management education through the Seven Healthy Habits of People Living with Diabetes program. Participants of this program were asked to set one or more goals related to their condition using the information and tools provided during the program. During the 3-month post class survey, 80% of participants stated that they were able to achieve and maintain their goals. The other 26% of participants stated that they were unable to achieve their goals for various reasons, including lack of time, financial constraints and lack of motivation.

Steps to a Fit & Healthy You

Steps to a Fit & Healthy You completed four classes in year two and three of the grant. Program data showed that 58% of participants reported success in decreasing weight and increased knowledge on weight management tools.

Challenges & Innovative Solutions

The Living Well with Chronic Conditions class presented several challenges within recruitment and retention of participants over the 6-week class. It was found that at least half of participants that signed up for the class within the hospitals registration system, failed to actually attend the class. The issue was attributed to the course being free of charge, implying a non-obligation to attend. This was

addressed by ensuring courtesy phone call reminders for all registered participants and by providing participant incentives for program completion. Now that the program has been in implementation for over two years, the reputation of the program has built within the community. The benefits of the program alone have helped to build attendance and the incentives will no longer be offered beyond the grant performance period. It was also discovered that the classes which were held in community based and faith-based organizations had a higher rate of participation and retention through the duration of the program. This is attributed to the recruitment efforts of Lay Leaders which dedicated the time to contact the participants in the weeks prior to the class to ensure they had an understanding of the commitment and were aware of the benefits of the program. Program participation also increased after the implementation of a physician outreach program. HRSA funds were utilized to develop a physician's outreach campaign that expressed the need for local rural physicians and the preventive health program of MedStar St. Mary's Hospital to work with one another to increase the health outcomes of our patients served.

Sustainability

On-going Services and Activities:

MedStar St. Mary's Hospital is committed to fully funding the Health Link Program in all years moving forward. Additional funding support will be pursued, however is not needed to sustain the program. All programs will be maintained, however slight changes will be implemented based on lessons learned from program evaluation. The Living Well with Heart Failure class will be changed to "Living Well with Cardiovascular Conditions" to provide an opportunity for individuals with any type of cardiovascular issue to participate. The Living Well with Chronic Conditions class will continue as free to participants; however Living Well books and program CD's will be sold or provided as a loaner for the duration of the six-week class.

Sustained Impact:

The Health Link Program has served as a model for other Maryland counties that currently implement the Stanford University Evidence-based Program within their local Departments on Aging. In 2009, 20 of the 24 jurisdictions in Maryland received federal funding through the Maryland Department of Aging for this program. It has been documented that programs led by local Departments on Aging experienced difficulties with participant recruitment and financial sustainability beyond federal grant funding. The success of the MedStar St. Mary's Hospital Health Link program in partnership with the St. Mary's County Department of Aging and Human Services has provided positive outcomes pertaining to participant recruitment from hospital patients and clients, where the hospital is where a majority of individuals with chronic conditions seek crisis and non-emergent care at some point within their disease lifecycle. Accordingly, the referral process from within the hospital and organizational partners has led to robust participation in a majority of the Health Link programs. The partnership between these two entities has also shown that financial sustainability is greater where the hospital has financial incentive to continue providing preventive health initiatives which help to decrease hospital readmissions and preventable hospital stays.

Implications for Other Communities

The Health Care Services Outreach grant has provided our rural community with a well established, comprehensive preventive health program, which is available to all citizens. Prior to Health Link implementation, there were limited opportunities for individuals, especially the uninsured to obtain preventive health education. The programs implementation has proven success in increasing the health status of vulnerable populations and has aided in decreasing the preventable readmissions rates with Congestive Heart Failure and Diabetic patients. The Living Well with Chronic Disease, Self-Management Program has also shown great benefit to family members, care givers and individuals with conditions beyond diabetes and cardiovascular disease. In partnership with vital service organizations, such as the Department of Aging the Minority Outreach Coalition, our organization has successfully reached individuals that are medically underserved or were lacking proper care continuum for chronic conditions. It is suggested that a wide-range of community partnerships, including social, behavioral and faith-based organizations is key to building and sustaining a successful preventive health program.

MARYLAND

Somerset County Health Department

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12655 |
| Grantee Organization | Somerset County Health Department |
| Organization Type | Health Department (government agency) |
| Address | 7920 Crisfield Highway, Westover, MD 21871 |
| Grantee organization website | www.somersethd.org |
| Primary Contact Information | Cynthia L. Abbott Program Supervisor Phone number: 443-523-1760 Fax number: 410-651-3425 somerset.admin.cindy@dhhm.state.md.us |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--|----------------------------------|
| Atlantic General Hospital | Berlin, Worcester County, MD | Hospital |
| Worcester County Health Department | Snow Hill, Worcester County, MD | Health Department (govt. agency) |
| Three Lower Counties Community Services (TLC) | Princess Anne, Somerset County, MD and Pocomoke, Worcester County, MD | FQHC |
| McCready Foundation Hospital | Crisfield, Somerset County, MD | Hospital |

Community Characteristics

Area:

The coverage area for the Outreach grant is a two-county area on the Eastern Shore Maryland: Somerset and Worcester.

Community description:

Somerset County is rural in character and sparsely populated covering 327.2 square miles with 71.6 people per square mile. The two population centers are Princess Anne, the county seat and Crisfield which is considered the only city within the county. There are also two islands in Somerset County. Deal Island is accessible by motor vehicle while Smith Island is accessible only by boat. Smith Island currently has a population base of 364 people, and is located 12 miles from the mainland. Somerset County's total population in 2010 was 26,470 and the racial makeup is 53.5% white, 42.3% African American, 3.3% Hispanic, 0.7 % Asian/Pacific Island, and 0.3% Native American.

Economically, Somerset County is a very depressed county. The poverty rate in 2009 was 24%. The median income in 2009 was \$35,621 and the second lowest median household income in the state. Major commerce in the county includes the seafood and agricultural industries, however, due to the seasonal character of these two industries, employment rates vary with unemployment peaking during the cold winter months. Somerset County had an unemployment rate of 9.9% in 2010. The number continues to grow due to the lack of industrial growth. In addition, in 2010, only 24% of residents held a high-school diploma. The low percentage of residents with a high school diploma compounds the measures of poverty and insufficient job opportunities. All of these variables not only affect the health of the individual, but the health of the community.

Worcester County, located on Maryland's Eastern Shore, is Maryland's only seaside county, known for Ocean City's clean sandy beaches. Worcester County is home to the highest unemployment rate in the state (9.2%). This is mainly due to its seasonal nature of

tourism, but tourism is its only source of economic growth each year. Worcester County also has the highest population growth change in the state by 39% from 1990-2005. Older residents are more likely to retire by the beaches and enjoy their golden years. More than 52% of the county's population is in the 45+ age group, and is expected to double by 2010. With the influx of older residents the county has seen an impact on its healthcare services, the accompanying medical bills, and higher medication costs while many residents live on a fixed budgets and limited incomes.

Need:

The focus of the program was to provide diabetes screening, self management education, case managing, assistance with medications and supplies, transportation, and dietary education in both counties (Somerset and Worcester). The target population of the program was uninsured and underinsured adults. Within the dual area of Worcester and Somerset counties there is only one major transportation company, Shore Transit, which services the entire area, but takes three hours to get from one end of the county to the next county. There are two hospitals, McCready Health Foundation Services is located in Somerset County and Atlantic General Hospital (AGH) is located in Worcester County. Atlantic General Hospital has an employed Certified Diabetes Educator (.5 FTE) who works with diabetic clients on an inpatient basis. There is only one Endocrinologist, who serves nine counties and is located in a non-rural area. There currently is a nine to twelve month waiting time for an appointment. The general health care system issues in the area are access to care, transportation, and primary and specialty care provider shortages.

Overall this area has a lower population density, higher proportion of elderly (42%), higher poverty rate (26% in poverty), higher proportion of uninsured (17% Medicaid eligible), lower educational attainment (24.4% completing less than high school), higher unemployment (7.6%), and higher death rates for all causes. The target population for the Closing the Gap on Diabetes program was adults 18-65+, which consists of 37,188 individuals or 46% of the total. It's estimated that 14% have diabetes in the tri-county area.

Program Services

Focus Areas

Chronic Disease Management: Diabetes
 Health Education and Promotion
 Pharmacy Assistance (vouchers)
 Physical Fitness and Nutrition

Target Population

Adults
 Elderly
 Caucasians
 African Americans
 Latinos
 Native Americans
 Alaska Natives
 Uninsured
 Underinsured

Description:

The grant activities were coordinated and implemented through both counties, with some staffing support and screening services provided by the consortium partners. The Outreach grant supported the implementation of four main activities:

1. The provision of free health screenings for diabetes (glucose testing, HgA1c, blood pressure, ADA risk assessment paper test, etc.). There were two purposes for the screenings; one was to identify diabetics who were unaware of their elevated glucose levels, and second was to provide the service for diabetics who could not afford the glucose testing and had no primary care provider. By doing this, we were able to identify and refer 278 (52%) clients to a FOHC facility for additional testing or medication. In Somerset County, services were provided in the Somerset County Health Department. In Worcester County, all services were provided in Atlantic General Hospital Health Center. Clients were followed- up every three months. A total of 144 screening events were held over the course of 2 years and 9 months (all data in the Source Book is until February 29, 2012).
2. Self-management education: the education consisted of individualized consults with a CDE, a registered dietitian, and/or a RN nurse. Follow up appointments were made every 3 months to monitor progress. Each service was provided in-house during the clinic or at a schedule appointment. Depending of the client's needs, all education and materials provided consisted of individualized meal planning, education on how to use the diabetes supplies (meter, lancets, keep a log, etc.) and other self-management techniques (insulin administration or oral medication intake). Four agencies (AGH, Somerset County Health Department, Worcester County Health Department, and McCready Health Foundations) provided the services and made referrals as necessary. All referrals (60% saw the registered dietitian and 52% saw the CDE or RN) were case managed for compliance and outcome.

As part of the self management services, the Closing the Gap on Diabetes program provided a 6 session educational classes utilizing the Stanford Chronic Disease and Diabetes Self-Management Program to Somerset County residents. Three staff members were trained in the Stanford Chronic Disease Self-Management and two in the Stanford Diabetes Self-Management evidence base program. Both programs were advertised in the community and depending of the need (diabetes, elevated blood pressure or any other chronic condition) the classes were schedule. Four Chronic Disease Self-Management workshops were schedule and 90 community participants attended the workshop.

The Closing the Gap on Diabetes program advertise the Stanford Diabetes Self-Management program among our clients, but unable to schedule one due to lake of interest and participation. Client's expressed preference for an individualized education with the CDE or RD.

3. Case management and coordination: This service consisted of helping those clients that needed additional help finding a primary health care provider, were in need of a voucher for a one month supply of medications, doctor's visit, lab test or transportation. The program coordinator was responsible to coordinate all services and schedule follow up appointments every three months for all clients that had diabetes. For those clients that presented elevated glucose levels, a referral to a primary provider for follow up care was made. If the client's glucose levels were under control, a 3 months follow up appointment was issued with us (the American Diabetes Association recommend an HgA1c test to be done every 3 months). In addition, the coordinator collaborated with the client to ensure that they were able to keep their appointments. Grant funds were used to reimburse the participating FQHC agency a negotiated discount rate for laboratory services, medications, and supplies for those clients that qualify services. A total of 18 providers participated in the program.
4. Outreach: Media campaign, newspaper ads, flyers, Tri-County Diabetes Alliance's website, agencies' websites and Facebook homepages were utilized to educate the community and to advertise our services. Staff participated in community health fairs and conducted presentations to local agencies, churches, etc. These presentations gave us the opportunity to educate and advertise all our services (glucose screening, individualize consult with a CDE, RN and RD, and vouchers for medications and supplies). The outreach worker for the dual county provided one-on-one interactions and information the diabetes program.

Role of Consortium Partners:

The Closing the Gap on Diabetes program had a very active consortium. The three year program provided an important opportunity for the consortium partners to develop stronger working relationships and jointly plan and implement multiple activities. Monthly meeting were held to provide updates of the program, clinics and build collaboration among all agencies. Each consortium partner played an active role in the program:

- Somerset County Health Department was the lead agency (as the grantee) and fiscal agent for the grant and staffed the program with a 0.15 FTE project director, who provided oversight for the program and attended all mandatory meetings and trainings. When the clinic nurse was not available during clinics, the project director provided direct services as she is a registered nurse. A 1.0 FTE Coordinator of Special Programs coordinated all services, case managed clients, issued vouchers (medications, transportation and laboratory work, and supplies), conducted coalition meetings, gathered data and created and submitted reports. A 0.05 FTE physician worked in the clinic conducting tests and explaining the results to all clients. A 0.10 FTE Registered Nurse provided self management education on diabetes and demonstrated to clients how to use a meter and documented the results. The health department had two contractual positions, a 0.20 FTE outreach worker and a 0.3 FTE Registered Dietitian. The outreach worker conducted intakes, participated in community events and provided outreach activities in the dual counties. The dietitian provided nutritional and dietary counseling in Somerset County and followed up on risk assessment test for the dual counties.
- In Worcester County there were 4 contractual part-time positions – A 0.10 FTE Certified Diabetes Educator (CDE), who provided self-management diabetes education and gathered data. A 0.10 FTE Registered Dietitian provided nutritional education and recommendations. A 0.05 FTE Physician Assistant provided education, screenings and results of blood tests. One 0.10 FTE clerk that schedule clients for the clinic and conduct reminder phone calls.
- The FQHC, Three Lower Counties Community Services (TLC) offered primary health care to underinsured and uninsured clients as well as blood draws and laboratory testing. TLC's physician referred their uninsured clients to the Closing the Gap on Diabetes Program for diabetes education, supplies and pharmacy assistance.
- McCready Health Foundation (Hospital): Accepted referrals for their ADA certified diabetes self-management classes and monthly support group. The hospital referred uninsured clients with diabetes seen in the emergency department to the Closing the Gap on Diabetes program.

- Worcester County Health Department: The health department offered a CDC evidence-based Diabetes Prevention Program (lifestyle balance) for clients diagnosed with pre-diabetes or for clients interested in the program even though they were not diagnosed.

Outcomes

Evaluation data was collected in four main areas: client program satisfaction, consortium member's survey, American Diabetes Association risk paper test (for clients that do not have diabetes) and areas for improvements in health care access. Selected evaluation findings are summarized below:

Patient satisfaction:

- Client satisfaction surveys showed that 100% of participants reported receiving quality care, and 98% reported that the care they received was timely.

Health care access:

- A total of 483 individuals (unduplicated) received services in our program. 146 clients presented with elevated HgA1c and were referred to their primary doctor for additional care. 149 clients presented with elevated blood pressure and 222 clients had BMI greater than 25.
- Referrals were made for clients with an elevated glucose, elevated blood pressure or were overweight. 278 clients were referred to a primary provider for additional care. 319 clients were referred to a registered dietitian for a dietary consult. 267 clients were referred to a certified diabetes educator or a registered nurse for education. 53 clients were referred to the case manager for medical vouchers and 140 for diabetes supplies. A diabetes resource guide was offered to all clients.
- The Closing the Gap on Diabetes program was able to measure the success by comparing data for those clients that follow up with the program every three months. 19% of clients improved their HgA1c, 11% improved their BMI and 19% improved their blood pressure.
- During community events and regular clinics, 848 ADA risk paper test were administered to those clients that had no previous diagnosis of diabetes. The ADA risk paper test consists of 7 questions with yes or no answer. The test was utilized to determine those clients at risk of diabetes and to increase awareness about pre-diabetes. For those clients that were at risk (83%), a referral was made to the clinic for screening and education.
- The consortium survey was given to all members every six months to evaluate the progress of the program and to identify areas that needed improvement. Surveys reported the program to be beneficial for their county, the project to be on schedule, the goals being met through the clinics, client services and follow up as well as receiving regular updates about the program. Meetings were organized with agendas posted in advance and most members attending.
- The Closing the Gap on Diabetes Program total return of investment (ROI) was calculated based on how many clients we served and their health insurance status (insure/uninsured, Medicare, medical assistance, private insurance, and self pay) and the total cost per services that program provided to the community. The ROI for Diabetes Self- Management Education (a consult with CDE, RN, and RD) is \$11.26.

Challenges & Innovative Solutions

One of our biggest challenges initially was due to budget cuts there was a turnover in staff at the project manager position before the program could began. The temporary vacancy created a slight delay in obtaining contracts and developing the clinic in Worcester County. It took some time for newly assigned staff to develop a collaborative relationship. There were various mandates and regulations that differed between the hospitals and health departments. We believe that the program was successful due to the following factors:

- Strong relationship with local professional association: The grantee agency developed and maintained a positive and highly collaborative relationship with the leadership from Atlantic General Hospital and Three Lower County Community Services. Meeting and conference calls with both agencies were held with the intent of providing more information about changes and expectations.
- Delay of starting the program: It took more than five months to get necessary contracts approved and signed. The delay prompted the consortium to change the performance measures so that they were more realistic.
- No funds to advertise services: Additional funds for the marketing campaign were not secured as anticipated. Some strategies the program did were to advertise services in the health department and Atlantic General Hospital's website, free

press release avenues, outreach letter to all local providers, free ads on public TV channel, regular messages on the lighted sign outside the health department, and flyers that were displayed in highly visible locations in the dual county area.

Sustainability

On-going Services and Activities:

The main components of the grant-funded program will continue after the grant period ends, though they will be reduced in scope.

- The Closing the Gap on Diabetes Program will continue referring clients to Three Lower County Community Services for health care. The benefit of a FQHC agency is that they are able to offer services using a sliding fee scale which will help those clients that do not have health insurance but are in need of medications and care. The health department will assist clients in applying for the Primary Adult Care (PAC) program. Clients will also be referred to other agencies depending on their needs. The referring service will be in kind.
- As part of Somerset County Health Department's community outreach efforts, the ADA risk paper test will be administered in other health departments' clinics such as family planning, colorectal screening and tobacco cessation, in addition to health fairs. Atlantic General Hospital will administer the assessment during their community events as well. During diabetes awareness month, flyers and press release will be developed to educate the community. This service will be in kind.
- The Tri-County Diabetes Resource Guide will continue be available to the community. The guide provides information about local agencies and their services. This service will be in kind.
- The Tri-County Diabetes Alliance website will be maintained by the Tri-Co. Diabetes Alliance (TCDA) Coalition.
- The Lower Easter Shore Tri-county area (Somerset, Worcester, and Wicomico) Health Improvement Coalition will focus on prevention of diabetes. The TCDA is a sub-committee of this group. Staff from the three counties will receive the National Diabetes Prevention Program training and will provide classes in the tri-county area.

Sustained Impact:

Our community has been impacted in significant ways since the program was funded. Over the past three years as a result of the positive working relationship among the consortium, new partnerships have been created and previous ones have improved. The improvement facilitated the process of working together to serve the community and to make sure the clients receive the best services needed. The Closing the Gap on Diabetes program has provided comprehensive services that no other health care provider has been able to offer in both counties. The community is aware of where to go to receive additional information at no cost to them. The program has encouraged a deeper collaboration among the consortium partners and will continue to expand access to healthcare for the underserved beyond the grant period. The FQHC is investigating the option of working with the health department to provide client navigation services in the future.

Implications for Other Communities

The lessons learned regarding how to build relationships with local agencies were important for the success of the program. There were some turf issues at first but maintaining an open dialogue and actively listening to each other gained the respect necessary for effective collaboration and implementation of the program. Having key organizations in the coalition facilitated the process of referrals and ensured that the type and level of care was appropriate and individualized for the client's need. Collaboration and consistency in wanting to achieve the best possible outcomes for the program and clients was important. Expect to encounter situations or barriers that you didn't anticipate. Work with the partners and do not be afraid to develop different strategies than originally planned. Establishing an effective, efficient consortium is a key part of the sustainability of this type of grant.

MICHIGAN

Borgess-Lee Memorial Hospital

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12760 |
| Grantee Organization | Borgess-Lee Memorial Hospital |
| Organization Type | Critical Access Hospital |
| Address | 420 High St., Dowagiac, MI 49047 |
| Grantee organization website | N/A |
| Primary Contact Information | Paul Noseworthy Project Director Phone number: 269-226-6690 Fax number: 269-226-5966 paulnoseworthy@borgess.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$124,875 May 2011 to April 2012: \$99,750 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-------------------------------|-------------------------------|--------------------------|
| Borgess Lee Memorial Hospital | Dowagiac/Cass Co/MI | Critical Access Hospital |
| Community Health Center | Coldwater/Branch Co /MI | Hospital |
| Three Rivers Health | Three Rivers/St. Joseph Co/MI | Hospital |

Community Characteristics

Area:
The SW MI Telehealth Network Expanded Telehealth program provides services in the state of MI in Dowagiac/Cass County; Three Rivers/St. Joseph County; and Coldwater/Branch County.

Community description:
The region's 159,313 residents average a density of just 106 people per square mile as compared to the statewide average of 175 persons per square mile. Data shows that residents of the region have a significantly higher rate of disease due to stroke, coronary heart disease, cancers, motor vehicle injuries, and unintentional injuries. One of the gaps identified by the three rural county hospitals is the lack of resources for professional development and community education. Michigan's Hispanic or Latino population witnessed an increase of 34.7 % in the last decade and is expected to increase steadily proving the need for an increased need in translation services.

Need:
The program was designed to reduce the stroke death rate and increase the use of a thrombolytic. It was to provide opportunities for professional and community education re: prevention/treatment and rehabilitation; to provide translation services to clinicians and patients; and to overall improve patient satisfaction with their health care encounter.

Program Services

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|--|---|
| Focus Areas Access: Specialty Care: TeleStroke Health Education and Promotion | Target Population Adults Elderly |
|--|---|

Migrant/Farm Worker Health
Language Translation Services
Community Screening Programs

Pregnant Women
Caucasians
African Americans
Latinos
Native Americans
Uninsured
Underinsured

Description:

Stroke: Significant effort was placed on developing community education material focusing on prevention and education. Each community used the material to promote their facility as the place to go quickly if you experience stroke symptoms. The grant also provided screening materials to the three communities to use with their individual health screens and outreach opportunities. Representatives from a Primary Stroke Center provided feedback to the referring hospitals regarding their patient's outcomes focusing on the American Stroke Association guidelines for care. With this feedback effort, we witnessed an increase use of tissue plasminogen activator (tPA.) Individual Stroke Risk Assessments have been completed. The Emergency Medical Systems (EMS) community was included in the education effort improving the response time.

Education: We collaborate with the State of Michigan TeleHealth Network: REMEC, Michigan Center for Rural Health and the Upper Peninsula Telehealth Network (UPTN) providing videoconferencing throughout SW Michigan. This allows for an extensive array of professional education programs to a multi-disciplinary audience. In addition to this outreach, we have assisted communities to offer health screens and preventive health screening programs. Due to the development and availability of evidence based material for the stroke and cardiac education, members of the communities have used the material to develop their own prevention programs.

Interpreter Services: The grant allowed us to contract with an existing service that is certified to train interpreters to provide medical interpretation. The grant provided medical translation by a certified medical translator of existing stroke, cardiac, and signage material into Spanish for the communities. It also allowed each community to comply with The Joint Commission standards to certify existing medical interpreters.

Role of Consortium Partners:

The three community hospitals in southern Michigan agreed to participate with this grant based on many discussions with the Director of Regional Networking. This strong trusting relationship has been a big strength for proceeding with the grant. Each facility met with their staff and identified the top three needs within their facility and community. Ongoing monthly meetings continue throughout this grant activity; as well as the program director participating with many of the TeleStroke program development, health screens, professional education, and interpretation services.

Outcomes

Stroke: The implementation of TeleStroke in May of 2009 required a significant education effort for the three communities of practicing physicians and health care providers to engage in the established evidence based medicine from the American Stroke Association requiring the delivery of thrombolytics within 3 hours from the onset of stroke symptoms. Each target community hospital has increased the use of tPA every year. We witnessed an increase in the use of tPA from 12 in 2009 to 22 in 2011 in Southwest Michigan, a significant 183% increase in use. The EMS community has engaged in this effort, as well, improving on the communication when a stroke patient is identified and transported to their local facility. 1436 individual stroke risk assessments have been completed. This focused effort on community education has changed attitudes from the public to call 911 when symptoms occur rather than waiting.

Education: The use of video conferencing providing professional education continues to be very successful. We have identified a cost savings for travel by implementing this connectivity. We have provided 292 education topics with an estimate 1620 participants. We estimate a cost savings of \$121,500.00 in professional staff travel time. (1620 X 3 hour travel time X average \$25.00/hr) The efforts of the community hospitals at promoting community educational programs have been embraced better than we had originally envisioned. We have successfully provided print advertising, hand-out marketing material for health fairs and refrigerator magnets promoting health.

Interpreter Network: Policy and procedures were established and implemented, each facility received training regarding the services and the need for culturally sensitive models of care. As staff change in the health care environment, we witnessed a need to repeat the training often to ensure consistency. This effort assisted these sites to be Joint Commission (TJC) compliant with patient-centered communication. In the three target hospitals we provided services to 52 limited English proficient individuals. In addition to this service,

we discovered that our current interpretation of health education material was not translated by a medical person. We were able to provide certified medical interpreters to translate written health care information for all three sites. Establishing the ease of use and the increased patient satisfaction with videoconferencing language services, we will be expanding this service to three other hospitals.

Challenges & Innovative Solutions

Initially, after being awarded the grant, to re-engage the hospital partners required more time that we anticipated. We had to revisit the goals and objectives with the three health care leaders to energize them to our grant mission. Establishment of the site coordinator requiring job descriptions, job postings, candidates interviewed, selection and training at each site took much longer than we anticipated. We did not realize the hiring processes at each site required extensive education and negotiation when paid through a grant. The delay in starting was not wasted time though; we continued to focus on stroke education using existing resources for community and professional development.

We experienced a change in CEO leadership at one site. There was reluctance by the interim CEO to engage in the work. This changed when the CEO was selected in year two, but this did result in the delay of implementation at their site.

Another major challenge we faced in implementation of TeleStroke was the time required to credential the neurologist at the community hospitals. Each site had their individual credentialing process extending the time of implementation by months. The solution has been addressed in May, 2011 by Center for Medicare and Medicaid Services (CMS) announcing the change in credentialing physicians by accepting the credentialing process from the site where the specialist is. This is the result of many discussions involving the national organization – American Telemedicine Association.

TeleStroke could not be completed, although several evaluations were achieved. Several physicians departed due to career opportunities and retirement, creating an inability to drive this forward with the existing medical staff. Senior Administration is in communication with another Michigan hospital that may provide these services in our region.

Michigan experiences on-going financial challenges by each hospital location participating in this grant. Unemployment was above 15% during this time. Increasing numbers of uninsured escalated the crisis and added to the financial stress at each facility. Each hospital prioritized expenditures in the face of limited financial resources. In 2012, each hospital remains fully committed to the work and has identified areas where we can expand.

Sustainability

On-going Services and Activities:

Stroke: We continue to educate communities about stroke signs and symptoms. Each hospital community has evidence based education material that will continue to be used. During this grant, efforts were made to identify resources on the web that are inexpensive yet nationally recognized for education material for health promotion. We identified stroke experts that are available and approachable to answer questions both from the health care provider and the community. Efforts were established to collaborate by sharing resources and implement community stroke support groups. Ongoing negotiations are in process to engage with other neurologists in Michigan that provide TeleStroke services.

Education: Since fiscal responsibility continues, providing video-conferencing education continues to be in demand. Fortunately, with the assistance of this grant (and several previously) we have a strong telehealth network of connectivity. This allows us the ability to share professional and community resources. Programs will continue with this outreach since the technical infrastructure is in place and the process is firmly established within Michigan. We have been asked by the VanBuren Intermediate School District to engage in discussions to share equipment within their school system and provide health services and education using videoconferencing. We will continue this service by maintaining our relationship with REMEC, Michigan Center for Rural Health and Upper Peninsula Telemedicine Network and sharing education resources with each other. We continue to find local resources that agree to be a part of the professional education network and video recording.

Translation Services: With the emphasis from The Joint Commission that hospitals provide patient-centered communication services, the need for interpretation continues as the country increases in diversity. We have signed a contract with Interpreter Network for another year of service. Senior leadership is in discussion with Voices for Health, another translation service provider that also has video conferencing capabilities that they want to implement. This only enhances that services will continue well into the future. Our plans are to reach out to four other hospitals sites in our network offering translation services within their health communities: Allegan, Sturgis, Coldwater, and Plainwell.

Sustained Impact:

Using the lessons learned from our challenges and solutions, we are able to offer similar services to other community hospitals. We plan to expand this service to four sites. Established standards of care by the American Heart/Stroke Association continue to be reinforced by our specialists. With this grant, we are viewed as a well-established and highly respected Primary Stroke Center where resources are available by a phone call. We collaborate with cardiac experts on staff increasing our outreach into SW Michigan to improve the care of the patient with heart disease. We are using our experience with community stroke education as a sample of what has increased participation in health promotion and prevention.

With the development of our technical infrastructure, we have been approached by VanBuren Intermediate School District to dialogue regarding a partnership with their efforts for education and health clinics.

Implications for Other Communities

Using the hub and spoke process with network outreach, you can easily see the opportunities to share information and technology. We are a connected society with many web applications. We witnessed this in the three years of this grant: 2009-2012 – credentialing issues were stopping our forward movement on the implementation of TeleStroke. The American Telemedicine Association focused a great deal of its energy on addressing credentialing. In 2011 CMS changed the credentialing process allowing for a much faster implementation. This was not completed in a day by just one person's interest; this took a large corporation to change national policy. This is one example of how sharing information with other grant applicants could provide opportunities to change policies that impact our efforts. Using the existing well-developed infrastructure, we will provide services with four other health care communities.

Some of the services developed as a result of the grant activity were:

- Nutrition Consultation where the location is convenient to the client
- Diabetes Education and Consultation by videoconference
- Provided video connection for several hospitalized patients to view several ceremonies that they would have missed
- Recorded Psychiatric Grand Rounds for facilities with limited professional education
- Connected regional care providers to quarterly grand rounds for the STEMI patient providing a consistent message throughout the region
- Developed an Accent Reduction Initiative program for physicians to improve compliance with health care
- Expanded our trauma outreach with broadcasting lectures from a national recognized program: American College of Surgeons: Advanced Trauma Life Support
- Connected senior leadership from Michigan based hospitals with Ascension Health, resulting in:
 - Improved communication with Michigan hospitals administration
 - Relationship Centered Care Education – Sponsor Team Meetings
 - Joint Commission Steering Committee
 - Healing Without Harm initiative
 - Electronic Health Record Governance Meetings
 - Annual Reviews
 - Community Benefit Inventory for Social Accountability development
 - Michigan Operations Excellence meetings
 - World Day of the Sick promotion
 - Environment of Care and Life Safety education
 - Provided multiple interview opportunities for recruitment

MICHIGAN

Eastern Huron Ambulance

Organizational Information

| | |
|-------------------------------------|---|
| Grant Number | D04RH12668 |
| Grantee Organization | Eastern Huron Ambulance |
| Organization Type | Non-profit organization |
| Address | PO Box 265, Caro, MI 48723 |
| Grantee organization website | www.mirems.org |
| Primary Contact Information | Leslie A. Hall Program Director Phone number: 989-284-5345 Fax number: 888-709-1718 leslie@mirems.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012 (no cost extension): \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---------------------------------|--------------------------------|---------------------------------|
| Bingham Ambulance Service | Ubyly, Huron County, MI | EMS Service, municipality |
| Central Huron Ambulance Service | Bad Axe, Huron County, MI | EMS Service, non-profit private |
| Croswell EMS | Croswell, Sanilac County, MI | EMS Service, municipality |
| Eastern Huron Ambulance Service | Harbor Beach, Huron County, MI | EMS Service, non-profit private |
| Elkton EMS | Elkton, Huron County, MI | EMS Service, municipality |
| Marlette EMS | Marlette, Sanilac County, MI | EMS Service, hospital-owned |
| Sanilac EMS | Sandusky, Sanilac County, MI | EMS Service, hospital-owned |
| Scheurer Hospital EMS | Pigeon, Huron County, MI | EMS Service, hospital-owned |
| Sebewaing Ambulance Service | Sebewaing, Huron County, MI | EMS Service, municipality |

Community Characteristics

Area:

The coverage area for the First on Scene EMS Project is a two county rural area in the Thumb of Michigan: Huron and Sanilac Counties.

Community description:

The project is located in two counties in the "Thumb" of the mitten shaped state of Michigan. The Thumb is a five county region, characterized by very fertile, flat land. The most important industry in the area is agriculture. It is a sparsely populated area, bordered by water, which enjoys and influx of seasonable tourism. The total population for Huron and Sanilac Counties is 79,000. In the two counties, healthcare providers are challenged with meeting the needs of high senior citizen and low income populations.

Need:

"Seventy-two percent of trauma deaths in a rural county occurred at the scene proving the critical nature of the first hour following the actual incident." (Rural Healthy People 2010). Winter road conditions, large geographic regions, and remote wooded and agricultural areas all cause delays for EMS professionals to reach the emergency scene for residents in Huron and Sanilac Counties, Michigan. Due to the large rural geographic area in the region, there is an urgent need for the first person on scene in an emergency to be able to provide life-sustaining care until the arrival of EMS. In response to this critical need, the nine EMS services in the region formed the

Huron-Sanilac EMS Network and embarked on developing the First on Scene community education and outreach program. First on Scene was developed to ensure that having a prepared and trained person "First on Scene" becomes the norm, not the exception.

Huron and Sanilac Counties have a disproportionate number of residents that are especially vulnerable to emergencies. We identified the elderly, agricultural workers and families, children, and special needs populations as particularly vulnerable.

- The Thumb has a high rate of residents that are age 65 and older: Huron (19.4%), Sanilac (15.4%), compared to Michigan (12.3%).
- 8% of residents in the region (more than 2700 households) are employed in agriculture, as compared to 1.1% of Michigan residents.
- 31% of households in Huron County, and 35% in Sanilac County, have a child under the age of 18 years.
- In Huron and Sanilac Counties, 8% of children age 5-20 are disabled, 18% of adults age 21-64 are disabled, and 42% of older adults (65+) are disabled. Special education enrollment data indicated 1849 children were designated as special education students in December 2007.

Both Huron and Sanilac Counties are Health Professional Shortage Areas for low income. In Huron County, 14.6% (5135) of residents live in townships that are designated as Medically Underserved Communities (MUC) and in Sanilac County, 44.6% (19,865) residents live in townships that are MUC designated. Four of the six local hospitals are Critical Access Hospitals (CAHs) and 10 EMS services meet draft guidelines for a Critical Access Ambulance Model (National Rural Health Association).

Program Services

Focus Areas

Access: Specialty Care
Emergency Medical Services
Health Education and Promotion
Health Professions Recruitment and Retention/Workforce Development

Target Population

Infants
Pre-school children
School aged children - elementary
School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
African Americans
Latinos
Native Americans
Uninsured
Underinsured
Farm Workers
Special Needs

Description:

The project expands upon existing services by adding four new or enhanced components to current programming targeted at the general population and EMS professionals:

1. **Community Education and Training:** In rural areas, it is common for a neighbor, employee, or family member to be the only person at an emergency scene for an average of 15 minutes. This time can extend to an hour or longer depending on road conditions and the remoteness of the area. Model programs that specifically address agriculture and wilderness related incidents will be utilized to teach residents basic first aid. Presentations, distribution of materials, and educational events will also educate children, special needs families, and the elderly about steps they can take to be prepared for emergencies. The project will also utilize the File of Life and Special Needs Identification programs.
2. **Cardiovascular Health Screenings and Education:** In a survey of residents in the region, as few as 54% recognized all the symptoms of a heart attack or stroke. Only 84% indicated that calling 911 would be their first step if they believed someone was having a heart attack or stroke. Early recognition of a heart attack or stroke is critical to saving lives and decreasing the damage from a heart attack or stroke. First on scene will conduct education on the warning signs, provide cardiovascular health screenings, and provide CPR training.
3. **Advanced EMS Professional Education:** Due to low call volumes and the infrequent occurrence of many conditions, advanced training is extremely important to rural providers. First on Scene will provide advanced training for EMS professionals and hospital staff that addresses the unique needs of special populations and conditions.

4. Increased Coordination of the Trauma Care System: Operating under a largely volunteer, part-time, and on-call system increases the likelihood of fragmented care in rural areas. This project will decrease fragmentation by developing a core training program, providing EMS services operations training, developing mutual aid agreements, conducting activities to build relationships between EMS professionals and hospital staff, and updating EMS supplies.

Role of Consortium Partners:

The First on Scene EMS Project has had active participation from consortium members. The grant program allowed for increased opportunity for consortium members to continue to work together cooperatively, coordinate resources, and plan and implement grant activities.

Eastern Huron Ambulance Service has acted as the grantee and fiduciary for the grant program on behalf of the Huron-Sanilac EMS Network. Each of the nine EMS Service consortium members has played an integral role in the planning and implementation of the following activities:

- Coordinate, host, market and/or provide instruction for various EMS continuing education and community education programs. Examples include agriculture safety awareness for EMS professionals, and community adults and youth; CPR classes, basic first aid for outdoor recreation enthusiasts; safety and preparedness education for school-age youth, special needs, school staff and parents.
- Dissemination of educational materials to the community on emergency preparedness, preparing for the arrival of EMS, and stroke and heart attack signs and symptoms.
- Coordination and marketing of community events such as EMS service open houses, and health screenings.
- Conduct informational meetings regarding the purpose of the Network, and to recruit new members.
- Development of new relationships and partnerships among services which has led to a decrease in territorial issues and in increase in sharing of information, assets, equipment and staff.

Outcomes

We plan to submit an application for no-cost extension before April 30, 2012 which, if granted, will extend our project period through April 30, 2013. As a result, we do not yet have complete outcome data. The evaluation plan and strategies are summarized below.

The success of this project will be measured based on the ability to meet target service numbers, increased knowledge of participants, accomplishing process measures, and perceptions of EMS professionals. There are three main strategies which will be employed to evaluate the program: Collecting input from participants, collecting input from EMS professionals, and tracking service data.

Collecting input from participants

Education of the public (first aid training programs, awareness education/presentations) and EMS professional pre/post surveys

Process: Registration forms, which are also used to collect demographic reporting data, assess an individual's confidence in handling an emergency situation and perceived skill level. Post surveys are used to measure change in confidence levels and perceived skills. For those aged 10 and older, surveys request the participants initials and date of birth for linking pre/post forms and for tracking unduplicated numbers across interventions. Age and developmentally appropriate tools are used for each audience.

Certification Rates

Process: Instructors report on the Service Activity Log the pass/fail rates for all classes which have a certification test. If a class does not have a certification process, instructors are asked to report the number of people that they observed correctly utilizing and practicing the knowledge and skills which they were taught.

Heart Attack and Stroke Quiz

Process: At events and presentations that include recognition of stroke and heart attack signs, participants complete a post-test which includes identification of the signs and symptoms. The post test utilizes the CDC developed question which was also used on the Behavioral Risk Factor Survey for the Thumb. Post tests are collected for a drawing and scored.

EMS Professionals Survey

Process: A repeat of the EMS Professional survey will be administered in May of 2012 to measure changes in attitudes, perceptions, and opinions. The survey will be sent to each licensed EMS professional residing in the two counties. It will be returned anonymously to the Independent Evaluator to promote valid answers. A drawing for a small item will be used to encourage return of the survey. This strategy was utilized for a return rate of greater than 50% in 2003. Data will be compiled and compared to data from past surveys conducted in 2003 and 2009. An analysis of the progress toward the project measures will be completed for the final report.

Tracking Reports

Process: A tracking report was created which incorporates each of the process measures of the project. Data for these measures are collected from the Service Activity Logs. A master participant database was created which enables the tracking of unduplicated users and all of the programs in which they participate. The raw data from the participant database is pulled into a tracking report which includes each objective, target, progress by year of grant, and a three year total. This report is used to provide quarterly updates to the Network Board members and to obtain support from local organizations and funders. It is also instrumental in reporting on project objectives for grant reports. Again, as we plan to request a no-cost extension, we plan to be collecting data through April 30, 2013.

Ongoing Quality Improvement: In addition to knowledge questions, age and developmentally appropriate questions will be included on the post surveys and post tests for programs. In order to encourage honest responses, an envelope will be passed around to collect the post surveys with the Independent Evaluator's address on it. This envelope will be sealed in front of respondents.

Challenges & Innovative Solutions

- When we were awarded the grant, the Farmedic Program was in a state of reorganization with McNeil Insurance taking responsibility for updating the program. We have had difficulty with contractors who were working on the updates. We held a pilot program to identify areas of strength and weaknesses and the curriculum is currently being rewritten.
- Volunteers and stipend paid assistance were difficult to recruit for various activities including the school presentations and health screenings. We reworked the original budget so that rather than pay stipends to several individuals to complete these tasks, we recruited two individuals. They were then trained and contracted with to complete the Andy the Ambulance presentations and other volunteer based tasks. We continue to use partnerships to alleviate staff time needs with other organizations such as local businesses to sell address signs and Farm Bureau insurance to help with safety programs. Restructuring the budget to hire a part time administrative assistant also freed up some of the project director's time to assist in other tasks.
- Coordinating a time for the Education committee to meet has been a challenge. We have utilized conference calls with limited success. We implemented a new schedule that has board and committees meeting alternating months.
- Finding enough local instructors to teach continuing education, and getting EMS professionals to attend CE programs scheduled sporadically were barriers to our education goals. We pooled our funding to present a three day conference which brought nationally recognized instructors from across the country, and also utilized our local instructors. Local EMS professionals were excited about the caliber of education at our EMS Summit, which began in 2009. We just wrapped up our fourth annual EMS Summit, and attendance has increased each year.
- We experienced difficulty in finding appropriate venues to sell reflective address signs to the community. We have utilized a printed placemat given to area restaurants to distribute information about the warning signs of heart attack and stroke. We decided to also put this information on the back of promotional materials for our address signs. We developed a partnership with local pizza restaurants to distribute the flyers on pizza boxes when they deliver to a residence. The reflective address signs not only are beneficial to EMS in the event of an emergency, but they also help restaurants to deliver to the correct address and in a timely manner.

Sustainability

Ongoing Services and Activities:

In addition to project activities we have continued to move forward in our network development/sustainability activities.

- We presently have a membership and dues structure, which includes corporate members, in place.
- We have been developing partner relationships with private businesses which have marketing or business goals that align with our project activities. One of the most influential partnerships we have formed is with Farm Bureau Insurance. Farm

Bureau has a vested interest in promoting farm safety and training of first responders. We also have partnered with Triad to prevent duplication of service in distributing Files of Life kits to the public. We are beginning to partner with pizza delivery service and local hardware stores to help with the marketing and sale of address signs.

- We have been successful in recruiting businesses to be event sponsors including a local grain elevator, other medical providers, and vendors of EMS equipment/supplies.
- We are beginning to see a level of participation at our education events that is close to being sustainable with event sponsors, tuition, and registration fees (EMS Summit, CE Classes)
- Repetitive offering of programs are also making them more routine. EMS services are now in the habit of having annual Open Houses and offering health screenings at public events. We are also having repeat requests for CPR training following the grant funded programs.

As we experienced success with individual projects it increased participation by EMS services and professionals. Development of partnerships has also opened the door to other opportunities including expansion of the network to a statewide effort, now the Michigan Rural EMS Network. The support for this concept was seen both in our current membership as well as other organizations across the state that witnessed our local successes. This expansion has been instrumental in putting rural EMS on the radar of funders and legislators at a state and national level.

Our educational efforts have resulted in a group of EMS professionals that are better equipped to address the challenges of providing service in rural areas. Residents of the two counties also have a better appreciation of the professional work done by the EMS crews, and are helping to dispel the myth that they are simply "ambulance drivers".

We have also seen a dramatic change in the attitudes of EMS services regarding issues of territory. While there will always be differences of opinion, we have seen a shift to services working cooperatively and collaboratively to achieve the ultimate goal of improved patient outcome.

Implications for Other Communities

Lessons learned about how to build relationships and encourage cooperative relationships among EMS services are important concepts that may be applicable in other communities. Also, creative responses to challenges presented, and an ability to adapt strategy or budget will be important for other communities seeking to implement a new program.

MICHIGAN

Marquette General Hospital, Inc.

Organizational Information

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|------------------------------|--|
| Grant Number | D04RH12758 |
| Grantee Organization | Marquette General Hospital, Inc. |
| Organization Type | Hospital |
| Address | 580 W. College Ave., Marquette, MI 49855 |
| Grantee organization website | www.mgh.org |
| Primary Contact Information | Susan Makela Director Educational Services Phone number: 906-225-3218 Fax number: 906-225-3037 Susan.Makela@mghs.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|---------------------------------|---------------------|
| University of Kansas Medical Center | Pittsburg, Crawford County, KS | AHEC |
| Indiana University School of Medicine | Indianapolis, Marion County, IN | AHEC |
| Indiana Higher Education Telecommunication System | Indianapolis, Marion County, IN | Academia |

Community Characteristics

Area:

Project primary focus was states of Kansas, Indiana and Michigan but educational events attracted national attention.

Community description:

Each of the target states address similar issues related to health professionals living/working in rural areas. There are significant challenges in recruiting and retaining rural health care professionals, dealing with medical professional shortages and managing the general financial challenges in a tenuous health care industry. The need for accessible quality continuing education intensifies as the industry adjusts to national performance measures and pay-for-performance initiatives.

Need:

Quality patient care is dependent on the ability to build knowledge and maintain competencies. The Midwest Alliance for Health Education (MAHE) is working to address the fact that rural health facilities have gradually decreased their education support for providers and employees as they are forced to adjust to the complex demands of health care finances. At the same time, more professionals are required to obtain qualified education for re-licensure and re-certification. The combination provides a setting where health professionals often find it necessary to forgo educational opportunities, leaving patients vulnerable to less than optimal care.

Program Services

Focus Areas

Health Professions Recruitment and Retention/Workforce Development

Target Population

Rural health professionals

Description:

This Outreach grant has been in support of the Midwest Alliance for Health Education (MAHE) in its mission to support high quality, accessible and affordable WEB-based continuing health education products, especially for rural health providers in the states of IN, MI and KS. Health education webinars and on-demand web events were produced by partners to assist health care providers with fulfilling continuing education needs and professional re-certification requirements. Events were specifically targeted towards organizational health education directors to support their primary need to assure ongoing continuing education opportunities for the variety of disciplines employed at their sites. In addition to content development, partners, through working committees, explored strategies for adjunctive value-adding services (such as completed courses tracking and easy to find professional/state licensure requirements), pricing, e-commerce function of website and marketing of the MAHE website and services to health care providers and professionals in the three target states.

Role of Consortium Partners:

Each grant partner acts as expert resources on a Governance Council that helped direct and guide the project. Partners offer education content that include continuing education credit in the form of webinars and on-demand learning opportunities. Partners serve as leads to organizations interested in partnering with MAHE and further developing education library. Partners also developed sustainability plans and activities designed to assist in expanding coverage areas, and filling service gaps.

Outcomes

The project has been able to offer 32 live webinars on a variety of topics, 30 of which went on to be promoted as on-demand events. Over the life of the project, the website membership has grown to 1146 users, representing a vast array of disciplines. MAHE has also been able to promote and support rural health initiatives in all partner states (IN, KS, and MI). A website calendar was developed and has continually been updated to offer resources and notices relating to rural health and education opportunities.

Challenges & Innovative Solutions

1. The Midwest Alliance represented three non-contiguous states, therefore in-person collaboration was only accomplished on three occasions. Communication was dependent on telephonic, email and electronic connections. Realizing the importance of face-to-face meetings, videoconferencing was utilized and found to be effective.
2. Most of the original council members changed positions, often delegating their role/responsibilities and some partners departed with no replacement. Building of relationships with new members took time and impacted the project progress/momentum.
3. Competition within and amongst partner organizations made things difficult and required additional time to find common ground/goals. Each organization already had continuing education programs established and MAHE's evolution had to be reconciled with overlapping organizational efforts.
4. The general state of continuing education web-based offerings has exploded since the creation of MAHE. More than ever, health professionals are able to increasingly find relevant courses online for ever decreasing cost and, increasingly, at no cost. In addition, many of these sites offer ancillary services, such as completed courses tracking and professions/state re-licensure/certification requirements information.

As a result, revenue generation has been a huge challenge due to complexities of finding optimal price points for products and services and due to challenges to effective marketing in the "clutter" that exists on the web. More established continuing education providers have the benefit of large scales of operation for content development, marketing and meeting budget.

Sustainability

On-going Services and Activities:

The Midwest Alliance will continue to have an impact on rural health education beyond the grant cycle through initiatives/projects in all three partner states (MI, IN and KS). In recognition of the inability to adequately overcome the significant barriers to meeting original MAHE goals, the partners adjusted the grant plan in Year 3 to better manage what opportunity they perceived at that point. Each

partner received an allocation to support bolstering of its respective continuing education capacity so that the rural health professionals' continuing education needs in each partner's own state would have better access locally, if not from MAHE, as originally intended.

Accordingly, resources have been devoted to assist Kansas with implementing web based educational events to include live, on-demand, and building ecommerce, thus creating a new opportunity for health care providers to participate in continuing education events and developing a source of income to sustain. In the state of Indiana, educational events have been coordinated to instruct educators and organizational leaders on the benefits of blended learning methods and techniques on ways to implement in their communities. MAHE is supporting efforts in Michigan to expand delivery of on-demand events, reaching a larger audience and offering more opportunities for CEU.

Sustained Impact:

The relationships created amongst partner organizations and members served will outlast the initiatives/goals accomplished through the grant cycle. Technology tools have been put into place allowing continued communication and collaboration. Growth and expansion of existing projects will enhance delivery and improve opportunities in all three states and beyond. Ultimately, these activities should assist in the retention and recruitment of vitally needed health care professionals in rural settings to help sustain rural health care capacity.

Implications for Other Communities

Having already traveled down this path and foraging into new areas, the list of lessons learned could prove invaluable. We have studied best practices and technique enrichment opportunities for staff development coordinators and educators. We can offer a roadmap with added insight and guidance through some of the challenges one may encounter in delivering on-line health education and provide potential solutions to problems, resulting in saving valuable time and resources.

MICHIGAN

Sterling Area Health Center

Organizational Information

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|-------------------------------------|---|
| Grant Number | D04RH12666 |
| Grantee Organization | Sterling Area Health Center |
| Organization Type | FQHC |
| Address | 725 East Main St., Sterling, MI 48659 |
| Grantee organization website | Sterlinghealth.net |
| Primary Contact Information | Roger Rushlow Program Director Phone number: 989-654-2072 Fax number: 989-654-2348 rushlow@sterlinghealth.net |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$149,600 May 2010 to April 2011: \$122,680 May 2011 to April 2012: \$92,760 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-----------------------------|-----------------------|----------------------------|
| Sterling Area Health Center | Sterling, Arenac, MI | FQHC |
| St. Joseph Health System | Tawas City, Iosco, MI | Community Hospital |
| Alcona Health Center | Lincoln, Alcona, MI | FQHC |

Community Characteristics

Area:

The coverage area for the Outreach grant is Northeast Michigan including the counties of Alcona, Iosco, Arenac, Ogemaw and Oscoda.

Community description:

This service area faces serious challenges for health care access due to high rates of under and uninsured individuals, widespread economic and social deprivation, joblessness, underemployment, geographic isolation, harsh climate, lack of transportation resources, and a large elderly population with extensive health care needs. All five counties are medically underserved communities and Health Professional Shortage Areas. The partner organizations provide virtually all of the primary care that is available in the service area.

Need:

Healthcare recruitment Professionals was formed in 2009 in response to an identified need for recruitment services specific to rural communities for primary care providers. The founding members were dissatisfied with the recruitment services available from national recruitment firms and collaborated to develop a recruitment approach that is unique and specific to candidates looking for the characteristics found in a rural environment.

Program Services

| | |
|----------------------|--------------------------------|
| Focus Areas | Target Population |
| Access: Primary Care | Infants Pre-school children |

School aged children - elementary
School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
African Americans
Latinos
Native Americans
Alaska Natives
Uninsured
Underinsured

Description:

The grant activities were coordinated and implemented through the three founding members and the HRP staff.

1. Identify and develop methods to attract potential primary care candidates to the area that are an appropriate fit for the service area. This will be accomplished through conducting annual recruitment strategic planning sessions, identifying current and future needs for the service area, developing data base resources and attending career fairs and conferences. Potential candidates will be selected based on skills and interest that meet identified needs, developed site visits based on the candidates' interests and needs, and maintained effective communication with potential candidates.
2. Develop formal relationships with established successful rural recruiting firms by maintaining a collaborative relationship established with 3RNet and through participation in state and national conferences where model programs and best practices are shared.
3. Evaluate current primary care needs of the service area on an annual basis by conducting annual Network strategic planning sessions and reviewing service area demographics annually.
4. Develop and implement a process to identify potential areas for 'shared' services utilizing a collaborative approach through review of service area need and executing contracts for services between members that benefits all partners.
5. Identify other organizations within the service area that would benefit from a collaborative approach to healthcare recruitment by developing a Business Model for potential new members, developing a recruitment fee schedule and exploring potential partnerships.
6. Explore opportunities for expansion into other areas of Michigan by identifying potential partners and initiate communication with additional partners to discuss and explore potential opportunities.

Role of Consortium Partners:

The grant program had a very active and supportive board. The organizations have a longstanding history of successful collaboration. Each organization played an important role in the program:

- **Sterling Area Health Center** was the fiduciary for the grant and staffed the program with a full time Recruitment Director in Year 2. Their accounting department prepared monthly reports on finances for the grant. Their CEO was the appointed representative and was an active and involved Board member at all monthly board meetings.
- **Alcona Health Center** provided a full-time Recruitment Specialist in Year 3 and helped to secure office space in Year 3. Their finance department worked directly with the fiduciary to help with the preparation of monthly reports. Their Executive Director was the appointed representative and was an active and involved Board member at all monthly board meetings.
- **St. Joseph Health System** provided space in Year's 1 and 2 of the grant. They contracted a Recruitment Director and Recruitment Specialist in Year1 and part of Year 2. They had representation at the table on a monthly basis despite many organizational changes. Their accounting department worked with the fiduciary to assist with the monthly reports.

Outcomes

- During the three year period, a total of eleven primary care providers were recruited to the founding member facilities and ten of the eleven providers are still with the facilities, there are still pending opportunities that may be filled by the end of Year 3.
- The Network was successful in sustaining the program by adding clientele who were in need of recruitment services.
- Improvement in healthcare access due to the addition of primary care providers through successful recruitment strategies via the Network.
- Heightened knowledge of the program locally and in the state of Michigan by networking and attending appropriate events.

- Out of the eleven placements for the facilities, there have been over thirty visits to our service area by providers interested in the area.

Challenges & Innovative Solutions

One of our biggest challenges was leadership/administrative changes among one of the partners. Working through the challenges made us stronger and have led to our success through:

- Maintaining communication with the organization and staying connected to the appropriate staff so that connections could be maintained despite the leadership and organizational change.
- Emphasizing the importance of participation/representation at the monthly board meetings was crucial for all three partners;
- Planning ahead so that the dates/times were established well in advance and coordinated with the participating members schedules;
- Following up with board members and to ensure everyone was on the same page and goals and objectives were realistic;
- Taking time to explain the program to newly appointed board members so they were equipped with the information they need to take back to the organization.

Sustainability

On-going Services and Activities:

The Network is in process of ensuring long-term sustainability through efforts that include an intensive marketing strategy to identify and secure potential clients, financial support for services from existing membership and exploring additional grant opportunities. We have applied for a no-cost extension and are hopeful that it will be approved within the next month to ensure continued financial support as we build our clientele. Services that will continue to be provided include:

- Recruitment of primary care providers for the three founding members
- Recruitment for the additional clients that have a signed service agreement
- Marketing efforts targeting local and statewide healthcare organizations to add additional clients to ensure financial sustainability

Sustained Impact:

Our community has been impacted significantly by having better access to healthcare because of the eleven new primary care providers that were brought to the service area. Our network partners continue to work collaboratively to identify additional Service Area needs and pursue opportunities for funding based on the identified needs. As a result, we have applied for and received a Rural Health Network Development grant and are proceeding to develop a formal structure for our Network as an independent 501 © 3 corporation.

Implications for Other Communities

What we have learned thus far regarding successful rural recruitment can be replicated not only in other rural areas but in any underserved area in the State of Michigan or United States.

MICHIGAN

Thumb Rural Health Network

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12759 |
| Grantee Organization | Thumb Rural Health Network |
| Organization Type | Non-Profit Organization; Rural Health Network |
| Address | 2188 S. Duncan Road Midland, MI 48640-9537 |
| Grantee organization website | www.trhn.org |
| Primary Contact Information | Darcy A. Czarnik Laurin Executive Director Phone Number: 989-374-0038 Fax Number: 888-262-0986 trhn.darcy@gmail.com |
| Project Period | 2009–2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------------|-------------------------------|--------------------------|
| Caro Community Hospital | Caro/Tuscola/Michigan | Critical Access Hospital |
| Harbor Beach Comm. Hospital | Harbor Beach/Huron/MI | Critical Access Hospital |
| Hills & Dales General Hospital | Cass City/Tuscola/Michigan | Critical Access Hospital |
| Marlette Regional Hospital | Marlette/Tuscola/Michigan | Critical Access Hospital |
| McKenzie Health System | Sandusky/Sanilac/Michigan | Critical Access Hospital |
| Scheurer Hospital | Pigeon/Huron/Michigan | Critical Access Hospital |
| Huron County Health Dept | Bad Axe/Huron/Michigan | Public Health Department |
| Sanilac County Health Dept | Sandusky/Sanilac/Michigan | Public Health Department |
| Tuscola County Health Dept | Caro/Tuscola/Michigan | Public Health Department |
| Covenant HealthCare | Saginaw/Saginaw/Michigan | Tertiary Hospital |
| St. Joseph Mercy Port Huron | Port Huron/St. Clair/Michigan | Tertiary Hospital |

Community Characteristics

Area:
The coverage area for the Outreach Grant is a three-county area in Michigan's Thumb region consisting of Huron, Sanilac, and Tuscola Counties. The target population for this grant includes low-income, uninsured residents of these three counties.

Community description:
Located in Michigan's mitten-shaped Lower Peninsula, the Thumb region is comprised of an area that is a sparsely populated, rural, and agricultural. The geographic area is 2,613 square miles—roughly the size of the state of Delaware—with a population of 131,206 (53 people per square mile). All three counties have a significant number of uninsured adults—Huron (17%), Sanilac (17.6%), and Tuscola (15.8%). Michigan was hit especially hard by the economic recession of 2007, and while the economy continues an uptick, the Thumb region historically has one of the worst economies in the state. Indicators such as household income, education level, unemployment, and health insurance rates contribute to the ongoing problem of preventing and treating chronic diseases for many residents. The region has a large portion of people who are underinsured because they are not at poverty levels to make them eligible for publicly-funded programs and they are working in low-income jobs that do not provide health coverage. Lower levels of post secondary education also make understanding and navigating health insurance systems a challenge.

Need:

TRHN began a needs-based process for improving the health status of residents in Huron, Sanilac, and Tuscola Counties. As a result of surveys, focus groups, data reviews, and program research, TRHN members identified access to care for the uninsured as one primary focus area. It was determined that as the local economy declined, the magnitude of the problem would continue to grow. And with an area that already had a significant number of uninsured residents, a unified effort to address was required to meet this need. The service area has very few programs which provide service and care to the uninsured, low-income population. There are no FQHCs in the service area. There are no free or low-cost dental clinics available. The lack of this support system for the low-income, uninsured has resulted in huge pressure on hospitals, public health departments, and private practitioners to meet the healthcare needs of the uninsured. With the lack of a coordinated system of care for this population, the care provided has been inefficient, fragmented, and financially burdensome.

Program Services

Focus Areas

Access: Primary Care
Oral Health

Target Population

Adults
Uninsured
Underinsured

Description:

TRHN utilizes a holistic approach to improving health status. Our needs assessment process has included data related to physical health, dental health, vision health, and mental health. In the Partnering for Health project, TRHN chose to address the first three focus areas. There are four project components—primary care, oral health, vision care, and one overarching component for health promotion services. For all of the program components, the target population includes low-income, uninsured residents of the Huron, Sanilac, and Tuscola Counties. The eligibility guidelines for each component are aligned to meet the income and population gaps not served by other public or private services. The following provides a brief description of proposed services and eligibility criteria as it applies to each component.

1. Primary Care: This aspect of the program targets uninsured adults age 18–64 with an income at or below 150% of the Federal Poverty Level (FPL) as verified by registrars located at each county health department. The program has the capacity to serve 80 residents and will allow the patient to establish a medical home and provide office visits and services including laboratory tests, radiology services, and specialty services.
2. Oral Health Program: This aspect of the program is to help meet the dental needs of all age groups who are either Medicaid recipients or low-income, uninsured patients with income at or below 200% FPL. A partnership with the University of Michigan School of Dentistry also provides free clinics utilizing dental students.
3. Vision Care: This aspect of the program provides free or low-cost eyeglasses to low-income, uninsured adult population and free or low-cost prescription eyeglasses for low-income, uninsured adults and children who are at or below 200% FPL. The sale of low-cost prescription eyeglass/sunglasses through general public sales at local health care facilities is also used as a sustainability fundraiser.
4. Health Promotion Services: Health promotion services encompass all of the focus areas. They are provided to the public with marketing specifically to low-income, uninsured populations to increase use of the services by the target population. Many services, such as blood panel, dental, vision, or other specialty screenings, are free of charge. Health promotion services include multi-faceted health fairs, follow-up and referral services, disease management education, and patient liaison services.

Role of Consortium Partners:

The Thumb Rural Health Network (TRHN) seeks to improve comprehensive health services in Huron, Sanilac, and Tuscola Counties by exploring and facilitating innovative approaches among the Network members. TRHN's 11 members are committed to set aside historical competitive issues and focus on emerging collaborative opportunities that address the complex health issues of the Thumb region. Services focus on access to health care for the underserved population that includes emphasis on primary care and dental services as well as chronic disease management. Additional benefits are improved community health status, community access to care, educational opportunities, and leadership development. TRHN membership consists of three county health departments, six critical access hospitals, and two tertiary-level hospitals. TRHN is the grantee and fiscal agent for the grant and staffed the program with an Executive Director and Project Coordinator. Consortium partner roles are as follows:

- Thumb Rural Health Network—TRHN provides annual matching funds in the form of personnel, eyeglasses, participant database software fees, and lab tests. The primary role of TRHN staff is to coordinate the project and grants management including financial management, management of contracts, reporting, coordinating and facilitating meetings, recruitment and training of additional providers, nurturing existing relationships outside of TRHN members, networking with human service providers, identifying additional opportunities for collaboration, and consolidating participant data from all program components and providers. Staff also coordinated and facilitated health fairs transitioning those responsibilities to committee members over the three-year grant period. Follow up for vision screenings and health fair screenings are carried out by the Project Coordinator.
- Public Health Departments—The three public health departments provide registrar duties, participated in Task Force meetings, and participate in health fairs as an in-kind contribution. The health departments provide essential screening services for the primary care component. As part of this registration process, they assess program eligibility, enroll participants, maintain the participant database, make outside referrals for those who did not qualify, assist with applications for the prescription assistance program, make referrals for the eyeglass program, and make the first appointment with the primary care provider. Staff also provide referrals to the dental program and vision care services. They also provide additional information and referrals for other existing programs offered through their department.
- Critical Access Hospitals—The primary role of the critical access hospitals is the provision of medical homes for 80 participants including the donation of medical care. They participated in health fairs by providing screenings and educational programs. They hosted eyeglass fundraising events and will make referrals to the dental and vision programs. Office managers of the hospital-owned participating clinics were instrumental in assisting with evaluation of the program, monitoring impact, and making modifications.
- Tertiary Hospitals—Tertiary providers were involved in projects based on relevance and their ability to contribute. For this project, one of the tertiary providers holds the reference lab contract and was involved in the screenings at health fairs. Both tertiary providers were financially supportive and assisted as needed with recruiting radiologists, specialists, and other specialized care as needs arose.

Consortium partners also partnered with existing models and community agencies to carry out the grant project including the University of Michigan School of Dentistry, local private dentists, Michigan Community Dental Clinics, local schools, the Michigan Department of Corrections, additional private practice primary care providers, reference labs, specialists, and other human service providers who provide assistance to low-income individuals and families.

Outcomes

The project provides comprehensive health care to low-income, uninsured residents by utilizing a medical home concept, maximizing use of existing services, and reducing duplication of services. Nearly 300 uninsured individuals who would otherwise have very poor—if any—access to care are now receiving primary and dental care. Primary care and dental clinic providers have not indicated any major problems with the program, administration, reimbursements, or patients. Indicators from the program focus group show that the members have been satisfied with resolution of problems, amount of participation in the planning and coordination process, and conflict resolution between providers. Network members report that they feel the time requirement for financial, registration, and office staff as related to low-income, uninsured related-issues has decreased since beginning the program. Financial data support there is a downward trend in the combined dollar value of charity care and bad debt due to the more efficient use of resources. Financial data also indicate that collection costs/revenue ratio has improved. The most important outcome is the satisfaction of the patients with the referral system and ability to access much-needed care along with the feeling of reward experienced by all staff and providers participating in this project.

Challenges & Innovative Solutions

There were a few expected challenges to this project and some unexpected challenges along the way. One of the biggest challenges was access to oral care services for the low-income, uninsured. The first challenge came when the State of Michigan cut dental services for adult Medicaid patients at the start of the grant. The grant had to be rewritten and submitted for change approval. This put the program seven months behind schedule in implementing a dental program. To overcome this challenge, more local dentists were brought on board to participate in the dental program thus allowing more patients to receive care. In addition to this, an innovative partnership was created between TRHN, a local dentist, and the University of Michigan School Of Dentistry to offer monthly free dental clinics. The State of Michigan reinstated dental services to adult recipients in late 2010, and the Network is currently working once

again with the Michigan Community Dental Clinics (MCDC) to start a clinic in the Thumb region. The greatest oral care challenge continued to be the overwhelming need for dental care in the Thumb region. This need far outweighs the resources available.

An additional challenge was the introduction of new key participating staff from Network members. Each time a new participating provider, member organization, or individual staff (e.g., office manager, hospital CEO, dentist) became involved in the project, there was a learning curve. In order to reduce any delays or conflicts from occurring, it was important to notifying TRHN staff as soon as new individuals were hired. TRHN staff was not always notified of new staff or providers. In order to make certain this did not happen, the Project Coordinator ensured key participating staff had copies of training materials on site including a copy of the protocols relevant to each individual's role. If a new provider came to the area, staff met with him to give an overview of the program and allow for the opportunity to ask questions. New committee and task force members were provided an orientation packet, a copy of the meeting notes/minutes from the past three meetings, and a personal orientation to the project. The Executive Director established an open door policy regarding communication and continually nurtured relationships through frequent contact and immediate response to problems and concerns.

Another expected challenge was skepticism and resistance to a new program. Early identification to skepticism and good communication proved critical in reducing resistance. This included the incorporation of pilot program and evaluation data in trainings. For example, if one county appeared to be making fewer referrals to the program, the Executive Director would meet with involved staff to determine any barriers preventing referrals. If appropriate, data from other providers not experiencing referral issues was utilized to demonstrate the program impact. Sharing success stories was also an effective tool in providing inspiration to others.

Sustainability

On-going Services and Activities:

A very cost-limited and effective approach was designed to promote sustainability after the grant period. The main components of the program will continue after the grant period ends although they will be reduced in scope. For each program component, a plan for sustainability with little or no use of grant funds has been developed. Sustainability strategies include a variety of fee for service, fundraising, in-kind contributions, leverage of third party payer sources, and local community-based grants.

- Primary Care Medical Home—After the initial recruitment of primary care providers, TRHN staff and members will undertake this responsibility in-kind. The Executive Director and consortium members will make presentations at medical association meetings and to individual providers on an annual basis. With the continued success of the program, word of mouth among peers will continue to foster expansion both within existing clinics, and to clinics, and to specialists. The Partnering for Health Task Force coordination will be shifted from the project coordinator to the TRHN Executive Director. Once protocols are in place and as participation in the task force is already donated in-kind, these activities will be manageable under the direction of the TRHN Executive Director. The registration process has been incorporated into the existing referral services of the local public health departments and will continue without grant funds. The provision of medical care is already being donated as well as the tracking of contributions. The network of coordinated services will continue to be supported by in-kind contributions of office managers with minimal support needed from TRHN staff.
- Oral Health Program—The consortium is currently working with MCDC to start a clinic in the Thumb Region. The MCDC model provides for self sustainability through the unique Michigan Medicaid reimbursement policy for dental services. Reimbursement revenue will sustain financial assistance needs for patients in need, as demonstrated in eleven currently operating MCDC clinics. As it grows, this fund develops and the amount available increases.
- Vision Program—Sales from the vision program should produce a minimum of \$2,000 per year and be sustainable through this process. Fundraising sales at each consortium member's facility will be scheduled annually and conducted by staff trained by the project coordinator. Normal sales to low-moderate income individuals will be handled by the three health departments ongoing with a small margin of revenue. This will especially be encouraged for seniors on fixed incomes. Assistance provided will be on a sliding fee scale for eyeglasses. The scale will descend to a no-payment floor. Additionally, donated and/or sliding fee scale examinations through local optometrists and state/national optometry associations will be recruited.
- Health Promotion—To cover the cost of screenings, Health Fairs will be open to the entire population of each county. Basic diagnostic tests will be priced on a sliding fee scale descending to no fee for those in need and priced to produce revenue for the testing assistance fund for those able to pay. Some very specialized elective testing will also be available for a set fee. This testing is currently being offered by outside for-profit corporations without any connection to the local community or follow-up care. This testing will be shifted to local hospitals and revenue generated during these events will be earmarked for the testing fund. Health education programs at multi-faceted health fairs will already be provided in-kind and therefore will be sustainable after the grant.

- Consortium members will continue to host periodic multi-faceted health fairs that include screenings and health ed. as part of their normal community outreach efforts.
- Finally, TRHN will continue to seek out additional grant funds and in-kind donations from the consortium of provider time and services to support continued access to care.

Sustained Impact:

This program will have a major sustained impact on the low-income, uninsured residents of the Thumb region by providing them primary care, health screenings, dental care, and vision care at costs which are affordable based on income. Without these services, most members of this population go without preventive care or inappropriately use emergency care to meet basic health needs. They are also more likely to have chronic conditions escalate to the point of healthcare emergencies. The innovative use of the medical home concept will also provide participants with a more consistent form of care resulting in better patient outcomes. The program has created a community of local providers who better understand the great needs challenges faced by the uninsured of the region. And by expanding on the collaboration of the consortium, efforts to expand care access to the underserved extend well beyond this project.

Implications for Other Communities

Many other rural communities have similar needs for the low-income, uninsured population and similar barriers to meeting these needs. While there are very few examples of the proposed primary care model and health promotion services, this program could work quite well in many rural communities with a high percentage of uninsured residents. Communities that have existing primary and oral health resources in place and providers that are willing to set aside competitiveness to work together are key components. The oral health aspect of this program has been very successful and can easily be replicated to meet the needs of other communities. The developmental materials including forms, software, central registration process, and recruitment procedures will be very valuable. The program protocols developed may also be utilized by other communities as a manual for beginning their own program.

MINNESOTA

County of Koochiching

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12756 |
| Grantee Organization | County of Koochiching |
| Organization Type | County Community Health |
| Address | 1000 5th Street, International Falls, MN 56649 |
| Grantee organization website | N/A |
| Primary Contact Information | Ric Schaefer Director at Arrowhead Health Alliance Phone number: 218-591-1302 Fax number: 866-822-2598 ricschaefer.sc@gmail.com |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|------------------------------|-------------------------------|----------------------|
| Lake County Public Health | Two Harbors, Lake County, MN | County Public Health |
| Carlton County Public Health | Cloquet, Carlton County, MN | County Public Health |
| Cook County Public Health | Grand Marais, Cook County, MN | County Public Health |

Community Characteristics

Area:

The service area for this project is the upper, northeastern corner of Minnesota. This area is commonly referred to as the "Arrowhead" region, as it encompasses the triangular, arrowhead-shaped northeastern corner of the state. The northern edge of this region borders Canada, while the eastern border is the northwestern shoreline of Lake Superior. All four counties (Carlton, Cook, Lake and Koochiching) are predominately rural, with the majority of the terrain comprised of heavily wooded, sparsely populated forestlands.

Community description:

The service area for this project is very rural and remote. Barriers to health care access include transportation, cultural barriers, severe and inclement weather (snow, ice, wind), difficulty attracting and retaining workforce and lack of networking among service providers. Unmet health care needs of the target population have been identified through analysis of statewide and county-level health statistics, a multi-year regional needs assessment (Bridge to Health) and local surveys distributed to the target population. Data suggests that pregnant women and those with infants/young children in the four county area are likely to be poorer, more isolated/ rural than others in the state, less likely to be employed, more likely to smoke, more likely to be Native American, less likely to have prenatal care in the first trimester, more likely to be on medical assistance, more likely to have postpartum depression and more likely to encounter barriers to accessing health care and community based services than others in the state.

Need:

The target population for this project was pregnant women and children from birth to age five. While the project was designed to promote access to universal home visits for all pregnant women and new mothers, specific efforts will target women and children considered high risk.

Focus Areas

Children's Health
Maternal/Women's Health

Target Population

Infants
Pre-school children
Adults
Pregnant Women
Caucasians
African Americans
Latinos
Native Americans
Alaska Natives
Uninsured
Underinsured

Description:

The program was designed to address the following through prenatal and postpartum home visits.

- Assess and address health issues of mom and infants (immunizations, nutrition, illnesses, safety, postpartum recovery, etc.).
- Screen for at risk issues which include postpartum depression and other mental health issues, substance abuse, domestic abuse, environmental hazards, self sufficiency issues, children with developmental delays, etc.
- Support and assist parents in creating healthy and secure relationships with their infants
- Connect and refer parents to community resources and facilitate access to health care services

Project activities focused on families at high risk for poor parenting outcomes, including teen parents, low income pregnant women, families involved with child protection services, children with developmental delays, parents at risk for child maltreatment, pregnant women with a history of chemical dependency and parents with mental health issues.

Prenatal Visits

Topics covered during prenatal visits include: fetal development, nutrition, risk behaviors (smoking, alcohol use, etc.), labor and delivery, breastfeeding, pre-term labor signs, exercise, newborn characteristics and cares, postpartum characteristics and cares, community resources, prenatal and infant safety (seatbelts, car seats, exposure to lead, etc.), and parenting. The nurses also assess health history, weight, blood pressure, promote routine prenatal medical care, and provide support.

Postpartum/Universal Visits

A minimum of two postpartum visits are offered to all mothers of newborns in each county.

Topics covered during the postpartum/universal home visits include a review of the labor and delivery experience, breastfeeding, postpartum physical status, nutrition, emotional status, support systems, fatigue level, role change, contraceptives, blood pressure, community resources, personal safety (domestic abuse), infant safety (car seats, environmental hazards), physical assessment of infant, weight of infant, infant development, immunizations and disease prevention, infant's sleeping, eating, bowel and voiding, infant cues, child development, and positive parenting.

Role of Consortium Partners:

Koochiching County

Koochiching County was the project applicant for the consortium and provided fiscal oversight and administration for the grant. The Public Health Director and the Community Services Director for Koochiching County played a significant role in implementing and/or enhancing home visiting services for maternal/child health in Koochiching County and facilitated staff training and participation in all grant activities. Public health and community services staff participated training related to home visits, evaluation outcome measures and data collection. Public health and social service staff worked with local consortium partners to strengthen services for pregnant women and women with infants/young children in Koochiching County.

Carlton County

Carlton County has an established home visiting program with comprehensive policies and procedures and an effective billing system for third party reimbursement for services. Carlton County staff provided technical assistance and mentoring to Cook, Lake and Koochiching counties to facilitate the implementation of effective home visiting programs. Carlton County also providing training related to assessments (basic home visiting assessment, PDSS and STEEP assessments), data collection and billing.

Cook and Lake County

Cook County fully implemented the service delivery and billing components of the home visiting program and devoted staff resources for home visiting and developing billing capacity. As training was both interactive (via remote technology) and in-person, Cook County made meeting and interactive training space available as needed. Staff time was committed for training and implementation of home visiting services in the county. Staff time was also committed for to learn effective billing techniques for those areas where billing is allowed for third party reimbursement.

Outcomes

Project data for the three year period is currently being reviewed. Preliminary data suggests that:

- Infants and children were screened for developmental and social-emotional milestones using recommended standardized tools
- Infants and children who were screened but did not meet developmental and social-emotional milestones were referred for further assessment, follow-up, and/or additional intervention
- Parents and their infants/children were connected to the community resources and/or services for parenting and family support
- Infants and children who participated in the program are current on well-child checkups.
- Infants/children who participated in the program are current with immunizations.

Challenges & Innovative Solutions

Home Visiting

Overall the most significant challenge was the actual development and implementation of Universal Home Visiting Program in three separate and distinct counties. We were able to move forward with development in a way that required each county to meet specific goals and expectations as outlined by our original application. Specific challenges included distance of each county from one another, separate county entities (County Boards/County Commissioners) governing overall health and human services, and unique partners and historic alliances within each county. None of the challenges were insurmountable, and in all three counties we have successfully implemented Universal Home Visiting.

Data Tracking

The most surprising challenge was in the area of evaluation development and tracking. Upon receipt of the PIMS requirements we set out to determine what additional process and outcome measures we felt were appropriate. Our original plan was to develop a web based program for data entry. This type of system was preferred as it would allow for case management and data collection for yearly reports. We explored the feasibility of developing an online electronic data management system but determined the cost of such a system to be impractical and unobtainable. Ultimately we settled on a set of documents completed by each public health nurse during the course of the home visit(s). In addition to the individual documents an Access based database tool was created so all clinical evaluation data could be collected and evaluated.

Strengthening local multi-disciplinary consortiums

One of our main goals was to strengthen local multi-disciplinary consortiums in each participating county. Barriers to developing these multi-disciplinary consortiums include the following:

- Members already met for other reasons not related specifically to maternal and child health.
- Adding an additional meeting has in some cases seemed overly burdensome to already time strapped agencies
- Many of the issues we expected to address through multi-disciplinary consortiums were already being met through an informal process

Although barriers exist, in many cases the needs are being met without convening multi-disciplinary consortiums. Often families that are high risk or who have suspected mental health or development delays are immediately referred to the appropriate agency. In effect the issues are being dealt with immediately and case conferencing is being done on an as needed basis.

Sustainability

On-going Services and Activities:

Home visiting will continue in each of the member counties. In the short term visits may be limited to those at highest risk or where third party billing is available. We have applied for additional grant funds to expand upon the home visiting program including the development of a more formal promising practice/evidenced based approach. It remains our goal to sustain a long-term universal home visiting program through short term grant funding and long term billing/tax levied county funding.

Sustained Impact:

There are a number of benefits which we believe will sustain beyond the life of this Outreach Grant. Including:

- Prenatal and Postpartum home visiting in all member counties
- A more tightly knit network of public health and human services organizations (this is especially true of the four consortium members)
- Improved education and skills of member county public health nurses which impact Maternal/Child Health outcomes beyond home visiting

Implications for Other Communities

Over the course of the last three years our consortium members have worked together to create and ultimately sustain a universal home visiting program. We feel that through this experience other communities could learn from experience in:

- Networking between County Based Public Health and Human Services Agencies
- Program Development beyond Maternal and Child Health Programs

MINNESOTA

Mississippi Headwaters Area Dental Health Center DBA Northern Dental Access Center

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12735 |
| Grantee Organization | Mississippi Headwaters Area Dental Health Center (D/B/A Northern Dental Access Center) |
| Organization Type | Non-profit organization / Community Dental Clinic |
| Address | 1405 Anne Street, Bemidji, MN 56601 |
| Grantee organization website | www.northerndentalaccess.org |
| Primary Contact Information | Jeanne Edevold Larson Executive Director Phone number: 218-444-9646 Fax number: 218-444-9252 jeanne.larson@northerndentalaccess.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,000 May 2010 to April 2011: \$124,300 May 2011 to April 2012: \$97,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|------------------------------|---|
| Lead Agency: Northern Dental Access Center | Bemidji, Beltrami County, MN | Nonprofit, community access dental clinic |
| Beltrami County Health & Human Services Family Health Division | Bemidji, Beltrami County, MN | County Public Health Department (government agency) |
| Community Resource Connections | Bemidji, Beltrami County, MN | Community association of nonprofit health and human service providers |

Community Characteristics

Area:

Rural, northwestern Minnesota, including the counties of Beltrami, Cass, Clearwater, Koochiching, Polk, and more. Communities include Bemidji, Blackduck, Cass Lake, Red Lake, Bagley, Clearbrook, Crookston, Thief River Falls, Mahnommen and more.

Community description:

Northern Dental Access Center serves low-income residents (200% of federal poverty guidelines) who live rural areas in and around Beltrami County form the target population. The median household income in Beltrami County is \$44,700 with 39.9% of the population living in poverty, the second highest poverty rate of 87 counties in Minnesota and much higher than the national poverty rate of 14.3%.

The health ranking of Minnesota Counties (*Minnesota Department of Health*) shows Beltrami as the 82nd healthiest of Minnesota's 85 ranked counties. 24% of people in Beltrami County are enrolled in Medicaid; 16% are enrolled in Medicare. According to the US Census Bureau Small Area Health Insurance Estimates, the number of uninsured people in our region is 15%; this is 50% higher than the Minnesota State Average.

According to Kids Count Data Center, children in Beltrami and adjacent counties are at significant risk compared to children in Minnesota and the nation as a whole; there are higher rates of poverty, food support use, teen pregnancy, abuse and neglect.

Need:

The 2009 HRSA grant proposal was submitted at the height of our community's effort to address the serious health disparity of dental access for low income families. At the time of application, thousands of people in the target population were being turned away because dentists had exceeded their ability to provide care for patients on subsidized insurance (Medicaid). Families were forced to drive hundreds of miles to find care and many simply go without. In Beltrami County alone, more than 4,600 out-of-county dental visits were logged each year—burdening agencies with travel costs, staff time in finding appointments and in finding drivers; and burdening families who are often forced to go hundreds of miles to see a dentist. Located in the heart of Dental Health Professional Shortage Areas, Northern Dental Access Center was created in an area where the dentist to population ratio in rural Minnesota is below the national average of one dentist for every 1,800 people (MDH, 2002). All area counties in the northwest Minnesota region are designated DHPSA. This shortage is being exacerbated by the aging of the current dental professionals; half of the dentists practicing in Minnesota are at least age 55 and seven dentists retire for every five who start a practice.

In this rural area, significant issues of poverty make for a higher than average enrollment in Medical Assistance and other subsidized Minnesota Health Care Plans (MCHPs); and private practice dentists are maxed on their capacity to serve these patients, because of the lower-than-acceptable reimbursement rates. Therefore, only 42% of people enrolled in a MHCP receive dental care.

Northern Dental Access Center opened in 2009 as a community access dental clinic to address the gap in dental care availability for the target population. Seven years of community collaboration-building, planning and fundraising resulted in a clinic design that deliberately set out to do things differently. Core to the concept was to provide a culturally competent approach to serving vulnerable families, and understanding the true barriers to care faced by families in poverty.

Program Services

Focus Areas

Children's Health
Coordination of Care Services
Health Education and Promotion
Oral Health

Target Population

Pre-school children
School aged children - elementary
School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
Native Americans
Uninsured
Underinsured

Description:

The activities funded by HRSA were designed to leverage local investment in increased access to dental care by adding patient outreach and support services to assure patient success and improve ultimate patient oral health outcomes. The objectives of the project were to:

- A. Address barriers to access to dental care by low income people
- B. Provide support and outreach services to maximize patient success with dental treatment plans and other family services that will improve overall health
- C. Build community awareness of the importance of oral health care and prevention as they relate to public health

Funds were used to provide a variety of value-added services, easily accessible by patients on-site. A Patient Support Center was created within the new dental access clinic to provide:

- a Patient Advocate to advise patients of their recommended treatment plan and work with them to address barriers to success
- insurance counseling to assist patients in Medical Assistance and other subsidized care program enrollment issues;
- information and referrals to help families access social and private services that are available in the community to help them achieve their health and self sufficiency goals;
- on-site child care for patients with young children,
- child and teen checkups, immunizations, and other health care referrals for patients by on-site public health nurses,
- assistance in finding transportation through partnerships with local and regional transportation providers;
- and addressing communication barriers.

The Patient Support Center's services complemented the dental access clinic's existing commitment to a culturally-sensitive patient-centered approach as reflected by:

- Toll free telephone access to schedulers and patient advice.
- Staff dedicated to take the time to dialog respectfully with patients regarding their treatment plans, insurance benefits, choices and individual needs to participate in treatment plan.
- A facility and staff that demonstrate cultural competency with a welcoming environment that balances empathy with encouraging personal responsibility; ongoing staff training and orientation regarding issues facing target population and strategies to assure their success.
- Provision of educational materials/events regarding nutrition and other behavior that impacts oral health.
- Solicitation and responsiveness to patient feedback and patient advisory group input.

Grant funds were also used to build general awareness of the importance of oral health care in our community through public awareness campaigns regarding impact of oral health care and personal responsibility for oral health care.

Role of Consortium Partners:

The three agencies that have come together to carry out the proposed activities are part of a larger community collaborative that includes dozens of agencies, with leadership by the Board for Directors of Northern Dental Access Center. The Center provides overall project managements and supervises project activities in the areas of treatment coordination, oral health education, community awareness, and addressing barriers to care (e.g. childcare, transportation, etc.). The Executive Director of Northern Dental Access Center continues to provide project management and facilitate communication among the consortium members to assure activities are well integrated and resources are used accordingly.

Community Resource Connections and Beltrami County Health and Human Services joined Northern Dental Access Center in planning and implementation of patient support and outreach services that were designed to enhance patient success and improve public health outcomes. Community Resource Connections oversees activities related to insurance counseling and enrollment assistance, client information and referral, and evaluation of these activities. Beltrami County Health and Human Services provides health outreach and information referral activities, child and teen checkups, and other health care services.

The directors of all three consortium members meet regularly to update each other on their respective project activities and to identify opportunities for improvement and refinement of activities.

Outcomes

Project outcomes include:

- 9,900 patients served in year three, more than 15,000 total: 41% children, 54% adults, 5% senior citizens
- 12% of children have been cavity free for 6 months
- 56% reduction in ER visits at the regional hospital that note a secondary diagnosis "*unspecified disorder of the teeth and supporting structures*" from 2008 to 2010.
- 5% reduction in ER visits that note this as a Primary diagnosis.

Through our patient exit surveys we have learned:

- 65% of patients report changing their brushing and flossing habits because of their dental visits
- 69% report overall health has improved since receiving dental care at this office
- 41% report changing how much sugar consumed as a result of the info given by our staff
- 46% report drinking less soft drinks, energy drinks/juice
- 28% report that they made use of the health or service related resources available
- 100% report our staff were friendly, knowledgeable and helpful in meeting needs and making them feel welcome
- 100% report they would recommend Northern Dental Access Center to a friend or family member
- 100% rate the dental treatment they received as Excellent(84%) or Good (16%)

Challenges & Innovative Solutions

Childcare – Efforts to address patients' need for childcare while siblings or parents had dental appointments became stalled with regulatory and liability challenges. Offering formal 'child care' would have required sign-in/sign-out procedures, immunizations proof, liability release forms and other formalities that would create even greater obstacles, and constrain efforts to build trust among patients. Our response was to reframe the concept of childcare, to 'child supervision' which entails us having a person on site who has other duties, but duties that are flexible so that when children are in the building, this person can interact with them, and assure their safety while mom or dad is receiving dental treatment. A robust children's play area has been developed and our staff person reads to children, plays Jenga, or colors with them. This has been greatly appreciated by our patients.

Transportation – Initial plans were to partner with the public transit system to provide transportation for patients who needed it to make dental appointments. After consultation with our patient advisory group, it became apparent that the transit system was less than desirable, and many people felt unwelcome by it, the lack of flexibility made it difficult to get a ride on short notice, and reliability for a timely ride home was an ongoing complaint. At the same time, a new, small business in our community was emerging—a 'safe ride' cab company to help reduce alcohol-related traffic accidents. After meeting with this business owner, we established a contract for patient transportation that would meet our needs and the needs of our patients. This established a foundation for daytime business for this new company, which has since expanded to include contracts with other health providers in our community. And our patients are thrilled with a luxury taxi cab ride when they need it.

Mental Health Issues – After working one on one with patients, through our patient advocates, we came to learn that the typical barriers to care that we knew were there—child care and transportation, were often covers for deeper issues in families that created barriers to success. What we find is that the primary reasons for treatment failure relate specifically to untreated or undiagnosed mental health issues. We have addressed this by providing training to our staff and dental providers to recognize these issues, and to manage mental health crises when they occur. Additionally, we are seeking new funding to add mental health screening and referral services for our patients.

Sustainability

On-going Services and Activities:

Most grant-supported activities will continue to varying degrees, including:

Patient Advocacy – This aspect of the project will continue beyond the grant period in a smaller scale. Cross training efforts have been underway to educate a variety of team members on the basics to help families break down barriers to care.

Patient Transportation – This aspect of the project has proven to be something that small, local funders are interested in supporting.

Child Supervision – This is a manageable addition to services that we will continue by assigning team members on a rotating schedule.

Awareness Campaigns – Many elements of building awareness are not sustainable beyond the grant period. However, we were able to identify the most cost-effective items, and as funds allow, we are able to purchase materials and ad space for specific items on a periodic basis.

Child-Teen Exams – Beltrami County Health and Human Service's role in the consortium—providing child and teen exams, immunizations and health outreach services to families—was all in-kind contributions as part of the County's commitment to public health. This will continue beyond the grant period.

Insurance Counseling – Northern Dental Access Center will continue to work with partner agency, Community Resource Connections to help patients understand and access Medicaid programs that are available to them. Without continuation of grant funds, this counseling will be administered on an appointment basis, because it's not certain that CRC staff can remain on site at Northern Dental Access Center.

Sustained Impact:

Most impactful from the outreach work these past three years, has been the core values that have emerged for this new clinic. We have learned through this grant, to understand the complexity of poverty and the barriers faced by the target population. A patient-

centered approach is now modeled through our new organizational chart; a strategic plan for the coming years embraces the Ruby Payne Bridges out of Poverty framework; and we have set a new standard for the adaptation of a medial-home model to community dental care.

Our consortium partners remain committed to working together, with or without grant funds, and their numbers have grown to include a half dozen community agencies who are on site to support our patients and the target population.

No doubt this award has changed the way our entire region views people in poverty, and how the dominant culture can improve its efforts to improve their lives and their health.

Implications for Other Communities

The patient outreach and support services through this grant round out the basic dental care, to create a comprehensive continuum of care for children and families, in an environment that is welcoming and nonjudgmental. Ninety-seven percent of patients report feeling welcome here. This success has garnered us both state and national recognition—awarded the 2010 Rural Health Team by the Minnesota Department of Health; and receiving Best Rural Program award from the National Association of Counties. Many other regional nonprofit organizations have toured our facility and are working to replicate this model approach.

MINNESOTA

Rice Memorial Hospital

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12737 |
| Grantee Organization | Rice Memorial Hospital |
| Organization Type | Hospital (city-owned) |
| Address | 301 Becker Ave., Willmar, MN 56201-3395 |
| Grantee organization website | www.ricehospital.com |
| Primary Contact Information | Dale Hustedt Chief Administrative Officer Phone number: 320-231-4226 Fax number: 320-231-4869 DHus@rice.willmar.mn.us |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$125,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$125,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|-----------------|--------------------------------|
| University of Minnesota School of Dentistry | Minneapolis, MN | University |
| Southern Minnesota Area Health Education Center (AHEC) | Willmar, MN | Non-profit organization (AHEC) |

Community Characteristics

Area:
The primary service area of the Rice Regional Dental Clinic includes 17 counties in West Central and Southwest Minnesota--Big Stone, Chippewa, Kandiyohi, Lac Qui Parle, Lincoln, Lyon, McLeod, Meeker, Murray, Pipestone, Pope, Redwood, Renville, Stevens, Swift, Traverse, and Yellow Medicine.

Community description:
The population of the 17-county service area is just over 250,000. Twelve of the 17 counties in the service area carry full designations as federal Dental Health Professional Shortage Areas. Two of the counties carry partial designations. Approximately 10% of the population is living below the poverty level. More than 90% of area residents are White, and approximately 4% are Hispanic or Latino. There are approximately 73,000 children under the age of 18 living in the service area, of whom approximately 10% living in poverty and nearly 40% qualifying for free or reduced school lunches. Approximately 10% of the children in the service area have special healthcare needs, 20% are ethnic minorities, and 21% are enrolled in public health care programs.

Need:
Dental access has been a health issue of growing concern for a number of years in rural Minnesota, specifically in West Central and Southern Minnesota. Significant oral health access problems existed for the region's children, especially those with complex oral health needs. Approximately 60,000 children under the age of 18 live in the 17 county service area of the Rice Regional Dental Clinic. While comprehensive oral health access data for this group is limited, data from the Rice Regional Dental Clinic, local and state agencies, and other sources indicate that children in the region can face significant disparities in oral health care access. Four factors contribute to these disparities:

1) *Low income and lack of dental insurance* – The lack of access to dental care, especially for patients on public assistance or with no insurance, is magnified significantly in rural areas. A smaller proportion of Minnesota children in rural areas have teeth in excellent

condition (42.1%) than those in urban areas (48.6%). Minnesota’s rural children are significantly less likely to have dental insurance than urban children (66.7% versus 83.5%). Over 60% of clients at the Rice Regional Dental Center report that another dental office said they were not taking patients with their type of insurance coverage (e.g. Medicaid). In one five-county portion of the region, only one dentist accepts new public program patients and only those patients from his home county. Of 16 dental practices participating in a local human services referral network, eleven are closed to public program and/or all new patients.

2) *Special needs status* – Rural children with special health care needs are also less likely to have dental insurance than those in urban areas (72.0% versus 88.4%). The service area is home to an estimated 8,503 children with special health care needs.

3) *Race and ethnicity* – Minnesota is becoming increasingly racially and ethnically diverse, with West Central and Southwestern Minnesota communities experiencing the most dramatic growth in minorities including Somali, Latino, and Sudanese populations. The region is also home to a large number of American Indians. Generally speaking, on most measures of oral and systemic health, Minnesota’s ethnic communities rate below the mean exhibited by the mainstream community. Disease patterns and health behaviors vary among the ethnic communities, and many of these individuals are among the uninsured/underserved and are less likely to be familiar with oral health practices and dental care.

4) *A shortage of qualified dental providers* – Lack of sufficient dental workforce is a significant barrier to oral health care for both adults and children. In 2003, Minnesota was the number one state experiencing and negative percentage change in the ratio of dentists to the population. In Minnesota, an increasing number of people with dental problems are using hospital emergency rooms because no dental treatment options are available to them. Twelve of the seventeen counties in the service area are federally-designated Dental Health Professional Shortage Areas. Pediatric dentists are in especially short supply in the service area, with only one pediatric dentist working one day per week in the entire 17-county service area. Because the Rice Regional Dental Clinic lacked the capacity and expertise to provide services to children whose needs are complex, patients were referred to the two pediatric dentistry practices in St. Cloud more than 60 miles away.

Program Services

Focus Areas

Oral Health

Target Population

Infants
 Pre-school children
 School aged children - elementary
 School aged children - teens
 Caucasians
 African Americans
 Latinos
 Native Americans
 Alaska Natives
 Uninsured
 Underinsured

Description:

Utilizing dental students, dental hygiene students, and residents, the Rice Regional Dental Clinic provides oral health care services to largely low-income and uninsured residents of rural Minnesota. In 2009, just over one-third (36%) of the patients served by the clinic are under the age of 20. However, the clinic lacked capacity and specialty expertise to serve children with complex oral health care needs.

The focus of the grant-funded program was to expand access to primary and preventive dental care for underserved children and youth, including those who are low income or who lack dental insurance or are public program patients, children with special health care needs, and ethnic minorities in the 17-county service area of West Central and Southwest Minnesota served by the Rice Regional Dental Clinic.

With grant support, the clinic hosted pediatric dentistry residents who could provide more advanced specialty care than the general dentists, students and residents staffing the clinic. While regular dentists typically have limited exposure to pediatric dentistry, pediatric dentists focus entirely on work with children as young as one year old. Pediatric dentists are skilled in working with children who

require extensive dental work and who may have other special health care needs. They are also trained to provide dental care in the operating room under general anesthesia when appropriate.

Pediatric dentistry residents completed rotations of 4 days per month, with one to two residents present each month. In addition to provided specialty care to our pediatric patients, the residents interacted with other clinical staff providing greater exposure to procedures and skills involved in advanced pediatric dental care.

Role of Consortium Partners:

The grant program had a very active consortium partnership, with the three participating partners contributing as follows:

- **Rice Memorial Hospital** served as lead applicant, provided fiscal management for the project and the Dental Clinic, provided necessary support services to the Dental Clinic, including housekeeping, maintenance, information technology and human resources, provided interpreter services and written materials in multiple languages, provided information and materials about the project to health care providers in the service area so they could appropriately refer their patients, managed and collaborated with Consortium partners to achieve project goals, maintained regular communication with the project officer to fulfill grant requirements, and supported ongoing sustainability planning on behalf of the Dental Clinic, among other duties.
- The **University of Minnesota School of Dentistry** coordinated and managed pediatric residents providing specialty services at the Dental Clinic; implemented School of Dentistry outreach curriculum for Pediatric Residents and dental and dental therapy students in rotation at the Dental Clinic; facilitated the process for faculty appointment of community-based adjunct faculty; and supported ongoing sustainability planning.
- The **Southern Minnesota Area Health Education Center (AHEC)** arranged appropriate housing for pediatric residents and dental students in the rural program area; coordinated community education activities, such as speaking at schools and community events; linked residents and dental students; linked dental students and residents in interprofessional training opportunities; and supported ongoing sustainability planning efforts on behalf of the clinic.

Outcomes

The outcomes of this project have been measured over time by tracking the characteristics and needs of the new pediatric patient population at Rice Regional Dental Clinic, in addition to a patient satisfaction survey completed approximately six months ago. The findings from these two monitoring efforts are delineated below.

The Rice Regional Dental Clinic has increased access to dental care for rural residents in the 17-county service area of West Central and Southwest Minnesota. In the grant period, more than 5,000 patients have received more than 60,000 dental services in over 26,000 visits. More than one-third (45.6%) of the patients are members of ethnic minority groups, with the largest representation (28%) from Hispanic/Latino backgrounds. 80% of the patients are on a public assistance insurance plan and 20% have a low income with no dental insurance. Though information on migrant workers and their families is difficult to track, clinic records show that access was provided to this population as 105 patients used Migrant Health vouchers at the clinic. Finally, the patients served at the clinic come from many different parts of the 17-county service area.

New patient demographic data collection forms completed by pediatric patients (ages 0-17) indicate that prior to coming to Rice Regional Dental Clinic, many of the area's low income and/or uninsured children experienced pronounced problems in accessing oral health care services. 51.3% of pediatric dental patients reported that they had contacted one or more area dental clinic(s) and been told that this clinic was not taking any new patients with the type of insurance coverage the patient had.

In October 2011, a survey was conducted to evaluate program effectiveness. Survey respondents were parents/guardians of pediatric patients. With the assistance of a bilingual administrative staff member from the Dental Clinic, ten telephone surveys were completed. The questions posed to the parent/guardian related to interpretive services, transportation, the child's dental services, and feedback for future improvement.

Among survey respondents, 30% indicated being satisfaction with the interpretive services provided, while 70% indicated that the question was not applicable to them. Related to the quality of the care received, all survey respondents reported that they were satisfied with the current services provided and 90% of the participants have recommended clinic services to their family and friends. In terms of additional comments, 80% of the respondents commented on something positive, while 20% offered constructive criticism.

One person reported waiting a long time for someone to answer the telephone. The survey results demonstrate satisfaction with the quality of dental services provided by Rice Regional Dental Clinic for pediatric patients.

Challenges & Innovative Solutions

The challenges encountered throughout the period of program implementation were many, but the major challenges fell into three main categories – low income patient population, lack of transportation, and language barriers.

Low-Income

To address some of the challenges inherent in providing services targeted to a low-income population, the Rice Regional Dental Clinic offers a sliding fee schedule for individuals without dental coverage, either through insurance or through public programs, and who meet income criteria based on the federal poverty guidelines. The sliding fee schedule offers discounts based on family income and federal income poverty guidelines. Everyone pays a minimum fee of \$20 per procedure on the date of service to demonstrate that the service provided is of value to them. Additionally, the clinic provides services on a contract basis for Head Start enrollees, including initial dental exams for \$20 per service for a preauthorized visit, as well as basic restorative treatment at \$20 per preauthorized service and \$50 for major restorative preauthorized services, if necessary and as Head Start funds allow.

Transportation

Barriers to providing dental services to individuals in this program include substantial transportation problems. Lack of adequate public transportation can be a significant impediment to accessing care for rural residents in the 17-county service area. In the satisfaction survey described above, when asked how hard or easy it was to make transportation arrangements to and from their child's appointments, 80% responded that it was very easy/no problems making arrangements; and 20% reported that it was somewhat difficult to make transportation arrangements due to a lack of gasoline in their car, or because they did not have a vehicle and had to use one of the community's transportation services. 30% of the survey participants reported that their child missed appointments due to lack of transportation. To address this potential problem of access, two local public health agencies (Kandiyohi County Public Health and Countryside Public Health) have agreed to provide information and referral related to finding transportation services.

Language

Minnesota is becoming increasingly racially and ethnically diverse. Of greater Minnesota communities, West Central and Southwest Minnesota are experiencing among the most dramatic growth in ethnic minorities including Somali, Latino and Sudanese populations. West Central and Southwest Minnesota is also home to a large number of American Indians. To begin to address these barriers, the clinic provides language interpreters at no cost to the patients who have limited English proficiency. The Dental Clinic employs a staff member who is able to speak Spanish, which helps bridge some of the language issues with patients and their families.

Sustainability

On-going Services and Activities:

The Rice Regional Dental Clinic will continue in its partnership with the consortium partners after the grant period ends. The consortium partners – Rice Regional Dental Clinic, University of Minnesota School of Dentistry, and the Southern Minnesota Area Health Education Center – have sustained this partnership over time and will continue to do so after the end of the grant period. The University of Minnesota will continue to place its dental students in the clinic for both learning and service provision purposes.

In addition, the partners have developed and submitted other applications for funding of different aspects of the dental clinic and have successfully garnered some financial support for these activities from organizations including the Minnesota Department of Health. Due to these activities, the core activities of the Rice Regional Dental Clinic will very likely continue albeit with a potentially different focus and/or at a lower level of services due to reduced funds.

Sustained Impact:

The clinic has become an established presence in the community. Awareness of the clinic in the community has grown over time through word-of-mouth, referrals to the clinic by dentists who are not taking new patients, and through other marketing and publicity. The clinic has become, in many ways, a community resource in many ways that will continue its presence and maintain some or all of its service offerings, but the focus will shift to emphasizing other components of the funding mix, including Medicaid or other public coverage enrollment, increased use of migrant worker vouchers, and growing the Head Start partnership to enable the clinic to provide more services to children in need.

The strong community-University partnership can certainly offer lessons to other similar communities about establishing, nurturing, and maintaining a pipeline of dental students in need of placements for experiential learning in underserved areas, as well as about the recruitment and retention of community preceptors to guide and teach these students in providing care to low-income underserved people.

MINNESOTA

Sanford Medical System-Bemidji

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH16369 |
| Grantee Organization | Sanford Medical System-Bemidji (current) North County Regional Hospital (former) |
| Organization Type | Hospital |
| Address | 1300 Anne Street, Bemidji, MN 56601 |
| Grantee organization website | http://www.nchs.com |
| Primary Contact Information | Sally Maruska (Corser) MS RHIA Director of Physician Services Phone number: 218- 333-5794 Fax number: 218-333-6486 Sally.Maruska@sanfordhealth.org |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000.00 May 2010 to April 2011: \$125,000.00 May 2011 to April 2012: \$100,000.00 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---------------------------------------|-------------------------------|---------------------|
| Cass Lake Indian Health Service (IHS) | Cass Lake, Cass County, MN | Hospital/clinic |
| Red Lake Indian Health Service (IHS) | Red Lake, Beltrami County, MN | Hospital/clinic |

Community Characteristics

Area:

The service area of the grant includes Cass and Beltrami Counties which includes: Red Lake Indian Reservation; Leech Lake Indian Reservation; and the communities of Ball Park, Bena, S Lake, Ryan Village, Ponemah, Red Lake, Bemidji, Solway, Guthrie, Wilton, Shevlin, Blackduck, Washkish, Kelliher, Pennington, and Schley.

Community description:

Key factors to understanding the region surrounding Bemidji, home of Sanford Medical Center are:

- the extremely remote and rural (frontier) nature of the area
- the emergence of Bemidji, Minnesota as a regional center
- high concentration of residents living in persistent poverty
- high percentage of uninsured or underinsured adults/families
- high percentage (16.7%) of Native American residents (* note the whole Leech Lake Reservation is not fully contained within the boundaries of Cass County – therefore percentage served by the grant maybe somewhat lower than actual)

The region served by the grant is located in the central section of Northwestern Minnesota. The winters are brutal, the economy is challenging, and unemployment is the highest in the state. Over 52% of children attending area schools are on free and reduced lunch programs. Preventive medical services are a luxury and visits to a physician are often at a crisis level that often is addressed by a visit to the Emergency Room rather than a visit to a primary care provider. Native Americans and many others view local medical services with distrust and therefore have difficulty communicating their needs. The region is the highest in the state for persistent poverty. Understanding of class, values, and communication styles, which are critical to creating an atmosphere of respect and relationship, are skills that are sadly lacking in professionals providing social and medical services, as well as in the regional businesses.

Need:

The focus of the Hospitalist / Hospital Medicine grant program was two-fold: To improve the access to comprehensive, high quality secondary healthcare services at Sanford Medical Center – Bemidji (formerly North Country Regional Hospital) and to reduce by 30 percent readmissions for the same condition within seven days to any hospital. The target populations were adults and youth (16 – 18) who lived in persistent poverty, underinsured and uninsured, and patients without a primary care physician in Bemidji.

The importance of the project "Hospitalist / Hospital Medicine Program " becomes apparent when one begins to examine the challenges that face health care delivery in all its practices in Northwest Minnesota. The grant specifically addresses the populations of Beltrami and Cass Counties; however within an approximate 60-mile radius of the city of Bemidji, the three largest American Indian Reservations: Red Lake, Leech Lake, and White Earth are located. Many services for hospital care provided at Sanford Bemidji do reach all three-reservation communities and the small communities that surround them. Racism and misinformation regarding the American Indian people (predominately Ojibwa) their tribal governmental structure, traditional culture and values continues to create an atmosphere of mistrust and miscommunication not only in medical settings but also throughout area social service systems and businesses. Beltrami and Cass County rank 1 and 3 for the highest concentration of residents living in *persistent* poverty in Minnesota. Both counties are designated as "frontier counties," a mark of extreme geographical isolation from market and/or service centers (National Center for Frontier Communities 2007). Living in poverty in a frontier county creates a double disadvantage as distances to services are far and transportation – both private and public - is often not available and, in the case of public transportation, frequently non-existent. Access to affordable phone services is sketchy and intermittent for many county residents who purchase minutes as their limited budgets allow. Limited phone access often creates extreme difficulty in ongoing communication regarding medical appointments, follow-up, emergency medical needs, and hospital admissions.

Program Services

Focus Areas

Coordination of Care Services
Integrated Systems of Care
Integration of culturally appropriate approaches to patient care – with emphasis on cultures of poverty and American Indians.

Target Population

Adults
Elderly
Caucasians
Native Americans
Uninsured
Underinsured
Unassigned (those without a primary care physician)
Youths ages 16 -18

Description:

Initially, North Country Regional Hospital's (NCRH), Hospital Medicine Program Manager, Sally Maruska, MS, RHIA coordinated and implemented the grant, with support from a Consortium Team. When Sanford Health brought NCRH under their services umbrella, Ms. Maruska, now the Director of Physicians Services continued to coordinate and manage the program. The grant supported two major goals with multiple strategies and activities to address and reach each goal.

1. To improve access to comprehensive, high quality health care services at (NCRH).
 - a. Strategies: Hiring Hospitalist physicians who staffed the hospital 24/7; Developing and implementing a pre-admissions and pre-care process, which involved all partners in the design, development of both an in-house and external referral process, a flow chart for visually tracking admissions, a procedures manual, and a direct phone line to hospitalist physicians that reduces the paperwork and patient time spent waiting to be admitted to the hospital.
 - b. Strategies: Developing stronger relationships between members of the consortium and building cultural competence to hospital staff. This was accomplished through ongoing Consortium Management Team meetings, cultural competence training, and survey /interview feedback from physicians, nurses, and patients regarding program satisfaction which was used to correct *issues* before they became *crises*.
2. Reduce by 30% readmission for the same condition within 7 days to any hospital.
 - a. Strategies: Designing, implementing, and coordinating a post-care process, this has been achieved through multiple activities including: coordination of pharmacy services between Consortium members and other referring agencies, the development and implementation of a system of records sharing, patient discharge education program, and direct physician-to-physician communication for patient admission, referral, discharge and follow-up.

- b. Strategies: Ongoing program evaluation that provided scaffold feedback on all aspects of the program and was used to make immediate adjustment to services and to measure the positive impact of all program components – cultural competency training, physician services, patient satisfaction, nurses/ physicians satisfaction, and improved respect and communications between Consortium members and hospital care providers.

Role of Consortium Partners:

The Consortium Management Team and members were very involved in each stage of the program's development as well as training and evaluation. The relationships established and strengthened throughout the term of the grant provided a template for future and ongoing program partnerships. Each consortium member contributed to the success of the project:

- North County Regional Hospital (now Sanford Medical Center – Bemidji) was the grantee and fiscal agent for the grant. The Project Manager, Sally Maruska, coordinated the design, implementation, and ongoing supervision of the program services and evaluation.
- Cass Lake IHS participated in all consortium Management Team meetings, disseminated all program information to their staff and provided ongoing input into the designed development and streamlining of services, as well as ongoing evaluation of program strengths and challenges. They publicized and recruited medical staff for training opportunities, supported second phase cultural sensitivity training, and served as the host for every third Management Team meeting.
- Red Lake IHS participated in all consortium Management Team meetings, disseminated all program information to their staff and provided ongoing input into the designed development and streamlining of services, as well as ongoing evaluation of program strengthens and challenges. They publicized and recruited medical staff for training opportunities, supported second phase cultural sensitivity training, and served as the host for every third Management Team meeting.
- Red Lake, Cass Lake IHS, and Sanford pharmacies have begun to work together directly to do medication / prescription reconciliation.

Outcomes

Data for program evaluation came from multiple sources – nurses, doctors, patients, administrators, training participants, etc., through multiple means: surveys, interviews, hospital records. All evaluation data helped make immediate adjustment to program services as well as document the program's development, growth, credibility and acceptance.

Nursing Surveys: Throughout the course of the grant, nurses evaluated their satisfaction with the hospitalist program and physicians five times - 192 surveys were collected and analyzed. With each administration of the survey nurses comments grew increasingly more positive. They felt they were “team members” working hand-in-hand with the Hospitalist Physicians. They rated the services provided by the physicians as very high (98.4%); felt there was great improvement in the quality of care because of the program and would not hesitate to refer a family member or themselves (95.7%) to a Hospitalist Physician for care. The nurses consistently thanked the management team for asking them to assess the program, and noted that their voices had been heard because their suggestions, comments and concerns were addressed.

Doctor Surveys: Physicians from Red Lake, Cass Lake, the Bemidji area, as well as out-of-state physicians were provided the opportunity to rate their satisfaction and that of their patients, with the quality and professional level of care provided through the Hospital Medicine program and physicians. The combined results of five iterations of the survey (174 surveys) revealed: 92.3 % surveys rated their patient feedback regarding the Hospitalist program as either satisfied or very satisfied. 94.3% of the surveys reflected either a satisfied or a very satisfied response to the quality of patient care delivered to their patients by the Hospitalist team.

Doctor Interviews: Physicians and Administrators from all three Consortium members – Red Lake, Cass Lake, and Bemidji participated in face-to-face interviews with the project evaluator. The interviews validated the physician surveys and provided an opportunity for physicians to share in-depth reflections on the Hospitalist program operations. All interviews were anonymous and data was collated into one common report without site or physician designation. 93.3 % of the physicians and administrators interviewed gave the Hospitalist program a 5 or highest rating for importance of service, felt that it was necessary for the program to continue and that although there might be challenges now and in the future that it was not only important but necessary for the improvement of patient care that the program continue. The remaining balance of those interviewed (6.7%) who did not rate the program a 5 rated the program a 4 and told the interviewer – there is always room for improvement.

Cultural Competency Training: One-hundred-ninety-three (193) medical staff from the Consortium area attended the Level One, *Bridges Out Of Poverty* training and returned evaluation forms (over 220 were registered). Thirty (30) medical staff attended the Level Two *Bridges Out Of Poverty* training. The training was an introduction to economic diversity, economic class, the hidden rules of class,

registers of language, power, and the theory of change. It was a transformative experience for those who attended. Participants rated the training as “the best training I have ever attended” and rated the presenter, Jodi Pfarr, a Native American consultant, as the best presenter they had ever experienced. Consistently participants made the request for additional training of this nature to help them improve their clinical or professional practices. Participants felt that the workshop enhanced their competency in four areas: utilizing interpersonal and communication skills; providing patient centered care; applying quality improvement; and, professionalism. Plans to continue to provide ongoing training in cultural competency is currently underway and will involve expanded partnerships as well as the current Consortium members.

Challenges & Innovative Solutions

The biggest challenges for the ongoing support and growth of the Sanford Medical Center Hospitalist / Hospital Medicine program are:

- I. *Ongoing Communications:*** Maintaining a regular schedule of administrative team meetings that addresses the current challenges of the program and disseminates program information to all concerned constituencies in a timely manner. ***Innovative Solution:*** The Program Director will continue to convene the Consortium Team meetings with the possible addition of other partners and expanded agenda to include community clinic initiative and emergency room services.
- II. *Consistency of Staffing:*** Maintaining and sustaining highly qualified staff who can work effectively and efficiently as a team. ***Innovative Solution:*** Ongoing recruitment and training for hospital medicine staff – both physicians, and nurses and continual feedback loop regarding performance, challenges and communications is ongoing and supported by the Sanford administration. Additionally, the format for team building and Hospital access is being currently being incorporated into the Sanford Emergency Room.
- III. *Creating a Seamless Interface:*** Maintaining open communication and education of all area Emergency Room and Emergency Services staff and the hospitalist program to continue to create and support a seamless interface for admissions, discharge, and follow-up will continue to be a great challenge for the Hospitalist program. ***Innovative Solution:*** The emergency room at Sanford is currently undergoing major change. It is hoped that the principles of team building and the training resulting from “lessons learned” that has enhanced the Hospitalist program will be applied to the Emergency Room process as well.

Sustainability

On-going Services and Activities:

The Hospitalist / Hospital Medicine program will be sustained through Sanford Health, the new owner of the North Country Regional Hospital, which is now Sanford – Bemidji - Medical Center. The project will continue to be managed by Sally Maruska, who has been promoted to Director of Physician Services. The Consortium Management Team has agreed to meet quarterly to discuss not only the Hospitalist program but other medical service areas as well. Sanford is expanding its medical services programs to include Cardiology, Nephrology, cancer treatments, and an expanded infectious diseases division. A new Hospitalist has recently been hired and another Hospitalist is being interviewed. Sanford has also acquired additional medical services in Bagley, a small town within the Bemidji service area, which will expand the current scope of potential Consortium partners.

Hospital Medicine and hospitalist program informational materials and training opportunities for area medical personnel will continue to be developed and offered for area nurses, physicians and interested community members.

Sustained Impact:

The establishment of trust and the building of mutually respectful professional relationships is truly the gift of the hospitalist program to the Consortium communities and the surrounding area. The model used to develop the Hospital Medicine / Hospitalist program has provided a template for ongoing and timely communication and the improvement of health care delivery for patients who are in most desperate need of quality services. As the Hospitalist grant is ending, a new community grants initiative to develop a community clinic is just beginning. The Hospitalist program manager and the community clinic planning consultant have already begun meeting to discuss cross over and ways to work together effectively and efficiently to provide seamless services and referral systems. Additionally, the Hospitalist Program Director is meeting with area Consortium members to plan new Emergency Room protocols to ease admissions to the hospital medicine program.

Bemidji Hospitalist / Hospital Medicine program has entered a new world of improved delivery of services to patients who live in persistent poverty. The multiple levels of evaluation that were used to monitor program progress and improve program delivery have established a standard that can be used as a launching pad for developing cultural competency, medical team work, and multiple opportunities for collaboration across multiple systems of medical service delivery. The key to navigating this complex reality is open and honest communications that establish and maintain respectful collegial relationships. Rural and frontier communities who interface with diverse constituencies would benefit greatly from exploring the various methodologies used to develop the Sanford Bemidji Hospital Medicine program.

MISSISSIPPI

Delta Health Alliance

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12672 |
| Grantee Organization | Delta Health Alliance |
| Organization Type | Non-profit organization |
| Address | 425 Stoneville Rd., Stoneville, MS 38776-0001 |
| Grantee organization website | www.deltahealthalliance.org |
| Primary Contact Information | Karen Fox, PhD President and CEO Phone number: 662-686-3843 Fax number: 662-686-3522 kfox@deltahealthalliance.org |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|------------------------------|------------------------|
| Delta State University - School of Social Work | Cleveland, Bolivar Co., MS | University |
| University of Southern Mississippi – Center for Sustainable Health Outreach | Hattiesburg, Forrest Co., MS | University |
| Mississippi Primary Care Association | Jackson, Hinds Co., MS | Non-profit association |

Community Characteristics

Area:

The grant-funded program served the following counties in the Delta region of Mississippi: Bolivar, Humphreys, Leflore, Sunflower, and Washington.

Community description:

The counties targeted by this project are representative of the impoverished, rural communities of our region. The Delta counties are characterized by a high proportion of African Americans, decades of population loss, high rates of unemployment, high rates of poverty, low literacy rates and educational attainment, and poor health outcomes. Rates of chronic disease and obesity continue to be among the highest in the nation. Area residents continue to face transportation issues, and there continues to be a shortage of health care providers, both factors contributing to poor access to health care.

Need:

The Delta Community Health Worker (CHW) project was designed to use trained lay community health workers to assist patients diagnosed with CVD, diabetes and/or hypertension, in understanding and self-managing their illness, and in addressing barriers to care. The project was also designed to save overwhelmed rural clinic staff a significant amount of unreimbursable time by having community health workers available to reinforce chronic disease education, help patients articulate follow-up questions, call patients to remind them of their appointments and ensure transportation is available to reduce no-shows and cancellations.

Focus Areas

Access: Primary Care
 Chronic Disease Management: Cardiovascular
 Chronic Disease Management: Diabetes
 Chronic Disease Management: Other:
 Community Health Workers/Promotoras
 Health Education and Promotion
 Pharmacy Assistance

Target Population

Adults
 Caucasians
 African Americans
 Uninsured
 Underinsured

Description:

The project served to recruit and train community health workers from five Delta counties, providing them continuing support as they began to serve their communities. Training classes were supported in Washington County during Year 1 with eight individuals completing CHW core skills training. During Year 2, seven CHWs were trained in Leflore County and Sunflower County. During Year 3, thirteen individuals from Humphreys, Leflore, and Sunflower Counties.

The project has supported (i.e., educational materials, diabetic testing supplies) area CHWs in their involvement in outreach events. CHWs have assisted with community and faith-based health fairs, breast cancer and other health screenings.

The project supported networking opportunities through area meetings, two regional conferences, and one national conference. The Delta CHW Coordinator worked to support area CHWs through periodic meetings, a regional conference during Years 2 & 3, and attendance at the Unity Conference, the national CHW conference in Pennsylvania during Year 2, in collaboration with the University of Southern Mississippi's Center for Sustainable Outreach.

The project supported a newsletter for community health workers to share outreach activities, resources, funding opportunities, and training opportunities. The newsletter was mailed bi-monthly unless interrupted by staffing changes.

The project has trialed a process whereby volunteer CHWs can support primary care teams, and is comparing the effectiveness and productivity of volunteers versus paid CHWs. Staff assessed the services provided by employed CHWs at DHA's affiliated clinics, and used this information in developing a referral process whereby volunteer CHWs can support primary care teams and chronically ill patients. The project initiated a pilot project at the Good Samaritan Health Center, to support the PharmD's diabetic patients receiving medication therapy management. The program was then implemented at Trinity Health Center, a certified rural health clinic in Cleveland, MS, utilizing trained CHW volunteers.

The project has developed tools and resource guides to be utilized by area CHWs and providers such as self-care logs and patient tracking sheets. Flyers were developed to be placed in patient exam rooms to cue providers to initiate a CHW referral. A community resource directory was also developed by the Coordinator and CHWs to help outreach workers identify helpful resources.

Finally, the project has supported Delta State University social work interns in obtaining experience in working as part of a primary care team with community health workers, though we have not had the number of students as anticipated. Dr. Lisa Moon, formally the Director of Field Instruction, and currently the Social Work Department Director, stated that students request placement near their homes, and the type placement they prefer. Fewer students than anticipated requested placement in primary care clinics in the target areas.

Two senior social work students were assigned to clinics for January 2010 under direction of LSW Patient Navigators at two of DHA's affiliated clinics the Project Manager, who was a Licensed Clinical Social Worker. Only one student was assigned in January 2011, and served at one of the affiliated clinics receiving experience in working with the patient navigator (a trained social worker) and an employed community health worker. In January 2012, only two of the four DHA-affiliated clinics (Gorton Clinic in Belzoni, Humphreys County; and Good Samaritan Clinic for South Sunflower County Hospital) had licensed social workers serving in the role of patient navigator, while the patient navigators at the other two sites (Good Samaritan Health Center in Greenville, Washington County; and Leflore County Health Center in Greenwood, Leflore County) were not licensed. Students were placed with the two licensed navigators, though one was moved after one month to another practice site due to staffing issues at the Indianola clinic.

Role of Consortium Partners:

Project partners met initially in June of 2009, and throughout the funded period through conference calls and meetings during the grant period. Since **Delta State University** social work students participated in field placement activities each year during the spring semester, the DSU faculty's involvement was subsequently in the fall and spring. Communication with Dr. Susan Mayfield-Johnson at the **University of Southern MS- Center for Sustainable Health Outreach** was on an on-going basis as she provided guidance in the recruitment, training, and support of the CHWs, and through assistance in developing training and service protocols, as well as call logs and barrier lists for CHW use. Dr. Mayfield-Johnson provided guidance in the planning of the CHW conferences and networking opportunities, as well as advocacy efforts for the credentialing of CHWs in the State of Mississippi.

Project staff did not have an opportunity to work as expected with the **Mississippi Association of Primary Care** and staff of the area community health centers as anticipated. However, other clinic partners helped us in understanding the needs and requirements of primary care clinics and the patients they serve.

Outcomes

Delta CHW staff have communicated regularly with researchers with the University of Illinois at Chicago, who assisted with the development of the evaluation plan. These individuals will provide data analysis and a final evaluation report which is not available at this time.

The clinical teams at the four DHA-affiliated clinics have expressed their appreciation for the work of the employed community health workers. These workers have been instrumental in providing outreach to the patient at home and in the community, increasing the use of web-based patient education modules, and reducing "no-show" rates at the clinic. A Patient Navigator at one of DHA's affiliated clinics reported:

When I began my employment at the Good Samaritan Clinic, I had very little knowledge about the duties of a Community Health Worker (CHW). However, I have gained an understanding during my time served as a Patient Navigator (PN). From my experience, the CHW and the PN work well as a team. I have gotten to experience the importance of a CHW. I think it is vital to have the CHW to assist the PN to provide patients with support, to help them address barriers, and to help them understand about their condition and the treatment recommendations.

Twenty-eight additional trained community health workers are now active in their communities, as a result of this project. The project has successfully provided communication among all area health outreach workers, and opportunities for networking with their peers.

Challenges & Innovative Solutions

Staff turnover presented one of the greatest challenges beginning with management of the project being transferred three times in the first year. There was also turnover in the position of CHW coordinator, with three individuals acting in that role over the course of the grant period. There have also been three different Clinical Champions and there have been three different DSU Social Work Directors of Field Instruction during the grant period.

Establishing a successful partnership with the federally qualified health centers presented a challenge. Since one clinic has clinic sites in Bolivar, Washington and Sunflower Counties, efforts were first made to implement the volunteer CHW program with this entity. However, Senior Leadership officials with this clinic system communicated that the system was in the midst of several priority initiatives, including the recent expansion of their primary care provider team (in the midst of the "on-boarding" process of 6 new primary care physicians including 1 in Greenville), new grant projects and upcoming New Access Points in the area meant that the clinic system did not have the capacity to commit to the project after all.

In September of 2010, DHA began working with a second clinic in the coverage area. An agreement was fully executed, and the CEO felt that the support of the CHWs would be very beneficial for a clinic in Humphreys County clinic. Joint policies and procedures were developed and the Delta CHW Coordinator was trained on the facility's EHR so that data might be abstracted. Unfortunately, it was determined that the limited number and ability of the volunteer CHWs would not provide adequate support for the clinic. Efforts were begun to recruit additional individuals interested in being trained as CHWs during a future training program.

In November of 2010, an agreement was executed with a large multi-provider clinic in Sunflower County. Meetings were held with clinic management to determine points of contact, requirements for volunteers, etc. All of the requirements as stipulated by the clinic were met by the volunteers, including background checks. A committed group of volunteers waited patiently for referrals, but due to clinic staff turnover and competing priorities, the program was never fully implemented.

Sustainability

On-going Services and Activities:

The Delta Health Alliance management team meets bi-weekly to share project updates, successes and challenges, so what has been learned through this project is now influencing the work of the Beacon Community project. The Beacon Director at DHA and Dr. Susan Mayfield-Johnson, a member of the Beacon committee, are incorporating the use of trained CHWs in supporting patients during care transitions, and are benefiting from lessons learned through this project. Delta Health Alliance's 21st Century project continues to utilize community health workers as part of the medical home team, and recently received funding from the Baxter Laboratories Foundation to support a full-time community health worker and part-time Patient Navigator (BSW) to be assigned to the Trinity Health Center in Cleveland, Bolivar County. The 21st Century project directors will begin assisting this clinic in transitioning to a medical home model of care, with the community health worker and patient navigator working with clinic staff to manage care for patients, assist patients in addressing barriers to care, and promoting disease self-management.

Project staff supports the State of Mississippi's efforts to move toward a standardized CHW training and certification program. With the adoption of these programs, providers will have more confidence in the abilities of CHWs, and payers will be more apt to reimburse for CHW services. The staff feels this will do more to sustain the work of CHWs in the Delta than anything else that can be done. For this reason, staff requested that the final Georgia Health Policy Center site visit provide technical assistance to the Mississippi State Department of Health's planning committee, on which the Project Coordinator and two trained CHWs serve, in moving forward with this process. On April 19th, a nationally recognized expert on CHW credentialing and workforce development will meet with the project staff and other members of the MSDH planning committee to provide his guidance and recommendations.

Sustained Impact:

The CHWs that have been trained through this project will continue to impact the health of their communities through their individual and collaborative efforts. They have experienced the value in networking with peers, and will continue to utilize resources they have identified through project activities. The CHWs that traveled to the national Unity Conference returned with a vision for the role they can play in transforming their communities. They are also better able to advocate for the community health worker role as a recognized profession.

Implications for Other Communities

The project has witnessed the effectiveness of employed community health workers serving as part of a medical home team. These individuals provide a valuable link between the patient at home and the care team to reinforce chronic disease education, and to increase compliance with treatment recommendations and appointments. The tools used by these employed CHWs, the tasks at which they have excelled, and the efforts made to help fellow team members understand their role, are lessons learned that should benefit health care providers and health care systems, especially as the nation moves toward performance-based reimbursement.

As we have learned through this project, however, there will always be community health workers who only desire to be volunteers in their community. These individuals, some of whom are retired or currently employed in a variety of professions, are dedicated to serving; however their time and resources are limited. They can still provide a valuable resource to area patients and primary care providers who understand the limitations of these volunteers. Volunteers may not generally be effective for cases needing immediate follow-up, and generally will not be able to provide services without travel compensation.

MISSISSIPPI

Magee General Hospital

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12746 |
| Grantee Organization | Magee General Hospital |
| Organization Type | Hospital |
| Address | 300 Third Avenue S.E., Magee, MS 39111 |
| Grantee organization website | www.mghosp.org |
| Primary Contact Information | Eddy Mahaffey / Cindy Watkins Project Administrator / Project Coordinator Phone number: 601-849-72228 Fax number: 601-849-0618 emahaffey@mghosp.org ; cwatkins@mghosp.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000.00 May 2010 to April 2011: \$125,000.00 May 2011 to April 2012: \$100,000.00 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|---------------------------|-----------------------|
| Magee General Hospital | Magee/Simpson/Mississippi | Hospital |
| HealthTrust, The Foundation for Magee General Hospital | Magee/Simpson/Mississippi | Charitable Foundation |
| Magee Medical and Surgical Clinic | Magee/Simpson/Mississippi | Medical Clinic |

Community Characteristics

Area:

The project provided services to the counties of Copiah, Covington, Jeff Davis, Lawrence, Simpson and Smith in South Central Mississippi

Community description:

The service area for this program encompasses a six-county area in rural south-central Mississippi, designated as "medically underserved" by the U. S. Department of Health and Human Services. Many in this area are uninsured or on Medicaid or Medicare and have very low income. 22% of the population of the service area lives below the poverty level. 25% of the adults are uninsured, with an average unemployment rate of 9.6%. Over 70% of the service area is rural. Only 17% of the service area population has a bachelor's degree. Many people are not knowledgeable about the benefits of preventive health measures and see physicians only for a late stage diagnosis.

Need:

This program was designed to ensure that women in our service area would have access to breast cancer awareness education and mammogram screenings to detect breast cancer at its earliest stage. A large number of our service area population is uninsured or underinsured and simply cannot afford to pay for a mammogram. The current state of the economy as well as widespread unemployment has caused many who were insured to lose their insurance coverage. That leaves even more women in need of our services. A large majority of women are uneducated about the importance of a screening mammogram and self-breast exams and will benefit from education that addresses fear, clarifies myths about treatment, and encourages an understanding of the value to themselves and their families of screening mammograms and self breast exams.

Program Services

Focus Areas

Access: Specialty Care
Breast Cancer Screening and Education

Target Population

Adults (Females)
Caucasians
African Americans
Latinos
Uninsured
Underinsured
Ages 35 – 49

Description:

Through this grant program, Magee General Hospital has provided 430 screening/diagnostic mammograms to females that are 35 – 49 years of age and uninsured or underinsured. This program also provided breast cancer educational materials including instructional material on how to perform a self-breast exam to well over 9,000 women. A highlight of our program has been our breast cancer awareness seminars. These seminars are primarily hosted by African American churches in the service area and include personal testimonies from breast cancer survivors, information regarding breast health issues and question and answer sessions provided by local OB/GYNs. Participants in these seminars are also given instructions on how to perform self-breast exams and have an opportunity to use breast models to gain knowledge in identification of an actual lump in the breast or other symptoms of breast cancer.

Role of Consortium Partners:

The consortium partners were very instrumental in the planning process, especially for determining the types of equipment needed to serve the program. Consortium partners also helped determine the types of advertisement used to promote the program. Several additional consortium partners were added as the implementation was underway.

Magee General Hospital is fiscal agent and provided significant staff support and resources. The Project Administrator was responsible for managing the project. He prepared progress and financial reports, ordered the new digital mammography equipment and supplies, and supervised the training of personnel. The Project Coordinator was responsible for consortium meetings, all marketing and promotion activities, attended annual trainings, and maintained communication with HRSA representatives. The Mammography Technician performed the actual mammograms, surveyed participants, maintained program data, and assisted at Breast Cancer Awareness seminars and health fairs. The Imaging Operations Manager assisted with data collection and health fairs.

The **HealthTrust** Grant Administrator provided oversight, participated in planning, and assisted at Breast Cancer Awareness Seminars and health fairs.

The **Magee Medical and Surgical Clinic's** Clinic Administrator represented the interests of local physicians and assisted with communication; the Assistant to Clinic Administrator provided communication assistance and support in reaching the targeted audience.

Other consortium members assisted with communication and reaching the targeted audience, hosted several Breast Cancer Awareness Seminars and fundraisers for sustainability, and assisted with communication to reach the target audience.

Outcomes

Through this program, Magee General Hospital has encouraged healthy habits and preventive measures used to prevent breast cancer through early detection. The program also increased women's access to breast cancer educational materials including instructional material on how to perform a self-breast exam. The number of uninsured women receiving mammograms has increased, and most importantly, the number of African American women receiving mammograms has increased as avenues for reaching this targeted audience have opened. The community has provided strong support of activities and developed creative ways to promote the program and raise funds, including a gift shop owner who donated a percentage of one day's sales, a beauty salon owner who hosted a luncheon and donated a percentage of a day's fees, and a high school girls' basketball team which organized a tournament and donated profits for the program.

Challenges & Innovative Solutions

The first challenge was an unexpected delay in receiving the digital mammography equipment and the time necessary for training on the new equipment. Due to this delay the number of free mammograms provided was less than anticipated during the first year. This challenge was addressed by placing greater emphasis on distribution of the educational material and promoting the coming availability of digital mammography. No other facilities within a 40-mile radius offer digital mammography.

Another challenge was the limited staff available to carry out the requirements of the program. When the original program was established, expectations were that existing staff could manage all administration and functions of the program, excluding the actual mammograms. After the first year it was easily recognizable the program would require at least one individual whose designated task was to carry out the functions of the program and insure its success. In the second year, a Project Coordinator was employed, and the program has exceeded expectations due to the dedication of this individual.

This program also experienced difficulty in reaching African American women. Although the services were free and no physician referral was required, research has determined that African American women are least likely to pursue a screening mammogram. To meet this challenge, Magee General Hospital accepted the volunteer services of a female African American cancer survivor to serve as our poster person; we used photos of her, with bald head and hugging her small son, on flyers, banners, and other materials. Other female African American cancer survivors spoke at breast cancer awareness seminars, and African American consortium members assisted in gaining access to African American churches. Billboards were also placed in areas highly populated by African Americans.

Sustainability

On-going Services and Activities:

We plan to continue offering mammograms free of charge to uninsured and underinsured women aged 35-49 within the same service area. Without this program, most if not all of these women would likely never receive a mammogram which could possibly save their lives. We also plan to continue with our distribution of breast cancer awareness educational materials on breast cancer, including what it is, what the risk factors are, and how it is treated, along with detailed instructions on how to perform a self-breast exam. The written information we provide uses verbiage that is easy to understand. Our breast cancer seminars include verbal communication from OB/GYNs and their perspective on breast cancer and also a breast cancer survivor's perspective from personal experience with the disease. At the seminars, attendees are given the opportunity to perform simulated self breast exams on breast models that are designed with various stages of breast lumps. This has been successful in teaching the ladies what they are actually searching for.

The program will be expanded to include exceptions on the age of the patients. As breast cancer education increases more women under the age of 35 are aware of breast issues and seeking answers. A physician's referral may be required for free mammograms of younger women.

The strategies used to sustain the above services and activities are 1) increasing the number of free mammograms by using funds from another grantor, 2) establishing a new special fund to receive monies from established fundraisers, 3) direct mail solicitations, and 4) pursuing new grants from other sources.

Sustained Impact:

Awareness about the need for and availability of mammograms has been heightened throughout the area. The screening mammograms and ultrasounds provide a benchmark mammogram that with continued screenings can detect breast cancer in early stage and thereby reduce late stage diagnosis of uninsured and underinsured women with a focus on African American women. The significant efforts made by this program into the African American communities will allow education of breast cancer to continue its momentum with education, awareness, and the expanding involvement of other groups in all six counties.

Implications for Other Communities

This program could easily be adapted in other rural communities to address the need of early detection of cancer through the use of regular mammograms and breast cancer education. The greatest challenge will be entry into the African American community and the provision of mammograms at little or no cost. It is highly recommended that for greater success one individual be designated to administer the program with limited additional responsibilities.

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Regional Health Care Clinic DBA Katy Trail Community Health

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12701 |
| Grantee Organization | Regional Health Care Clinic, dba Katy Trail Community Health |
| Organization Type | FQHC |
| Address | 821 Westwood Drive, Sedalia, Missouri 65301 |
| Grantee organization website | Katyhealth.org |
| Primary Contact Information | Chris Stewart CEO Phone number: 660-826-1571 Ext. 3 Fax number: 660-826-1300 cstewart@katyhealth.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-------------------------------------|------------------------|--------------------------------|
| Care Connections for Aging Services | Benton County Missouri | Area Agency on Aging |
| Pathways Community Health | Benton County Missouri | Community Mental Health Center |

Community Characteristics

Area:
Benton County, Missouri

Community description:

Describe in one paragraph the primary factors that influence life in your community (such as population make up, disease rates, gaps in services, economic and social conditions that impact health).

Benton County is located in West Central Missouri just 31 miles south of Sedalia on highway 65. It is a rural, isolated area of the state which has seen incredible growth over the past 10 years due in large part to its location on Truman Lake, a large recreational area. 31.5% of the population is over age 62 compared to Missouri's 17.2% (US 2010 Census). The 2007 Missouri Senior Health Report, indicates that 41 percent of individuals 65 years of age or older in Benton County are overweight (body mass index between 25-30) and that 20 percent have diabetes, in both instances the percentage is higher than for Missouri as a whole. The rate of suicide for Benton County ranks in the first quintile of Missouri counties as the highest in suicides. The percentage of uninsured people is 28.5 in Benton County, much higher than for Missouri at 12.3.

Need:

Our program, Harbor Village focuses on health and wellness and collaboration between primary care and behavioral health providers and senior services to impact chronic disease and depression. Services to be provided include primary care, preventive health and wellness services, and mental health services through multiple entry points, but with coordinated service delivery and co-location of providers.

In summary, the purpose of the project is to provide a coordinated and integrated network of care that is person/family centered and to address the bio-psychosocial needs of individuals across the lifespan, with a particular focus on aging, through an integrated referral

system. The emphasis is health and wellness collaboration between primary care, behavioral health and senior services partners to impact chronic disease and depression. The goal is to provide access to these integrated services through Harbor Village. Although multiple entry points exist for accessing services, service delivery will be coordinated through Harbor Village.

Program Services

Focus Areas

Access: Primary Care
Aging
Behavioral/Mental Health
Chronic Disease Management: Cardiovascular
Chronic Disease Management: Diabetes
Coordination of Care Services
Health Education and Promotion
Integrated Systems of Care
Pharmacy Assistance
Physical Fitness and Nutrition

Target Population

Adults
Elderly
Caucasians
Native Americans

Description:

In Year 1, the leadership team (consisting of consortium partners) identified three task forces under the umbrella of Disease Prevention and Health Promotion-Enhanced Wellness to address specific issues related to processes and implementation. The three active task forces are ADRC, Care Plan, and Depression/McArthur Initiative. Although each task force has a specific agenda, it has been noted that many of the issues that surface in each task force overlap with one or more other task forces. This overlapping has been deemed a benefit by the leadership team because the task forces are making connections between their efforts and those of the other task forces and also how they relate to the overall objectives of the grant. Each task force met regularly, often monthly, with more than 15 task force meetings convened during Year 1 and an additional 17 task force meetings in Year 2. The Care Plan Task Force met monthly, the ADRC Task Force met 4 times, and the Depression Task Force met once and agreed to incorporate its work into the Care Plan Task Force for the present time as many of the issues overlapped.

The individual task forces have been charged with assessing organization, provider and staff education needs related to the task force issue (ADRC, Care Plan, and Depression/McArthur Initiative). Upon initial discussion, it was determined by the task force chairs that cross education among the Network partners were necessary prior to educating providers and staff. As a result, "lunch and learns" were held periodically to allow each partner an opportunity to educate the other partners about the services they provide, who they serve, how individuals qualify for services (eligibility requirements), referral sources, and other information as identified during the session. In Year 2, there was one education-related event for providers and staff. The event was a Transitional Collaborative meeting targeted at the staff and providers of all three Network partners. It was held April 13, 2011 and was structured as a training event for informing and educating all staff about the new service delivery processes. The agenda consisted of a welcome, team building exercise, and content session on collaboration, partnering, and time management. Similar events will be held quarterly until such time as the all three Network partners are co-located, at which time Harbor Village staff meetings, inclusive of staff of all three agencies, are planned.

In addition to the work of the task forces, it is important to recognize other achievements since the grant was implemented, particularly the implementation of the Transportation Voucher Program that began January 1, 2010. This program increases access to services by the target population by offering transportation vouchers through a contracted vendor. Within the first year grant period, 71 vouchers were issued to 46 individuals through the Transportation Voucher Program. In Year 2, 239 vouchers were issued to 77 individuals. As care coordination services increase, so has the need for transportation. The funds needed for transportation far exceed what is budgeted through the grant. As a result, transportation has become a high priority for Harbor Village and has been brought forth to the Benton County Health Care Coalition to be addressed for the broader community. Representatives from OATS transportation, the ambulance district, Harbor Village, and others came together for an initial meeting on April 18, 2011, in preparation for the larger coalition meeting, which is planned for June 2011.

Role of Consortium Partners:

To achieve our success, each partner had to fully appreciate the operational and service orientation of each other. Early briefings, seminars and one-on-one communication from the start facilitated that understanding. We found that having a committee structure with

a leadership team with overarching responsibility contributed to our success. The committees were comprised of the people and organizations most interested, knowledgeable and skilled for each specific committee. Therefore, these individuals could make solid recommendations for moving forward and also execute any decisions made by the leadership team.

Regular leadership and action team meetings kept the collaboration moving forward. The meetings require a heavy investment of time and energy of the Network partners, but they have had significant influence on making forward progress toward achieving the objectives within the timeframes established in the project plan.

The Network partners also have a strong commitment to the concept of integrated service delivery and care coordination. This strong commitment is instilled in staff and new partners by the leadership team through training, opportunities for interaction with the leadership team, and extensive communication.

Outcomes

The most notable outcomes are as follows:

- Written, approved process and policies for integrated service delivery, including processes for referrals.
- A formalized process for retrieving and sharing patient data. The leadership recognized early on that additional resources will be required to implement a data retrieval system that will truly be effective for sharing patient data and continues to pursue options for developing a health information exchange.
- Implemented quality and cultural competency standards and provided training.
- Implemented the shared care program across partners, which has increased continuity of care for those enrolled in the program.

Challenges & Innovative Solutions

One of the greatest challenges that has been identified by the leadership team, and reiterated by the task forces, is the ability to retrieve electronic data across organizations. Each agency has its own data system for tracking patients/clients. In order to proceed with integrated service delivery, the ability to integrate key data elements is essential. The leadership team is currently in the process of identifying specific needs so that services of an outside consulting firm can be used more effectively and efficiently. Efforts are focused on defining what data needs to be tracked, who will be responsible for tracking the data and how the integration of data will be managed. As part of this discussion, the leadership team has also been discussing how information technology expenses associated with this project and ongoing efforts will be addressed. In the interim, the Care Plan Team is pursuing the feasibility of an intranet that will allow for specific care plan information to be shared with the Care Plan Team with consent of the individual being served. This shared data will assure continuity of care and will include specific functional and household assessment data, medications, allergies, as well as patient history information.

Successes and innovation

The subject of integrated or shared care by three partnering agencies is now more known in our service community. The concept was originally foreign to many but now we increasingly see that groups and other service providers understand the immediate and long-term benefits. Additionally, the business community and other health related providers such as the Health Department, Ambulance District and the local community college have been supportive of our efforts and fully briefed throughout the planning process. There is also a strong desire to identify more ways to integrate services through technology and care coordinator. This project resulted in a broader group undertaking a Center for Medicare and Medicaid Services (CMS) Health Care Innovation grant to further expand the concept regionally. The application is pending; however, new partners were at the table who had not previously been involved.

Sustainability

On-going Services and Activities:

Current sources of funding include Medicaid reimbursement, Medicare reimbursement, third party insurance, and HRSA Rural Health Care Services Outreach Program grant funding. The Harbor Village Consortium will continue to provide ongoing in-kind contributions for purposes of planning, fundraising and grant development. Although not directly related to the Rural Health Outreach grant, significant resources to augment integrated service delivery in Warsaw have been secured. Katy Trail Community Health was a recipient of a Capital Improvement grant of \$2,986,943 and a Department of Economic Development Neighborhood Assistance

Program (NAP) tax credit award of \$375,000. Care Connection was also awarded a NAP tax credit of \$500,000. These capital resources will be used to construct a facility to house the three Network partners and facilitate shared care programming. Local fundraising has generated \$6,000, with a matching commitment from local financial institutions of \$30,000. In-kind efforts from the three Network partners have surpassed \$100,000 for Harbor Village, with approximately 40% in-kind specific to the Rural Health Outreach project (\$39,769).

By integrating primary care and behavioral health services and co-locating the three partners of the Harbor Village Consortium into one location, costs to provide services will be streamlined. Additionally, Medicaid funding will be maximized through community health center funding received by Katy Trail Community Health for both primary and behavioral health services. Pathways Community Behavioral Healthcare and Katy Trail Community Health have explored this enhanced reimbursement for behavioral health services through a successful contractual relationship. Katy Trail is now exploring the partnership with Care Connection for Aging Services and its funding mechanisms, which are very different. The goal is to implement a sustainability strategy that focuses on the success of the partnership and the key points of integration. The leadership team is still analyzing ways to leverage the enhanced reimbursement to support the staff required to sustain the Harbor Village integrated services.

Sustained Impact:

It is anticipated that by identifying a medical home for the population served, severity of need may reduce for some patients, reducing cost of treatment. Funds for specific evidence-based programs and services continue to be accessed through local, state and foundation grant opportunities and/or state contracts as they become available. Because Katy Trail provides services on a sliding fee scale and serves patients with private, third party insurance, collections through these avenues are also being pursued along with community fund raisers, as necessary.

Implications for Other Communities

In an interdisciplinary model of teamwork, clinicians from different professions assume roles and carry out responsibilities that share common goals for the client. Potentially, over time, the roles of these partners will overlap and become more flexible. Interdisciplinary primary team members understand the educational background of one another, become familiar with one others' areas of expertise and are aware of the roles assumed by each profession. Goal planning and the implementation of tasks are undertaken in an integrated manner by all team members. Communication among the professions is frequent and on-going. Roles and tasks are assigned according to levels of expertise rather than solely on the basis of traditional professional responsibilities.

It is anticipated that this model will result in an integrated approach that can implement and achieve a close collaboration/partly integrated program with some shared systems, shared space in the same facility, face-to-face consultation, coordinated treatment plans, basic appreciation of each others' roles and cultures, and influence sharing. The team has found throughout the process that the care manager is a key component in making shared care a realization. However, all individuals conducting intake are fully briefed and oriented to the shared care model so that individuals can be appropriately linked to a care manager. The process components for shared care include a screening process, an individualized care plan, information and education, behavioral activation, medical assessment and monitoring, some form of counseling (i.e., stress management, motivational guidance, etc.), and program monitoring. A significant component of the orientation to shared care is the programs available to patients by each of the Network partners.

MISSOURI

Saint Francis Medical Center

Organizational Information

| | |
|---|---|
| Grant Number Grantee Organization Organization Type Address Grantee organization website Primary Contact Information | D04RH12699 Saint Francis Medical Center Hospital 211 Saint Francis Drive, Cape Girardeau, MO 63703 www.sfmc.net Carrie Copeland Project Director Phone number: 573-275-2177 Fax number: ccopeland@sfmc.net |
| Project Period Funding Levels | 2009 - 2012 May 2009 to April 2010: \$145,816 May 2010 to April 2011: \$123,124 May 2011 to April 2012: \$95,875 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-------------------------------------|--|----------------------------|
| Dunklin County Health Department | Kennett/Dunklin/Missouri | Public Health Department |
| New Madrid County Health Department | New Madrid/New Madrid/Missouri | Public Health Department |
| Pemiscot County Health Department | Hayti/Pemiscot/Missouri | Public Health Department |
| Scott County Health Department | Sikeston/Scott/Missouri | Public Health Department |
| SEMO Health Network | Benton/Scott/Missouri, Bernie/Stoddard/Missouri, Kennett/Dunklin/Missouri, New Madrid/New Madrid/Missouri, Portageville/New Madrid/Missouri, Sikeston/Scott/Missouri | FQHC |

Community Characteristics

Area:
 Services through the Outreach grant were primarily focused in five counties in Southeast Missouri: Cape Girardeau, Dunklin, New Madrid, Pemiscot and Scott. Some services were also provided in the following counties: Bollinger, Butler, Carter, Perry, Reynolds, Ripley, St. Francois, Ste. Genevieve, and Wayne.

Community description:
 Of the five counties included in this grant initiative (Cape Girardeau, Dunklin, New Madrid, Pemiscot and Scott), Cape Girardeau is the largest with a population of 75,674, followed by Scott (39,191), Dunklin (31,953), New Madrid (18,956), and Pemiscot (18,296). Pemiscot County has the highest percentage of African Americans (26.8%), while Cape Girardeau has the lowest (7.0%). All five participating counties have a high school graduation rate that falls below the state average of 86.2% (Cape Girardeau 85.8%, Scott 75.5%, New Madrid 73.2%, Pemiscot 70.1%, and Dunklin 67.5%). The percentage of people living in Missouri who fall below the poverty level is 14%. Pemiscot County has the highest percentage of people living below the poverty level of all five participating counties with a percentage of 31.8%. Dunklin County has the next highest percentage of people living below the poverty level with a percentage of 23.6%, followed by Dunklin (23.6%), New Madrid (21.1%), and Scott (18%). Chronic Disease is a major cause of death in all five counties. According to the state of Missouri, in 2009 443 people died from cancer, 160 died from Chronic Obstructive Pulmonary Disease, and 552 died from heart disease. The Missouri Department of Health and Senior Services (MDHSS) reports of the

119,336 adults above the age of 25 in the five participating counties, approximately 38,784 are current smokers. Smoking is a major risk factor of lung cancer and other pulmonary diseases.

Need:

According to the MDHSS, approximately 119,336 adults age 25 and older reside in the five county service area. Of these, an estimated 38,784 are current smokers. According to the Health Resources and Services Administration, all five counties are designated as Health Professional Shortage Areas (HPSA). Four of the partnering counties (Cape Girardeau, Dunklin, New Madrid and Pemiscot) are designated as Medically Underserved Areas (MUA), while Morley, Sandywoods, and Sylvania townships in Scott County are also designated MUAs. The need for this initiative is especially vital since the average adult smoking rate in the five participating counties throughout Southeast Missouri is 32.5%, which is 9.1% higher when compared to the rest of the state and 11.6% higher when compared to the rest of the country. According to MDHSS, the tobacco use rates for participating counties are Cape Girardeau (20.9), New Madrid (39.8), Scott (24.8), Dunklin (38.5), and Pemiscot (38.5).

Program Services

Focus Areas

Health Education and Promotion
Lung Cancer Screenings

Target Population

Adults
Uninsured
Underinsured
Other: At a high risk for lung related illness (cancer, COPD, Emphysema)

Description:

The Lung Cancer Outreach grant provided three main services to the community: education, lung screenings and referrals. Education about general lung health was distributed to each participant regardless if they participated in the lung screening. Flyers and informative brochures were the most used avenues. These materials were distributed at health fairs, and provided at scheduled screenings.

For the lung screening service we used a portable spirometer (MiniSpir). With the spirometer, we were able to determine the participants Forced Vital Capacity (FVC), Estimated Lung Age (ELA), and general lung function (Interpretation). With this information, a basic level prediction could be formed regarding the patients lung health. Any participant who received an abnormal Interpretation (Obstruction or Restriction) was referred to a primary care physician. Patients with a primary care physician were encouraged to take the screening results to their physician for further investigation. Participants who did not have a primary care physician were referred to SEMO Health Network, a partner of the grant and an area Federally Qualified Health Center (FQHC). SEMO Health Network charges on a sliding scale and was able to meet the needs of participants who did not have health insurance, had inadequate insurance, or had little to no means to pay for health services.

Participants with abnormal screening results were followed up with on a monthly basis until either cleared by their physician, unable to contact, or expressed no desire to continue with the follow-up process. Follow-up calls were used to determine if the participant had seen a physician, was waiting to see a physician, needed help scheduling an appointment, needed transportation assistance, or had questions.

Role of Consortium Partners:

Initially there were six consortium members: Saint Francis Medical Center, the four contracted health departments, and the Southeast Missouri Cancer Control Coalition. SEMO Health Network was brought on as a partner later in the grant cycle.

Saint Francis Medical Center served as the lead. They provided a project director and the amenities needed, such as office space, desk, chair, electricity and phone service. In addition, Saint Francis Medical Center was able to integrate a well-established smoking cessation program with this initiative. The Freedom From Smoking program at SFMC is funded by the Missouri Foundation for Health (MFH) and is a very successful program in the community. The two initiatives were able to partner and expand the Lung Cancer Outreach initiative to a very vulnerable population, smokers.

The four partnering health departments provided a location to perform monthly scheduled screenings, access to the community through established relationships, and a health educator to train for the continuance of the initiative.

The Southeast Cancer Control Coalition provided a great atmosphere for networking and feedback. Monthly meetings were a great opportunity to discuss grant activities. The meetings provided a place to receive feedback and network with other area health departments. Several of the additional counties where screenings were offered resulted from the coalition meetings.

SEMO Health Network provided a space for the screenings, access to the community, and people to train for continuation of the screenings. In addition, SEMO Health Network eliminated the need for a referral system. A provider is present at all of their facilities. If an abnormal screening is found the patient can be seen by the provider directly or an appointment can be made before the patient leaves.

Outcomes

The desired outcome for this initiative was to develop a comprehensive system of care for the early detection, referral and treatment of lung cancer in Southeast Missouri. We believe this outcome was met.

Early detection of lung cancer is crucial for an encouraging prognosis. Through the screenings, both scheduled and at health fairs, we were able to educate the community on lung cancer and provide an initial step in finding abnormalities. All participants who came into contact with this initiative were offered educational material on lung health and a lung health screening through the use of a spirometer.

A referral system was put into place to move the participant from the screening to a primary care physician. The referral system's focus was on participants who did not have a primary care physician. Participants who needed further assessment and did not have a primary care physician were referred to SEMO Health Network. There they were able to receive care regardless of their ability to pay. Based on their income, many patients are charged a flat fee of \$20 regardless of the test performed. In the event a patient was believed to have lung cancer and needed to see a Pulmonologist, patients would be referred by SEMO Health Network to the proper specialist. Through some research we were able to determine that the area hospitals had programs for patients unable to pay. SFMC, in particular, has two programs where patients must apply, and based on their income may receive some assistance. These hurdles are one big reason why follow-up would be crucial in the case of a cancer diagnosis. The members of the initiative would be able to assist the participants through the process.

Challenges & Innovative Solutions

Reaching the target population (uninsured/underinsured individuals ages 25-64) was a challenge that was apparent early on in this initiative, and was quickly resolved by adding an additional partner. Originally, clients sought the spirometry screenings at the health department in their county. Within the first year it was obvious the target population was not the population using the county health departments. A FQHC was approached about joining as a partner. SEMO Health Network, a FQHC in Southeast Missouri, has a presence in all but one of the counties targeted by this initiative. SEMO Health Network was eager to join as a partner. They were given the same equipment as the health departments and were trained accordingly. We began seeing more of our target population within the first screening held at one of their facilities.

Evaluation was the toughest challenge to overcome with this initiative. The outcomes and output measures originally set were not realistic for the goal or funding period of this grant. The evaluators and project director enlisted the help of their TA to take a second look at the logic model. From there, new outcomes and output measures were developed. These new outcomes and output measures were much more realistic and in congruence with the overall focus of the Lung Cancer Outreach initiative.

Sustainability

On-going Services and Activities:

Identify the services and programs that will be sustained beyond the Outreach grant period. Sustainability
The lung screenings offered through this initiative will continue to be offered after funding has ended. Many of the flyers and brochures disseminated were free and will continue to be offered to the community. The referral chain will also continue to function. All of the participating parties have agreed to continue the process developed through this grant. Since the larger purchases were made with HRSA funding, only small expenses will need to be met once funding has ended. All participating parties have agreed the expense incurred through the screenings will be absorbed into their yearly budgets.

Sustained Impact:

For sustainability each of the four partnering health departments and SEMO Health Network were provided a laptop computer, printer, spirometer and all the accessories (paper, ink, screening material, storage and travel totes). At each facility at least one person was trained to perform the lung screenings using the spirometer.

The health departments will be offering the screenings at health fairs/community events, flu clinics, WIC programs, and on a walk-in or scheduled basis. SEMO Health Network will also be offering the screenings at health fairs/community events and will add the spirometry test to the services they already offer.

The Southeast Cancer Coalition has also added lung cancer awareness as one of their cancers of focus. The coalition is present in many community activities and their partnerships reach beyond the four partnering county health departments contracted in this initiative.

Implications for Other Communities

Before discussing the benefits of a program like Lung Cancer Outreach, one important point must be made. Initially the grant enlisted the help of the county health departments. While their insight and relationship with their communities is priceless, the desired target population did not respond as planned. Partnering with a FOHC or a doctor's office that is able to offer health services to patients who may not be able to pay for services is the way to go.

With this initiative the goal was to develop a system that would screen and make aware people, who may never have been, of lung cancer and refer them to a physician who would be able to further assess and continue to watch over the patient. We were able to do just that. While no lung cancer was found, lung health became something community members were now thinking about. This opens the door to not just lung cancer, but general lung health. Conversation was able to naturally flow from cancer, to general health of the lungs, to smoking cessation, to exercise. We believe this program would be a great avenue to get people thinking about not just their lung health but also their whole health. One of the greatest tools was the ELA. When a person is able to see that their lung health is years beyond their actual age it puts into perspective how important the decisions they make regarding their bodies really are.

MONTANA

Butte Silver Bow Primary Care Clinic, Inc.

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12663 |
| Grantee Organization | Butte Silver Bow Primary Care Clinic, Inc. AKA Butte Community Health Center |
| Organization Type | FQHC |
| Address | 445 Centennial Avenue, Butte, MT 59701 |
| Grantee organization website | www.buttechc.com |
| Primary Contact Information | Michelle Miller Director of Behavioral Health Phone number: 406-723-4075 Fax number: 406-723-3059 mmiller@buttechc.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|------------------------------|--------------------------------|
| Anaconda- Deer Lodge County Law Enforcement Agency | Anaconda, Montana | Law Enforcement |
| Anaconda-Deer Lodge Public Health Dept. | Anaconda, Montana | Public Health |
| Anaconda-Deer Lodge County Attorney's Office | Anaconda, Montana | County Attorney |
| Anaconda Public School | Anaconda, Montana | Public School |
| Department of Family Services | Anaconda and Dillon, Montana | Child Protective Services |
| Barrett Memorial Hospital | Dillon, Montana | Local Hospital |
| Beaverhead County Law Enforcement Agencies | Dillon, Montana | Sheriff and Police Departments |
| Beaverhead County Attorney | Dillon, Montana | County Attorney |
| Beaverhead County Public Health Department | Dillon, Montana | Public Health |

Community Characteristics

Area:
The project served Anaconda, Montana (Deer Lodge County) and Dillon, Montana (Beaverhead County). Other counties that use services in one of the above communities: Sheridan and Twin Bridges (Madison County), Philipsburg (Granite County) and Deer Lodge (Powell County)

Community description:
Nearly half of the 9,298 residents in Anaconda-Deer Lodge County and half of the 9,248 of Beaverhead County are considered low income. This means these families have incomes at or below 80% of the area median income. It is clear that in the beautiful setting of Southwest Montana, a significant portion of the population is experiencing the stress and anxiety of economic hardship. Accompanying the hardship are alarming rates of depression, suicide and substance abuse. These societal health factors are associated with community risk for child abuse and neglect, including sexual abuse. Depression is linked to substance abuse which is a major contributing factor to child sexual abuse. In 2005-2006, Montana had the highest rate in the nation of alcohol abuse in the population aged 12 and older. Children with substance abusing parents are up to three times or more likely to suffer abuse and neglect. While the actual number of children at risk for and experiencing sexual abuse is not known, it is clear that rural Southwest Montana communities present high risk in their rates of economic hardship/poverty, depression and substance abuse. Social workers in the region also have grave concerns about the actual number of children they are encountering who have been abused. According to the Robert Wood

Johnson Foundation's county profile, Deer Lodge County ranks in the basement –43 of 47 counties – for health outcomes including more poor mental health days than the state rate. While Beaverhead ranks better in terms of health outcomes, it ranks high in risky behavior, especially excessive drinking and people who had contemplated suicide. The suicide rate for Dillon and the surrounding county per 100,000 population is 36 percent, versus 20 percent for the state of Montana. Depression remains the top diagnosis at the Butte Community Health Center clinic in Dillon and more than 100 patients are enrolled in a depression collaborative there. The data points to an area where people are poorer, have fewer resources, worse health status, difficult social and family situations and engage in riskier behaviors.

Need:

This grant is an expansion grant to open two satellite centers in Anaconda and Dillon that provide Children's Advocacy Center services. The Butte Community Health Center has operated services at the main facility in Butte, Montana since 1998. Prior to opening the satellites, families and professional would travel 60-150 miles for evaluation and mental health services. During several months of the year, travelers are faced with harsh winter roads making access difficult. Also, due to poverty and lack of reliable vehicles, transportation services were challenges to getting to Butte. Through this grant the Community Health Center provides prevention, intervention and support/recovery services for sexually and physically abused children aged 0-17 in Anaconda and Dillon, Montana.

Program Services

Focus Areas

Behavioral/Mental Health
Children's Health

Target Population

Infants
Pre-school children
School aged children - elementary
School aged children - teens
Adults
Caucasians
African Americans
Latinos
Native Americans
Uninsured
Underinsured

Description:

Prevention:

Teach Talking About Touching, a nationally recognized curriculum, in K-3 public school classrooms in Anaconda and Dillon, Montana. Integrating information about personal safety into public school curriculums is a powerful way to reach children and a major prevention strategy for this proposed program. This program has been successfully integrated into all Pre-kindergarten through third grades in the Butte school district resulting in over 1600 children a year receiving training each year. On average, twenty volunteer adults are trained as TAT trainers in the school system. This model will continue to be used in the new satellite programs. Another prevention activity is to provide a minimum of 4 public presentations to local civic and faith-based groups in Anaconda and Dillon in effort to educate communities about child abuse and neglect and encourage community involvement in prevention. Information was presented to service clubs and the local Child Protection Teams.

Intervention/Evaluation:

To provide every child in Beaverhead, Deer Lodge and Madison Counties who may be a victim of child sexual abuse access to a professionally trained medical provider and forensic interviewer at a local Child Evaluation Center, thereby minimizing trauma to the child and improving prosecution rates of perpetrators. Small communities rarely have funds to provide professionals with specialized training to manage these types of cases. This training is essential and directly tied to outcomes of these complicated cases.

Support and Recovery:

Recovery for sexually abused children and their families is contingent upon effective therapy and support. The goal of the support/recovery portion of the program is to provide therapy and support to children and families who are at risk for or who have been victims of child sexual, physical, and/or emotional abuse. Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) is evidence-based and is considered the gold standard for children who have been abused. All therapists receive training in this model. TF-CBT provides support to the non-offending caregiver as well.

Role of Consortium Partners:

Anaconda-Deer Lodge County Law Enforcement, a long-standing and reputable department within Anaconda-Deer Lodge County government (a consolidated city-county government), provided consistent staff (detectives) trained in investigating child sexual abuse cases. They met and maintained the competencies of detectives for the CEC.

- **Anaconda-Deer Lodge Public Health Department**, another long standing and reputable department within Anaconda-Deer Lodge County government, provided parenting classes, helped educate families on prevention of sexual abuse and educated children about prevention through the TAT program.
- **Anaconda-Deer Lodge County Attorney's Office** provided a consistent staff attorney who is specially trained in child sexual abuse cases who ensured that the highest degree of attention is provided to CEC cases; ensured that all legal proceedings protect the rights of the victim and follow fair and sound practices of the legal system and provided legal perspective during peer and case review proceedings
- **Anaconda School District** provided written communication to students and families regarding prevention efforts and dedicated time for school nurses, teachers, and counselors to teach the Talking About Touching curriculum.
- **Community Health Center, as the lead applicant**, was responsible for administering the grant funds; hiring and overseeing the project staff; organizing meetings and guiding the consortium. The CHC provided space in their Dillon clinic for the Child Evaluation Center.
- **Department of Family Services (DFS)**-local offices in Deer Lodge County provided key staff trained in child sexual abuse cases to attend the meetings of the consortium and multidisciplinary team. DFS provided staff that is trained in forensic interviewing as a member of the rotation schedule. DFS ensured that all scheduled forensic interviewers met and maintained the competencies of the forensic interviewer as outlined in the following pages. DFS provided a trained worker to attend forensic interviews when they are the primary investigating agency.

In Dillon, a similar roster of organizations committed substantial services to expanding the SAP program in their area. The Dillon Consortium includes:

- **Barrett Memorial Hospital**, the only hospital in Beaverhead County and has been providing quality care for many years, commits to sending a key staff person to all meetings; they agreed to provide laboratory services and write off those services if families are unable to pay for them.
- **Beaverhead County Attorney's Office** provided a consistent staff attorney who is specially trained in child sexual abuse cases to ensure that the highest degree of attention is provided to CEC cases; ensured that all legal proceedings protect the rights of the victim and follow fair and sound practices of the legal system; provided legal perspective during peer and case review proceedings
- **Beaverhead County Law Enforcement** provided consistent staff (detectives) trained in investigating child sexual abuse cases; they met and maintained the competencies of detectives for the CEC as outlined in the following pages.
- **Beaverhead County Public Health Department** attended meetings and provided necessary supplies for medical exams.
- **Community Health Center, as lead applicant**, was responsible for administering the grant funds; hiring and overseeing the project staff; organizing meetings; guiding the consortium
- **Department of Family Services (DFS)** local offices in Beaverhead and Madison Counties provided key staff trained in child sexual abuse cases to attend the meetings of the consortium and multidisciplinary team. DFS provided staff that is trained in forensic interviewing as a member of the rotation schedule. DFS ensured that all scheduled forensic interviewers met and maintained the competencies of the forensic interviewer as outlined in the following pages. DFS provided a trained worker to attend forensic interviews when they are the primary investigating agency.

All consortium members have been involved with the Butte SAP process for over three years. Because the Butte SAP Program is the only service of its kind in the region, most partners have had case involvement with the Butte Child Evaluation Center. Because of their familiarity with the program and their understanding of the need, all members were eager to bring services to the more rural areas adjacent to Butte.

Outcomes

Prevention: In 2011, approximately 450 children received the Talking About Touching Curriculum instruction in schools in Anaconda and Dillon.

Intervention and Evaluation: Several consortium members have attended high quality training on criminal investigation, medical and forensic evaluations, detection of abuse, prosecution, and improving effectiveness of multi-disciplinary teams.

Support and Recovery: In 2011, 87.5% of children seen in Dillon and 88.9% of children seen in Anaconda received mental health services to address the trauma of the abuse. Of the children re-assessed for trauma symptoms during therapy, 65% had a reduction in mental health symptoms.

Challenges & Innovative Solutions

We operate the main center in Butte, Montana and then the two satellites in Anaconda and Dillon. Each community is unique. Prior to this project, professionals in one community had very poor relationships to the point of not talking to one another at all which adversely impacted investigations. Progress has been made, however, there continues to be room for improvement in team relations. In order to address this challenge, we conduct team meetings monthly.

One neighboring community, Deer Lodge, has requested that we have team meetings in their community with their key agencies. Because children and families are seen in the Anaconda Center, we agreed to have multi-disciplinary team meetings in their community every 1-2 months. It is a challenge for staff to cover activities in multiple communities. In order to address this, when needed, we split up staff between communities in order to cover activities.

Sustainability

On-going Services and Activities:

It is our intent to sustain all activities beyond the grant period. We generate revenue through billing third party payers for mental health therapy. Over the last year, maximizing billable services has been the focus so that activities can be sustained with that source. National Children's Alliance is the accrediting organization for Children's Advocacy Centers. If we seek accreditation for each of the satellites, \$10,000 may be available for each community. The Department of Justice in Montana currently provides \$10,000 annually to the Butte site. We have requested that they consider providing \$10,000 to the satellites. This funding would be used primarily to continue building teams in the community and on going training.

Sustained Impact:

Prevention activities are designed to reduce rates of abuse to our most vulnerable population – children. Prevention education teaches children that abuse is not acceptable and teaches them the skills to participate in their own safety and the importance of telling a safe adult. Educating members of the community through public presentations is designed to create safer communities by strongly encouraging community members take a stand against child maltreatment.

By using a coordinated investigative response by highly trained professionals results in successful prosecution of abuse cases, which then removes offenders from communities and protects children.

Mental health treatment is extremely important for children and their non-offending caregivers. The research has shown that failure to obtain mental health therapy to address the trauma, there is an increase in future victimization, high-risk behaviors, depression, anxiety, substance abuse, and violence in relationships. Providing evidence-based trauma therapy, improves the outcomes for children and their families. Healthier individuals make for healthier communities. Of the children re-assessed for trauma symptoms during therapy, 65% had a reduction in mental health symptoms.

Implications for Other Communities

The satellite model for Children's Advocacy Centers is in its infancy. We have 3 years of experience in developing and maintaining these services. Also, there are few FQHC's that provide these services. We can serve as a model on how to provide these services to one or multiple communities under the umbrella of an FQHC.

MONTANA

Cooperative Health Center

Organizational Information

| | |
|---|---|
| <p>Grant Number</p> <p>Grantee Organization</p> <p>Organization Type</p> <p>Address</p> <p>Grantee organization website</p> <p>Primary Contact Information</p> <p>Project Period</p> <p>Funding Levels</p> | <p>D04RH16279</p> <p>Cooperative Health Center</p> <p>FQHC</p> <p>1930 Ninth Avenue, Helena, MT 59601</p> <p>http://www.co.lewis-clark.mt.us/departments/health/chc-health-clinic.html</p> <p>Kate McIvor Executive Director Phone number: 406-443-2584 Fax number: 406-457-8990 KMclvor@co.lewis-clark.mt.us</p> <p>2009 - 2012</p> <p>May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000</p> |
|---|---|

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------|-------------------------------------|-------------------------|
| Parker Medical Clinic | Lincoln, Lewis and Clark County, MT | FQHC satellite |
| God's Love | Helena, Lewis and Clark County, MT | Homeless Shelter |
| Montana Diabetes Project | Helena, Lewis and Clark County, MT | State Government Agency |

Community Characteristics

Area:

The coverage area for our Outreach Grant has been three service sites within Lewis and Clark County, Montana; including the Cooperative Health Center and God's Love Homeless Shelter Clinic in Helena and the Parker Medical Clinic located in Lincoln.

Community description:

Lewis and Clark County is a large and sparsely populated area, equal in size to the states of Delaware and Rhode Island combined. We have a population density of 16 persons per square mile. About 30% of our residents live below the 200% level of poverty. Our suicide rates are among the highest in the country. Cultural barriers and financial constraints, coupled with a drastic shortage of providers, have fueled the problem of accessing appropriate care in a timely manner.

Need:

Our experience has shown that 70% of the people coming to see one of our medical providers have a mental health diagnosis, a substance abuse diagnosis or both. Our goal was to integrate mental health services into the primary health care setting.

We began this project with a vision of improved clinical services for our diabetic population, which three years ago was estimated to be approximately 400 persons. These numbers fluctuate, but today, we know our diabetic population to be in excess of 500 persons.

Project activities were designed to screen patients with diabetes for mental health disorders and the impact of diabetes on their general well being.

The prevalence of diabetes in Montana increased from 2.8% in 1990 to 6.4% in 2006 and to 6.9% in 2010.

Focus Areas

Behavioral/Mental Health
 Chronic Disease Management: Diabetes

Target Population

School aged children - teens
 Adults
 Elderly
 Caucasians
 African Americans
 Native Americans
 Uninsured
 Underinsured
 Homeless Patients

Description:

Our original intention was to improve delivery of clinical services to our diabetic patients, with an eye toward closer examination of three specific populations – rural, frontier and homeless. We wanted to demonstrate that improved mental health would lead to more effective management and control of their diabetes, as demonstrated by improved A1c lab values. Three survey instruments were used to help establish baseline data and to measure progress: Psychiatric Health Questionnaire (PHQ-9), Problem Areas in Diabetes (PAID), and the Quick Psycho Diagnostics Panel (QPD). The Cooperative Health Center and Parker Medical Clinic were the first and only primary health care clinics in Montana to use this electronic psychiatric screening tool – QPD. This instrument is an interactive tool using proprietary logic and providing multi-dimensional analysis, and screens for the nine most commonly encountered psychiatric diagnoses found in primary health clinic settings. The test combines features of an inventory and a structured interview. All patients respond to a core set of 59 questions (like an inventory); when responses suggest a possible psychiatric disorder the test branches into modules that probe in-depth (like a structured interview). The survey contains more than 200 diagnostic questions, but the patient will only see a subset of them. Numeric scores reflecting the severity of disorders are created by summing the number of relevant test items (symptoms) endorsed by the patient. Pattern-matching algorithms match symptoms reported by the patient against DSM-IV diagnostic criteria, and printed notes on the report (not numeric scores) indicate the specific DSM-IV diagnosis.

The QPD allows our providers to more quickly and accurately diagnose psychiatric disorders and make better treatment decisions. The program provides us with detailed information about prevalence and co-morbidity. We are able to demonstrate measurable progress and outcomes by gender, by individual, by diagnostic category, and by specific time periods. Results from these instruments, along with information gathered from chart audits have been entered into a spreadsheet that our consortium partner, the Montana State Diabetes Project will examine and analyze for project evaluation.

This grant provided for a full-time mental health counselor and full-time case manager to be present in the medical hall. Medical providers and other clinic staff bring patients to meet the counselor, case manager or both. Brief meet and greet sessions occur daily, and appointments for follow up are scheduled in a timely manner. Patients with diabetes receive more in-depth case management and counseling services. Patients with diabetes receive more assistance implementing self-management goals; incentives were given including pedometers, blood pressure cuffs, health club memberships and self help books. Diabetes education is provided on-site to our patients.

We've changed how business is done with this grant. Since this program was first funded, Cooperative Health Center has emerged as a community leader in mental health services, and is a key member of the County's mental health Local Advisory Council, along with the local hospital, health department, County Attorney's Office, Center for Mental Health, Western Montana Mental Health, and many persons and families living with mental illness. This new collaboration, led by the Lewis and Clark County Commissioners, will determine the future of mental health services for all in Lewis and Clark County.

Role of Consortium Partners:

With regard to three of the partners – Cooperative Health Center, Parker Medical Clinic and God's Love – the roles and responsibilities were essentially the same; in that medical staffs were expected to conduct PHQ-9 screenings for all patients with diabetes, and then refer those with scores greater than 9 to the mental health provider. If the patient was started on medication for depression or had a medication adjustment, he/she would be referred to our case manager for follow up.

Data was collected and organized by our case manager and then passed along to our colleagues at the Montana Diabetes Project, where the State's Epidemiologist would analyze and interpret the data. The Montana Diabetes Project staff had indicated from the beginning that they were hopeful of discovering outcomes that would be worthy of being published.

Outcomes

Preliminary Results and Findings:

- A statistically significant result was observed in the A1c level changes between baseline and follow-up in those participants who had received diabetes management education.
- No significant differences between baseline and follow-up PHQ-9 scores were observed in regard to gender, clinic, or whether or not participants received DSME.
- No significant differences in A1c or PHQ-9 scores were observed in relation to homelessness.
- It is also noted that 261 participants had not received diabetes education compared with 108 that had received DSME. This presents an opportunity for quality improvement and to someday see diabetes education make a greater impact on depression scores.

In the end, the Mental Health Coordinator and case manager realized that collecting some of the agreed upon data was difficult, impossible and/or inconsistent.

- 1.) It was difficult to track if patients were receiving mental health services outside our clinic sites.
- 2.) We did not track the number of mental health visits per participant.
- 3.) We did not have a mechanism to track if patients continued on prescribed mental health medications throughout our collection period.
- 4.) We found that providers were not administering the PHQ-9 at the same interval with each participant.

At the subjective level, we have an abundance of anecdotal evidence to support that we have been successful. Feedback from our patients has been almost universally positive. Medical providers have commented on noticing reductions in individuals' A1c scores, and our mental health provider reports reductions in individuals' QPD scores for Depression. With regard to outcomes, we have educated our patients, our staffs, and our communities. Ongoing collection, review, and analysis of program data is planned to support quality improvement efforts.

Challenges & Innovative Solutions

Our original intention had been to partner with the local hospital and the Urban Indian Health Center, with the idea that we would look more specifically at our Native American population, because we knew that this is a group disproportionately affected by chronic health issues, especially diabetes. We were disappointed when our original consortium partners decided they did not want to participate in the project. Therefore, our first major challenge was to rethink our overall approach and the structure of our consortium. We shifted our target population, and settled on more of an in-house model that would allow us to maintain the focus on diabetes and mental health, but with more of an eye toward comparing rural, frontier and homeless patient populations.

Sustainability

On-going Services and Activities:

Cooperative Health Center is going to absorb this program. The CHC staff and Board are committed to keeping counseling and case management services integrated with primary care services. CHC is going to use funds it has received for Patient Centered Medical Home to sustain the work of the Counselor and Case Manager. CHC will be applying for permanent mental health/case management funding from the Bureau of Primary Health Care to keep this project going. When the data from this project is available, CHC will use it to apply for more funding.

Sustained Impact:

We see sustained impacts as a process driven by a partnership of staff and patients. We routinely hear from our partners that they appreciate and value these services and there is an expectation that they will continue. Because of our ORHP funded activities we are now well prepared to move on to the next level of a best practices model of integrated health care, in the form of a Patient Centered

Medical Home. Furthermore, our administrative and clinical leaders have made clear their commitment to secure ongoing and permanent funding needed to support current and expanded mental health and case management services.

Implications for Other Communities

We believe that we have a system that works very well, and that our experiences might serve as a model for other communities interested in the integration of mental health services into primary health care. We cannot emphasize enough the importance of comprehensive planning. We would encourage communities to invest themselves heavily into an effective planning process; making sure that they have a broad base of internal and external buy-in from all stakeholders.

MONTANA

Granite County Medical Center

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12661 |
| Grantee Organization | Granite County Medical Center (GCMC) |
| Organization Type | Hospital District |
| Address | 310 Sansome St.; P.O. Box 729, Philipsburg, MT 59858 |
| Grantee organization website | www.gcmcenter.org |
| Primary Contact Information | Sharon Fillbach Program Director Phone number: 406-859-3271 Fax number: 406-859-6528 sfillbach@gcmcenter.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,066 May 2010 to April 2011: \$123,904 May 2011 to April 2012: \$98,395 |

Consortium Partners

| Partner Organization | Location | Organization Type |
|----------------------------------|---------------------------------|-------------------|
| Granite County Health Department | Philipsburg, Granite County, MT | Health Department |
| Granite County Public Schools | Philipsburg, Granite County, MT | School |
| Dentist | Missoula, Missoula County, MT | Dental Practice |

Community Characteristics

Area:
The Outreach Grant serves Granite County, Montana.

Community Description:
Granite County, with its 3,079 residents scattered across a distance of 1,027 miles, is *beyond* rural and actually classified as "frontier." Remote and mountainous, it remains one of the most isolated communities in western Montana, not to mention the United States. In this medically underserved area, GCMC is the sole service provider, with the next nearest medical facility at least 30 to at most 80 miles away. Access to healthcare is more difficult in winter, which can last for six months a year and make for hazardous road conditions.

Granite County grew up in the mining industry: gold and silver booms that lasted into the early 1900s. Today, our population centers, once thriving, operate as shadows of their former glory or no longer exist. In fact, Philipsburg, our county seat, affectionately refers to itself as the "Ghost Town that wouldn't die". With this heritage comes a proud, independent, and tough way of life—one that leads to many risk-taking behaviors (such as smoking, poor diet, and the "just a broken bone" mentality) and is averse to accepting handouts. Our county also sustains significantly high levels of unemployment, the elderly, and uninsured, well beyond state and national averages.

Need:
Like many frontier communities, healthcare in Granite County is constrained. We are a Primary Medical Care HPSA, Mental Health HPSA, Dental HPSA, and MUA/MUP, reflecting a significant shortage in healthcare providers. Residents must often travel 30-80 miles one-way for medical care, particularly specialty services. Further, Granite County sustains one of the highest rates of unemployment in the state and a median household income below both state and national averages. Twenty-five percent of our population is elderly and 29 percent uninsured.

Before the start of our program, more than a third of our county was dentally underserved, with 22 percent of our population having last seen a dentist two to five years ago and 13 percent not having seen a dentist in the last five years. Among schoolchildren, 30 percent had current dental needs and 14 percent urgent ones. Intervention for schoolchildren is particularly important because our county lacks an optimal level of fluoride in our drinking water to prevent tooth decay and dental caries.

Leading causes of death for Granite County are heart disease, cancer, and CLRD (COPD). Periodontitis and other oral problems may be linked to heart disease; and poor periodontal health, dental care, and oral health knowledge are significantly associated with increased occurrence of CLRD. Our county is experiencing increased rates of obesity, physical inactivity, and diabetes (although below national levels); and it sustains high rates of injury-related death, with vehicular accidents often involving alcohol. These patterns of disease and activity can also impact dental health.

As our program began, our Dentist made the following observation: Patients were in a much more advanced state of oral disease. Younger patients tended to be "drill and fill," while older patients frequently needed oral surgeries, extractions, and dentures. Essentially, people were not yet on a routine to maintain what they had.

Program Services

Focus Areas

Oral Health

Target Population

Pre-school children
School aged children - elementary
School aged children – teens
Adults
Elderly
Pregnant Women
Caucasians
African Americans
Latinos
Native Americans
Uninsured
Underinsured

Description:

The focus of our grant program was to provide access to dental care for the residents of Granite County. We thus created a dental home that offered comprehensive oral healthcare and targeted underserved populations: Medicaid, uninsured, and at-risk populations, including children, those in poverty, and the elderly.

Activities were coordinated by GCMC and Granite County School District, staffed by GCMC and the Dentist, and promoted by GCMC and Granite County Health District. Together, we (1) deployed a mobile dental van, (2) provided a school-linked dental clinic for oral screenings, and (3) installed and maintained a one-chair fixed dental clinic.

1. *Deployment of the mobile dental van.* First, we used grant funds to purchase and furnish a van for use as a mobile dental clinic. The van provided dental care at our two municipalities, Drummond and Philipsburg. These sites were selected for maximum visibility, to better promote oral health awareness and the start of our dental service; and to remove transportation barriers for some patients. From June to October 2010, we provided 109 dental encounters to 41 patients (unduplicated).
2. *Provision of a school-linked dental clinic for oral screenings.* Using the mobile dental van, we provided yearly dental screenings and oral health education at our three public schools. We served approximately 90 percent of all students in 2010, and 50 percent in 2011 and 2012. In sum, we conducted 679 screenings for 474 students.
3. *Installation and maintenance of the one-chair fixed dental clinic.* Beginning in 2010, we piloted a temporary fixed dental clinic. Using portable dental equipment from our mobile unit, we outfitted a one-chair dental exam and treatment room at our Critical Access Hospital. From November 2010 to present (April 2012), this clinic has provided 459 encounters to 209 patients (unduplicated).

Role of Consortium Partners:

- GCMC acted as grantee and fiscal agent for the grant. The center provided a 0.4 FTE Dental Program Coordinator, whose tasks included build-up of the mobile dental van and fixed dental clinic, planning and coordination of all dental services, and marketing and outreach. GCMC also staffed a 0.2 FTE Dental Hygienist, as well as hired and trained a 0.4 FTE Dental Assistant. Other duties absorbed by the hospital included (1) billing, insurance, and payments; (2) scheduling and follow-up for appointments; and (3) data entry and reporting. GCMC also provided rent-free space and infrastructure (e.g. utilities, housekeeping, and technical support).
- The Dentist (0.2 FTE) staffed the mobile dental van and fixed dental clinic, provided oral health screenings at the school-linked clinic, and helped to train the Dental Assistant.
- Granite County Public Schools helped to plan the oral health screening events.
- Granite County Health Department informed the public about the dental van, school-linked clinic, and fixed dental clinic, as well as incorporated information about oral health into education programs and health promotion classes.

Outcomes

We collected evaluation data in two areas: provider satisfaction with the program and improvements in healthcare access. Selected evaluation findings are summarized below:

Provider satisfaction

- Through provider interviews, we found that our Dentist, Dental Hygienist, and Dental Assistant are committed to working with the program for the long-term.

Improvements in healthcare access

- At the school-linked clinic, we delivered 679 oral health screenings to 474 students.
- At the mobile and fixed dental clinics, we provided 568 encounters to 250 patients (unduplicated).
- At both mobile and fixed dental clinics, patient demographics were as follows: 28 percent were elderly, 20 percent were children and adolescents. Also, 54 percent lacked dental insurance, 16 percent were on Medicaid, and 8 percent on the Rural Health Discount (a sliding fee scale for our Critical Access Hospital).

Challenges & Innovative Solutions

(1) Our original plan was to serve our community via a mobile dental program. Indeed, the van was very useful for jumpstarting and building the initial program. However, we soon realized a critical limitation to our efforts: winter. Granite County exists at an elevation of 5,000-6,000 feet. Only 28 days a year are frost-free, and snowfall is possible any month of the year. Despite adjustments to the our dental van's insulation and heating system, it was difficult to keep patients warm in the van for six months of the year. Thus, to better serve our population in winter, we piloted a temporary fixed dental clinic. Starting in November 2010, we used portable dental equipment from our mobile unit to outfit a room at GCMC's Critical Access Hospital. This service soon grew to a schedule booked two months out within the first year of the program.

(2) The original Dentist from our Collaborative was unable to continue to serve through the course of the grant. We were fortunate to recruit a dentist who was willing to travel to our county one day a week, prepared to work in an underserved area, and committed to working well beyond the scope of the grant.

(3) Another challenge was adjusting to dental billing, a new venture for the hospital. Fortunately, our original dental assistant was also adept at medical billing. While transitioning her into dental billing, we simultaneously recruited and trained a new dental assistant.

(4) To ensure that clients kept their dental appointments, we made adjustments to scheduling. We had our dental assistant call patients the night before a scheduled appointment, and if needed, fill cancellations with patients from our waiting list. This ensured that our dental staff did not lose money or time.

(5) The Public Health Nurse position for our county turned over twice during the course of the grant. This impeded our consortium's ability to promote the dental program and build services.

Ongoing Services and Activities:

Our fixed dental clinic (one chair one day a week, for eight patients a day) currently operates at a net loss of \$1,400 per month. To cover this gap, we are (1) continuing to improve our billing practices; (2) absorbing support staff (e.g., scheduling) into the larger institution of the hospital; and (3) relying on the hospital for such indirect expenses as utilities, housekeeping, IT support, and maintenance.

Reaching financial break-even will require expanding our service to achieve greater economy of scale. Plans are in place to grow the clinic into a permanent two-chair facility and to increase the number of days per week of operation from one to three. We are presently seeking additional grant funding to support the capital expenses associated with this expansion.

Our school-linked dental clinic will continue to provide at least one screening event per year, during February's National Dental Health for Kids Month." We will make this free service available to students from every other grade. The program will be supported first through income generated by the fixed dental clinic. Secondly, it will be subsidized by (1) volunteer efforts by dental and hospital staff and (2) grants and fundraising. Major support for this program has come from our local thrift shop, which in the past has committed funds for children with urgent dental needs to come to the fixed dental clinic.

Our mobile dental van, if possible, will be leased or sold. A neighboring county (with less mountainous terrain) has expressed interest in purchasing the van for use in medically underserved areas. Revenue from the transaction will be directed into the day-to-day operations of the fixed dental clinic.

Sustained Impact:

In a frontier community, it can be a challenge to add a new healthcare service to the roster. However, with the help of the Outreach grant, we have been able to build a weekly fixed dental clinic that will continue to operate beyond the scope of the grant. Further, we have developed a cohort of dental providers and administrative staff dedicated to improving the state of oral health in our community, particularly for underserved populations. We are also seeking funding to sustain the growth of our program as needed. As a result, our community is beginning to rely on the dental clinic as a presence for the long-term. They are building relationships with our providers and committing to a regular program of oral healthcare.

Through the school-linked program, we identified students with pressing oral healthcare needs. Our partner, the H&R Thrift Shop, pledged to pay for their restorative care at the fixed dental clinic. Despite communication with parents and guardians, however, we had difficulty getting children in for the care they needed. Many were reluctant to bring children in for essential dental care. Through outreach and building of trust, we have just begun to bring these children into the fixed dental clinic. We anticipate that this relationship will continue to grow over time.

Implications for Other Communities

Granite County now has a fixed dental clinic, sited in a hospital that takes Medicaid and administers a sliding fee scale, and staffed by a traveling dentist. Our county also has a school-linked dental clinic performing oral health screenings for children and teens. The program's success depends on two factors: (1) an influx of funds (i.e. the Outreach grant) to build the service to long-term sustainability and (2) a consortium willing to go the extra mile, or miles.

Our dental service is most replicable to frontier communities that are geographically isolated, less populated, and medically underserved. For instance, in the 56 counties of Montana, 11 lack a dentist, four have only one dentist who does not take Medicaid, and 12 have one dentist who is Medicaid-enrolled. According to our state dental health coordinator, there are at least ten counties in Montana with similar demographics that could potentially benefit from our model: Critical Access Hospital-based dental care primed for slow, steady, sustainable growth.

In 2011, our pilot dental program was recognized by the Montana Hospital Association as an Innovative Health Program of the Year. We are presenting our model at the Montana State Family and Community Health Conference in April 2012 to grow the possibility of this program in other underserved parts of our state.

MONTANA

St James Healthcare Foundation

Organizational Information

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|------------------------------|--|
| Grant Number | D04RH12657 |
| Grantee Organization | St James Healthcare Foundation |
| Organization Type | Non-profit organization |
| Address | 425 W. Porphyry Street, Butte, MT 59701 |
| Grantee organization website | N/A |
| Primary Contact Information | Ida Reighard RN, Grant Coordinator Phone number: 406-723-2960 Fax number: 406-723-2404 ida.reighard@sjh-mt.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,500 May 2010 to April 2011: \$123,450 May 2011 to April 2012: \$99,950 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|-----------------------------------|-------------------------------------|
| Dr. Patrick McGree, MD, Private Practice | Butte/Silverbow, Montana | Private Practice Doctor Office |
| North American Indian Alliance | Butte/Silverbow, Montana | Urban Native American Clinic/FQHC |
| Montana Tech College of Nursing | Butte/Silverbow, Montana | State College |
| Barrett Memorial Hospital | Dillon/Beaverhead, Mt | Public hospital district |
| Butte Community YMCA | Butte/Silverbow, MT | Non profit |
| Mountain Pacific Quality Health | Helena/Lewis and Clark County, MT | State Organization |
| Medical Arts Pharmacy | Butte/Silverbow, MT | Private pharmacy |
| Rocky Mountain Clinic-Express Care | Butte/Silverbow, MT | Private Physician Office |
| St. James Healthcare | Butte/Silverbow, MT | Not for profit/faith based hospital |
| Community Health Center | Butte/Silverbow, MT | FQHC |

Community Characteristics

Area:

The coverage area for the Outreach grant is currently a five-county area in Southwest Montana: Butte/Silverbow County, Barrett Memorial Hospital, Granite County, Powell County and Jefferson County.

Community description:

Located in Southwest Montana, Butte-Silverbow County is one of the larger communities in the area with a population of 34,606. The service area includes the surrounding smaller towns that are up to 100 miles away. Butte is part of one of the nation's largest superfund sites- the legacy of over 100 years of copper mining. The community struggles to overcome economic and social effects of the industry's demise in the 1980's. Poverty is high. In 2003, Montana ranked 46th nationally in per capita income. Based on the US Census Bureau, Silver Bow County's poverty level is 14.9% compared to 13.1% for the United States. Between 1997 and 2006, the number of people served by the Western Mt Mental Health Center in Butte increased by 162%; the number served there indicates the rate of mental illness is 4.3% of the population. In the surrounding areas, the rural communities are mainly ranching towns with pride in being self-sufficient. People do not like to travel to larger communities for health care, nor is this affordable. People simply do not receive the services, particularly preventative services.

Need:

The focus of the grant program was to increase the awareness of diabetes and to provide educational services to empower people in preventing the disease and the complications that accompany diabetes. Since diabetes can be a silent disease with catastrophic complications, outreach to the people was essential instead of waiting for the disease to surface with irreversible secondary conditions. We knew different health care agencies were trying to address this overwhelming problem but we needed the support of the grant to become a cohesive network to reach more people effectively and get our message to the community.

A needs assessment was conducted during the planning phase of our program. That assessment showed 68% of Silver Bow County patients with diabetes had a glucometer to assess their blood glucose levels, right at the state average but 41% did not check their blood glucose levels because of affordability of supplies. We also learned the majority of people with diabetes said they received their diabetes education from their physician at the time of their care. We recognize that a physician does not have adequate time to deliver diabetes education in a fifteen minute visit. Half of the people surveyed said their diabetes was not under control or they did not know if it was or not. The healthcare providers were also surveyed as part of the needs assessment. The top three obstacles providers saw as standing in the way of patients with a well-managed disease include: the patients' lack of knowledge or lack of understanding about diabetes/ lack of a referral system for education for their patients, and cost of supplies and medications.

Program Services

Focus Areas

Chronic Disease Management: Diabetes
Coordination of Care Services
Health Education and Promotion
Physical Fitness and Nutrition

Target Population

Pre-school children
School aged children - elementary
School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
African Americans
Native Americans
Uninsured
Underinsured

Description:

The grant activities were coordinated and implemented through The Butte Community Diabetes Network. The grant coordinator is an employee of St. James Healthcare and based out of the hospital. She has staffing support at the hospital and together they coordinate the activities of the network. The network partners provide the outreach services to the community with the support and assistance of the grant coordinator who is a Registered Nurse. The Outreach grant supported the implementation of numerous activities:

1. The provision of community health screenings for diabetes as well as lectures on diabetes to raise awareness. These informational screenings have been provided to businesses, clinics, senior centers, Native American Powwows, schools, churches, low income housing, health fairs, and surrounding communities. Students from the Montana Tech Nursing School perform these screenings weekly at three locations reaching a large population of people with glucose testing, blood pressure screening, and medication reviews. The students work as case managers at times as well directing people to the appropriate services. The network has sponsored two diabetes expos for the community that reached over 300 individuals. A total of 22 screening events were held over the course of three years in a variety of locations not including the 41 clinics the nursing students performed.
2. There are two diabetes support groups offered monthly. One is for the general public and one is for children with diabetes and their families. These are held at the hospital and are free of charge. There are guest speakers and fun events offered at these groups as well as education and an opportunity for people to share their experiences. The children's group includes a mentoring program where older kids with diabetes are available for the younger kids as mentors.
3. Diabetes classes have been in place since the planning grant phase. They are part of the Diabetes Self- Management Education program at St. James Healthcare that is recognized by the American Diabetes Association. These are taught by a Registered Dietitian and Registered Nurse, Certified Diabetes Educator to a group of people referred by their doctors for diabetes education. This has dramatically filled a gap in the community for diabetes education. The medical community reported on a recent survey they utilize the service and see promising results in their patient's self-care and knowledge base after attending the classes. This is a billable service and assists in the network's sustainability plan. The program has been duplicated in Dillon, Mt, a partner community one hour south of Butte.

4. Diabetes Conferences- The diabetes network has offered three conferences to the local medical community. Each conference had attendees from each corner of the state. The staff from the State of Montana Diabetes Program has attended and supported the conferences and offered encouraging support to the network's efforts including Butte in the larger state endeavors. A total of 245 providers attended the conferences (nurses, dietitians, primary providers, pharmacists and students). As a result of this outreach and education, there are more referrals from the area providers and more medical staff calling with questions regarding diabetes services. Butte does not have an endocrinologist within a two hour drive. The grant funded two well-attended speaking arrangements by an endocrinologist to the medical community. There were a total of 90 people attending the talks. The topics were geared toward health care providers in an effort to update these busy practitioners on diabetes standards of care and management. The providers voiced satisfaction with the talks and felt they learned a great deal they can adopt in practice.
5. The outreach grant strives to reach high risk people of all ages, including children. The YMCA holds a class for children called Find Your Verb. This program is held two times per week and is ongoing. It is after school and the instructor introduces all aspects of the YMCA to the kids so they are not intimidated by the pool, machines, exercise classes and will adopt their favorite "verb" as part of an active life. Healthy snacks are provided with education on nutrition and the importance of eating balanced meals as well as the importance of eating together as a family. There is also education on ways to decrease screen time and increase activity in their daily lives. There have been 49 participants in this program.
6. The grant has supported intensive case management and a diabetes call center. The grant coordinator is a Registered Nurse, Certified Diabetes Educator and is able to track people as they call for diabetes needs/concerns. She is then able to follow up with them as diabetes is an ongoing disease that requires additional education and management. The "call center" is a way for patients to get quick information on diabetes, get hooked up with services and for providers to refer patients to the correct program without having to learn about each program. The intensive case management program is available for people that require more information and assistance/ support. The RN calls to check on them and see if they need anything. This is an effort to prevent complications related to diabetes as well as provide needed support.

Role of Consortium Partners:

The grant program has a very active consortium. This three year program has provided an important opportunity for the consortium partners to develop stronger working relationships and jointly plan and implement multiple activities. Some of the partners are very active in the day to day network programs while some are less active but continue to be supportive and provide information and patient referrals to the network.

- **St. James Healthcare and St. James Foundation** are very strong partners. They maintain the budget piece of the grant as well as promote the programs to the hospital staff and the community. The grant coordinator and an administrative assistant (.5 FTE) are St James employees supported by the grant. They are able to work at the hospital and with the medical staff recruiting patients and increasing awareness to diabetes. St James Healthcare has provided the support with space, equipment and staff to make the diabetes network a strong consortium for the community.
- The **Butte Family YMCA** has been a very important part of the network. The Find Your Verb program for children is held at the YMCA two times per week and instructed by their staff. The YMCA allows the Mt Tech Nursing Students to work as preceptors to these programs as well. The YMCA works as a referral source to the community. They refer patients to the different network programs. The YMCA is a hub for all different populations in the community. They help to spread the word on the network. The network greatly benefits from the in-kind time and space donated by the YMCA for these programs.
- **Mountain Pacific Quality Health** is a federal organization that worked closely with the network in the first two years to increase awareness to renal disease and diabetes. They conducted surveys and teaching engagements on the prevention and treatment of renal disease. They also provided internal evaluation services for the network. The foundation's focus has changed from renal disease over the past year but they continue to talk to the medical community about the network services.
- The **Public Housing Authority of Butte** is an agency that works with the population living in low income housing. They strive to provide education and raise awareness to chronic illness and healthy lifestyles. The network has attended picnics, health fair, meetings and individual sessions with clients living in the housing developments. This includes families with small children. The network has been able to provide case management for available services as well as the risks of smoking, diabetes, obesity and inactivity. There are three large developments with over 800 tenants in this program.
- The **North American Indian Alliance (NAIA)** is a network partner that has invited the network to their facility for diabetes education. The grant coordinator and network partners have attended "Talking Circle" which is a diabetes support group held at the center. The network has attended the yearly PowWow where they were able to conduct a needs assessment, do health screenings, and provide information on diabetes. The network has also worked with the youth group at NAIA on health promotion. The network coordinated a three month program where the youth group from NAIA attended Find Your Verb and got the children very involved in the YMCA.

- The **Montana Tech College of Nursing** has been very effective in outreach to the community. The students are nurses with an Associate's degree in nursing working towards their Bachelor's degree. As a group, they provide health screenings and case management services in the community. They go to the Senior Center, low income housing, and a church that provides lunch one day a week to our needy population. They are able to monitor blood pressure, blood sugar levels and educate people on their medications. They are also key in referring people to the available services.
- **Barrett Memorial Hospital** is located in Dillon, Montana, one hour south of Butte. This hospital has a Registered Nurse and Registered Dietitian for diabetes services. They also have a Diabetes Prevention Program (DPP) in their community that has been in place for five years. They offered assistance to the network during the application process for the DPP. They sponsor members of the network to speak to their community at the monthly lunch and learn at a local restaurant. Their staff has attended our conferences and assisted in referring patients that live between Dillon and Butte as appropriate.
- **Dr. Webb and Dr. McGree** are doctors in private practice. Dr. Webb works at a walk in clinic where he diagnosis people with diabetes frequently. These two network partners refer patients to the DPP and to diabetes class. They advertise network programs at their offices. Dr. Webb has led people in the Walk and Talk with the Doc every year.
- **Medical Arts Pharmacy** staff refers patients to the network programs and advertises programs at their busy pharmacy. The chief pharmacist attends the advisory board meetings and provides input on what he sees as needs in the community for people with diabetes.

Outcomes

We collected evaluation data with surveys to the medical community, the advisory board and satisfaction surveys to patients. We also analyzed referral data.

Provider Satisfaction/Referral Data:

- Surveys were sent to all medical providers in the area two times in year one and yearly in year two and three. In year three, we surveyed dentists also. We averaged a 68% return rate among medical staff and 80% among dentists. If they had sent patients to our services, 100% were pleased with the programs. If they had not referred patients or had not heard of the network, we provided them with information with a formal visit and written information for their patients. We noticed more providers were referring each year with 19 different providers referring in year three. The dentists were not familiar with the programs so the grant coordinator spoke at their quarterly meeting on the programs and the importance of referring patients as many do not have a primary provider. This was well received. There has also been an increase in invitations to speak to different organizations in the community about diabetes and the network. The grant coordinator has been invited to speak at 12 places in the community since January 2011. She was contacted by two organizations the first year. All of the other speaking engagements were because the network contacted the agency. We see people are eager to learn about diabetes and what is available.
- The Advisory Board said being on the board has impacted their job in a positive way (100%). When asked what the biggest success of the network is, 70% said a place for the medical community to refer patients in an easy manner. Additional comments included support for day to day diabetes management, educational offerings to the community to improve awareness of diabetes and that there is now a safety net for people with diabetes that is preventing complications later in life.

Patient satisfaction

- Patient satisfaction surveys are conducted on people in the Diabetes Prevention Program and the Diabetes Self-Management Education program. We found 98% of participants reported receiving quality education and said they would refer a friend to the programs.
- There is now an ongoing waiting list for people to attend the diabetes education classes as well as the Diabetes Prevention Programs.

Challenges & Innovative Solutions

In the beginning, everyone at the table had a vision to improve diabetes services for the community but everyone had a different focus and a different plan to obtain this. The needs assessment became key in providing direction for the program. Once we developed a sound quality improvement process, that became our guide as well. We continue to go back to this process as we move forward. We use the Plan, Do, Study, Act process for all of our programs.

Another challenge involves the large area we serve. As programs grew in Butte, network partners such as the YMCA and Mt Tech College of Nursing stepped in to assist with these programs. The grant coordinator traveled to neighboring communities to present programs and offer support in developing services to their towns. Once a rapport was established, we were able to do more over the

miles. The network brought in webinars that were presented through St. James Healthcare. The surrounding communities sent people to Butte to attend these free of charge. These sites also attended the conferences on diabetes. For patients, we were able to use telehealth equipment that was already in place to provide diabetes classes over the miles. The information packets were mailed to a designated person at the sites and provided for the class attendees. This was done in conjunction with a class in Butte, requiring no additional time to the instructors. We have done this at three sites.

Obtaining buy in and involvement from the medical community was a frustration early on but as we grew and provided a good service, word of mouth has led to more referrals. We use our Quality Improvement process in reaching more of the medical community as well. We always ask people where they heard about us. This has helped us focus our advertising efforts.

Sustainability

On-going Services and Activities:

The network anticipates that the network will sustain, at some level, most of the core services that they currently offer. The network had a series of sustainability meetings and the partners committed to the following:

- The YMCA: They plan to continue the Find your Verb program for children, and they have state funding to continue diabetes-related activities for adults with pre-diabetes.
- The Nursing School: The nursing students will continue to do outreach/community-based practice focused on diabetes as part of their training program
- St James Healthcare: There will likely be enough carry over to continue to fund the grant coordinator's position for approximately nine months. The Network partners agreed that it is important for the coordinator to be able to continue to dedicate a significant amount of her time and effort to coordinating the Network and the Diabetes education classes. The hospital administration is committed to continuing the diabetes work in the community.
- The Community Health Center: St. James and the Community Health Center will coordinate on diabetes education classes in the future to reduce duplication on the community.

It is likely without HRSA funding, the Network will have to scale down some of the activities (the diabetes provider conference held each year, the number of classes held, etc.)

Sustained Impact:

The Community has been impacted in several significant ways with the outreach grant and the network. There is now a place for our medical providers to refer patients for diabetes education and services. This is being done. Surveys to the medical community show there is an increased awareness of diabetes and the improved outcomes if patients receive education and support from the network. We feel strongly patients have an improved quality of life after completing diabetes education classes. They become empowered in their disease management and prevent complications that can lead to disability and death.

Many of the network partners had been trying to address diabetes prior to the grant program. We look back now and see we were "spinning our wheels". The consortium is effective in providing services in a uniform manner that promotes sustainability. The current model is simple and effective. There is one main phone number to introduce people to services in the community as appropriate.

In addition, the Network was able to leverage the resources and capacity from this grant to apply for and receive a Diabetes Prevention Program grant from the State to work with pre-diabetics. Based on referrals, the Butte medical community is now thinking about pre-diabetes when they were not before, and they are seeing a good level of provider referral into network programs. Outside of the hospital and physician practices, the school nurses now have support and places to send the at-risk kids. The conferences for professionals have provided the opportunity for local healthcare professionals to build their skills and to know about the resources in the area. In addition, they have seen capacity of future health care providers grow as a result of this project. The nurse students are now learning so much about diabetes and it will be part of their professional practice moving forward- it is important capacity building for them and for the community.

Implications for Other Communities

The lessons we learned include the significance of going to the people. Our network is strong because of the medical members but also the nonmedical people in the network. We have spent a great deal of time at senior centers, churches, powwows, school open houses and places that are not clinics/hospitals. We learned this is how you reach the people. The outreach work raised awareness to

diabetes and to the network while building trust. We also learned to ask the community and the medical team for feedback often and then to address their concerns with an implementation plan that is revisited as part of a quality improvement process.

We learned to share the work and the resources among the partners, even those that do not attend regular meetings. We also learned to ask for help from the partners. This allowed us to do more outreach programs and educational sessions.

MONTANA

Wheatland Memorial Hospital

Organizational Information

| | |
|-------------------------------------|---|
| Grant Number | D04RH12659 |
| Grantee Organization | Wheatland Memorial Hospital |
| Organization Type | Hospital |
| Address | P.O. Box 287 Harlowton, MT 59036 |
| Grantee organization website | wheatlandmemorial.org |
| Primary Contact Information | Jean Wallace Outreach Coordinator Phone number: 406-632-3191 Fax number: 406-632-3170 jeanwallace@wheatlandmemorial.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--|-----------------------------|
| Harlowton Public Schools | Harlowton/Wheatland/Montana | School |
| Yellowstone Boys and Girls Ranch | Billings/Yellowstone/Montana | Mental health facility |
| The Resilience Center | Worden/Yellowstone/Montana | Private business |
| Partners in Health Telemedicine Network | Billings/Yellowstone/Montana | Telehealth network |
| South Central Mental Health Center | Billings/Lewistown/Yellowstone/Montana | Mental Health facility |
| Wheatland County Extension | Harlowton/Wheatland/Montana | University system extension |

Program Services

Area:
Wheatland Memorial Healthcare is a Critical Access Hospital serving residents from five frontier counties: Wheatland, Golden Valley, Meagher, Sweet Grass, and Judith Basin.

Community description:
Montana is sparsely populated with 902,195 residents scattered over a vast geographic area covering more than the combined areas of the states of New York, New Jersey, Pennsylvania and Ohio. Over 80% of Montana's communities have fewer than 3000 people. The service area for this program has around 5000 people. The largest urban area has about 100,000 people. Managing healthcare, healthcare education, and mental health support and intervention in such a dispersed environment presents special barriers and challenges.

Need:
The target population of the Community Resilience Outreach Program is frontier youth in grades 7-12 of the Harlowton Public Schools and their caregivers. Even though this population is at high risk for mental health problems and substance abuse as indicated by data analysis, there is a serious lack of available education specific to mental health promotion, and substance abuse prevention and a dearth of mental health clinical interventions or substance abuse treatment options. When compared to the state of Montana, Harlowton youth have high levels of the following Risk Factors associated with both depression and substance abuse: 1) extreme economic and social deprivation 2) low neighborhood attachment, 3) high mobility/transition.

Focus Areas

Behavioral/Mental Health
 Children's Health
 Health Education and Promotion
 Health Information Technology

Target Population

School aged children - elementary
 School aged children - teens
 Adults
 Caucasians

Description:

We have organized the Community Resilience Outreach Program (CROP) within a "Healthy and Resilient Community Model", which is an adaptation of several models in current use in the world. A healthy and resilient community is one which shares a common history, has a vision for and hope in the future, moves through adversity with strength and courage, makes use of resources both within and outside the community, and is prepared to look at new ways of tackling problems. The services we provided correlate to the Healthy and Resilient Community Model.

1. We designed and offered the "Community Resilience Outreach Program" (CROP) comprising mental health promotion, substance abuse prevention, and early identification, referral and treatment services for youth in grades 7-12. An evidenced-based curriculum was developed to teach youth the five skills of resilient people: perseverance, self-acceptance, equanimity, self-reliance, and purpose. The curriculum is designed to be taught in three levels: Introduction to Resilience, Assessing Your Resilience, and Building and Strengthening Your Resilience. This model can be replicated in frontier communities anywhere in the world.
2. Based on a Community Needs Assessment and the passion to improve the skills and connections between community residents, multiple small Work Groups were established to carry out many programs in the community. Groups organized around a broad range of community interests, including:
 - Teen Leadership Camp and Summer Camp
 - Promoting Health
 - Community Celebration
 - Community Service
 - Mental Health
 - Emergency Preparedness
3. In established partnership with St. Vincent's Healthcare/Partners in Health Telemedicine Network (PHTN) in Billings Montana, has allowed us to purchase and install televideo equipment to meet the needs of our service area. Sites at Yellowstone Boys and Girls Ranch, Harlowton Schools, South Central Mental Health (Lewistown) and Wheatland Memorial Healthcare are used for delivery of the CROP program.
4. We recognized, developed, and celebrated existing community strengths and resources. The first annual community celebration took place in June of 2010. A community website highlighting successes and positive local stories is in the works. Efforts to revitalize the local Chamber Board have resulted in better communication within the community about positive aspects and business successes. This effort has spawned several new tools for communication.

Role of Consortium Partners:

The close working relationship between our partners has been the keystone of our success. Partners were engaged in the original visioning and then in the planning and implementation of CROP. All sit on the Advisory Board and provide other services relative to their expertise.

Wheatland Memorial Hospital is the lead organization and fiscal agent for the grant. The hospital provides office space and supplies for the Project Director and in-kind services of staff as needed for specific activities.

Harlowton Public Schools provides space, curriculum teacher, and continual feedback for curriculum improvement.

Yellowstone Boys and Girls Ranch provides expertise in development and refinement of the curriculum content and also provides the Behavior Therapist to co-deliver the classes with the classroom teacher.

The Resilience Center has provided guidance, evaluation, and refinement of the curriculum based on over two decades of research into resilience.

The Partners in Health Telemedicine Network provides the televideo link and expertise for maintenance.

South Central Mental Health provides cutting edge ideas of counseling via televideo as well as the service for our community.

Wheatland County Extension provides a local viewpoint to guide and sustain all activities.

Outcomes

The most important outcome is sustainability of each of the programs we have introduced during the grant period. We have successfully found funding to continue those activities that require funding and have evidence of improved attitudes and resilience in our population.

Outcomes for the CROP classes have shown increased resilience scores and correlation between what is being taught with improved healthy behaviors. The program is designed to build understanding and practice of resilience over three consecutive school years, and results indicate this approach is highly effective. Though we cannot claim causation without the use of a control group, the resilience scores of students who completed the Resilience Curriculum showed marked improvement in the targeted skills: perseverance, self-acceptance, equanimity, self-reliance, and purpose.

A positive change in the hospital culture and increase in morale are significant and palpable. Education, training, and staff development activities with both individual and group job-related counseling were developed to address the decline in morale after the loss of the community's two physicians and the resignation of the hospital CEO. In a staff survey conducted in March, the majority of employees responding expressed high satisfaction with their jobs and reported that the purpose of Wheatland Memorial is in alignment with their personal values. Continued improvement in the hospital culture is now part of the Strategic Plan and is worked on by two different committees.

In addition to the two larger areas of success mentioned above, a number of significant improvements have been made in services available in our community.

1. Access to mental health sustainability has increased. Credentialing requirements have been changed to help expand the number of providers who will be able to provide mental health services through telehealth. South Central Mental Health and CROP obtained a waiver to allow LPC and other Masters level counselors to bill for services provided through telehealth. A NAMI-affiliated support group meets monthly and is the first NAMI site located in a small rural area in Montana to become affiliated with NAMI in Billings.
2. A community fitness program has become a regular component of the school's Adult Education offerings.
3. The Chamber of Commerce, which had become ineffective, has been rejuvenated and joined with a CROP focus group to improve communication within our area through website development and a positive Public Relations drive with a focus is on creating pride in our community.
4. A Teen Leadership Camp was developed to provide leadership training for middle school students in the WMH service area.
5. The city of Harlowton has taken over maintenance of the tennis courts which were refurbished by a group of young adults (age 20-30). These young adults have planned and implemented several other community-building activities that have not involved CROP funding including "Wheatland County Connections," a web-based exchange for goods and services, and the highly successful Bountiful Baskets, a food cooperative.
6. Wheatland Memorial Hospital provides a paid staff member to offer EMT training at the high school for students and adult community members to increase the availability of emergency services locally.

Challenges & Innovative Solutions

Each of our program goals has been met and in some cases exceeded expectations. However, there have been significant challenges along the way.

Technical difficulties plagued us from the beginning in trying to deliver quality tele-video to the school site. We purchased a microwave link used in the military to send the signal from our site to the school without the need of an additional charge. No one else is using this technology in their tele-networks that we know of, but we believe it holds great promise for urban areas or rural areas that are not in mountainous regions. The equipment worked flawlessly during the last two years of instruction.

The cost of the T1 line and equipment as well as unbillable services for education in the area of mental health proved to be too steep for most schools to absorb. Based on the prohibitive cost, we decided to redesign the Resilience lessons so that any teacher could teach them.

The greatest challenge was the loss of our only doctors who had served the community for seventeen years, and the subsequent loss of our CEO. Our facility went into a financial free-fall as we struggled to recover with temporary and uncommitted providers. By the time a new administrator was hired, the hospital was deep in debt. Employee morale was at an all-time low. CROP worked through resilience training and culture improvement to revive the facility. We established "Characteristics of Ownership," now used in all staff evaluations, which assess and reward excellence in customer satisfaction and teamwork. Even in this poor economy, the hospital has turned the financial picture around, not only by wise investment but by improved attitudes and performance of staff and a pulling together of our community to support our hospital. The staff is now dedicated to improving the care and service they offer, and with hospital staff comprising nearly one-tenth of our population, the improvements have been felt countywide.

Sustainability

On-going Services and Activities:

Because of the nature of this Outreach grant—funding to build resilience in our community—sustainability is the key indicator of program success. A resilient community learns and grows from its hardships and makes choices that lead to a better life for its residents. All aspects of CROP will be continued in some form in the coming years through partnerships, sponsorships, and in-kind and volunteer services.

Through continuing partnership between the hospital and the school system, EMT training and exercise programs will continue. The Teen Leadership Camp will be sustained through volunteers and a local nonprofit agency that has pledged support of the camp for future years ensuring its sustainability.

Mental health connectivity and support will continue through a state waiver to allow reimbursement to Licensed Practitioners in addition to Psychiatrists and Licensed Social Workers. Support of the telehealth network and equipment will be continued by Wheatland Memorial Hospital. Local NAMI representatives are highly dedicated to continuation of the program, and our affiliation with the Billings chapter of NAMI will provide resources and support in the future.

The CROP curriculum will be taught by teachers within the Harlowton Schools. The curriculum will be marketed by The Resilience Center, a private company, and spread to schools all over the state and beyond. Data will continue to be collected and improvements made to the curriculum by The Resilience Center.

Community development has always been a goal of WMH and will continue without additional funding from HRSA or other grants. The Hospital has made community development part of their strategic plan and has dedicated paid staff time to growing our community.

Sustained Impact:

As our children continue to make good decisions that lead to rewarding and fulfilling lives, they will impact communities wherever they go, taking resilience with them into the adult world.

Breathing life back into a defunct Chamber of Commerce and creating pride in our community will have a lasting impact on community growth and development.

Probably the most significant immediate impact CROP has had on our community is improvement of our hospital culture. With the potential loss of our hospital came great fear for the sustainability of our rural community. Though CROP cannot claim full responsibility for improvements in the hospital culture, it was certainly an important member of the team. The drive to improve hospital service has been so successful that the Hospital Board now envisions implementation of a Patient Centered Medical Home model.

The Resilient Community Model is based on over twenty years of research into resilience. We now add three more years of research and application of the model to a Frontier community. The success of CROP should encourage other rural and frontier areas to adopt this model to support and build their own communities. Rallying around youth, which small communities do readily, and teaching them to be more resilient proved to be an effective focus. The Living a Resilient Life for Kids has proven to be an effective tool, which will soon be available for a nominal fee to any program.

NEBRASKA

Good Neighbor Community Health Center

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH16345 |
| Grantee Organization | Good Neighbor Community Health Center |
| Organization Type | Non-profit organization |
| Address | 2282 East 32 nd , Columbus, NE 68601 |
| Grantee organization website | N/A |
| Primary Contact Information | Kristie Stricklin Chief Operating Officer Phone number: 402-563-9224 Fax number: 402-563-0544 kstricklin@ecdhd.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|----------------------------|-------------------------|
| Four Corners Health Department | York, York County, NE | Health Department |
| Healthy Families Nebraska Program | Columbus/Platte County, NE | Non-Profit Organization |
| East Central District Health Department | Columbus/Platte County, NE | Health Department |

Community Characteristics

Area:

The coverage area for the Outreach grant is an eight-county area in Nebraska, including Platte, Colfax, Boone, Nancy, York, Butler, Polk and Butler.

Community description:

The combined service area is rural, with a large Hispanic/Latino population located in the most populated area of the counties served by GNCHC. Within the four counties served by GNCHC, Hispanic Latinos comprise 14.7 percent of the population, compared to 7.4 percent statewide (2006 Census estimates). It is important to note that 41% of all the births in the four county area served by ECDHD are to Hispanic/Latino women, which is significantly higher than the 12.47% of Hispanic Latinos in the district. Most of the Hispanic/Latino women served have an educational level less than third grade (WIC computer system data). This lack of proficiency in reading even their own language produces challenges for health education. Effective education often means going over teaching goals verbally or using pictograms. The combined eight county service area population has a lower rate of high school graduation at 83.3 percent than the state average of 86.6 percent. Two counties, Colfax at 72 percent and Nance at 80.6 percent are significantly lower in graduation rates and therefore have a higher rate of dropouts. In addition, the ECDHD district had a total of 386 births to mother who were age 19 and under, out of a total of 3706 total births during the 2001-2005 time frame, making the percentage of teen births in the district 10.42%, which is above the state average percentage for the same time period of 9.1%. Colfax County has the highest teen birth average of the eight counties at 20.6%, more than double the state average. The statistics of the service area clearly point to a need for some pre-natal intervention services among Hispanic/Latinos and teens.

Need:

A consortium consisting of the Good Neighbor Community Health Center (GNCHC), Four Corners Health Department (FCHD), East Central District Health Department (ECDHD) and Columbus Community Hospital Healthy Families Nebraska Program (CCH-HFN) together have a service area of 4,300 square miles in rural Nebraska where 1,252 births occurred in 2005. The most significant

barriers to accessing medical care and needed education during and immediately after pregnancy for this service area are: 1. The large geographic service area in which public transportation is absent. By providing in home education, transportation barriers are eliminated. 2. For multiparous women, adequate childcare to attend meetings/groups is limited, either due to economic, language, or support system barriers. With the education occurring in the home, with an interpreter present, those factors are eliminated as well. 3. Six of the eight counties served are designated as Medically Underserved Areas (MUA) and three are designated in whole or part as HPSA for primary medical care. Because of these shortages, providers have less time to spend with each woman during their prenatal visit, providing one on one in home education and assessment effectively reduce this disparity.

Program Services

Focus Areas

Access: Primary Care
Access: Specialty Care

Target Population

Pregnant Women

Description:

The grant activities were coordinated and implemented through East Central District Health Department, (ECDHD), with some in home prenatal and postpartum visits provided by the consortium partners. The Outreach grant supported the implementation of three main activities:

1. Providing training and ongoing technical assistance support for staff to do home visits utilizing the effective evidenced based tools and trained staff from the CCH-HFN program.
2. In-home visits by local nurses to peri-natal families related to pregnancy care, newborn care, child development and safety. The education done during these visits reduces preventable safety risks through assessments and education and reduces disparities in available prenatal/postpartum education related to language, cultural and distance barriers.
3. Assessment of risk factors for the newborn and family including physical, developmental and behavioral health issues. The behavioral health issues are identified with the use of the Quick Psycho-Diagnostic Tool (QPD) which is used and assessed at each home visit. This reduces incidence of complication related to baby blues, including postpartum depression, and family anxiety and stress through early detection.

Services are offered in both a culturally and linguistically appropriate manner to address the underserved population of Hispanic mothers, newborns and families through support for Spanish-speaking interpreters and purchase of Spanish Healthy Families curriculum.

Role of Consortium Partners:

The grant program had a very active consortium. This three year program provided an important opportunity for the consortium partners to develop stronger working relationships and jointly plan and implement multiple activities. Each consortium partner played an active role in the program:

- Good Neighbor Community Center (GNCHC)-Applicant organization. The mission of the GNCHC is to work in collaboration with the community to increase access to primary preventative health care in order to improve the health of the underserved and vulnerable populations. Currently, the GNCHC OB program provides prenatal and postpartum care to more than 120 women a year, which serves as a valuable referral source for the in home visit program.
- East Central District Health Department (ECDHD serves Boone, Colfax, Nance and Platte in East Central Nebraska. ECDHD provided staffing for the program to include both nurses and interpreters, and provided referral for identified needs.
- Columbus Community Hospital-Healthy Families Nebraska (CCH-HFN)-The Columbus Community Hospital is the umbrella agency for Healthy Families Nebraska and is a rural hospital serving approximately 50,000 individuals in its catchment area. CCH-HFN targets young, primarily single, pregnant mothers and their families through a voluntary home visitation offering them intense, in home education, support and resources. Their vision statement is to give our families the tools and support to raise children in a positive and loving home. They provided the initial training and ongoing assistance for the home visit nurses in conducting the home visits and using the risk assessment tool.
- Four Corners Health Department (FCHD) serves Butler, Polk, Seward and York counties in Southeast Central Nebraska. The staff has a history of working closely with the communities to improve health and find needed resources and referrals. This mission is accomplished through coordination with local regional and state partners. They provided a nurse who conducted the home visits and referred families for additional services as necessary for pregnant women in their population service area.

Outcomes

The purpose of the grant was to build a home visitation service to address the needs of a high risk minority population that has multiple needs including poverty, low attainment of high school education, a high Hispanic/Latino population and geographic and transportation barriers.

One of the main measures of success has been building a relationship with expecting mothers. This helps them to feel more comfortable when the nurse comes into their home. This has been achieved by meeting with mothers during their OB visits, visiting and introducing the nurse and providing educational material about the home visits.

During the grant period 87 unduplicated women have been served and 101 total home visits have been provided. By looking at the economic impact Mothers and Babies Personal Support Program demonstrated a \$1.04 return on investment for every one dollar spent.

Challenges & Innovative Solutions

Staffing and consistent scheduling have been the greatest challenge met in this program. The requirement of a licensed RN, with the willingness to work only a limited amount of hours has been the biggest factor. Until recently, the RN would work on one of her days off from her regular job, which was never a consistent day, thus scheduling was difficult. It was also difficult to find an interpreter who had a flexible enough schedule to be able to work different days each week. Recently however, it worked out that an RN and an interpreter already employed by East Central District Health Department was able to take on the limited number of hours and give the program the consistency and structure that was needed. Visits are now done on an assigned day of the week, and the MBPS staff is also present during the OB clinic hours to get the clients' signed up and participating in the program.

Sustainability

On-going Services and Activities:

We fully understand that we must continue to seek out several simultaneous resources that will sustain and enhance the Mother & Babies Personal Service (MBPS) Program. We have had initial discussions about several strategies to address future funding. These include 1) Local funding for continuation. We feel that if we develop an evidenced based program with proven outcomes for mothers and infants that the community will not want it to discontinue. 2) Third Party Payors such as Medicaid to cover the cost of post-partum visits, 3) State funding from the Nebraska Legislature, 4) Funding from the Buffet foundation or other Nebraska foundations that are concerned in peri-natal home visitation programs, 5) National foundation or Federal funding in the form of an earmark.

Sustained Impact:

The primary benefit of this program is to improve the health and well-being of peri-natal women and their infants through the provision of evidenced based home visiting methods and curriculum that will reduce negative birth outcomes and provide family support. This method has assisted in early detection and correction of "problem areas" such as high risk peri-natal behaviors, postpartum depression risks, and unsafe environments for mothers and babies. It also serves as a "referral source" for participants with needs that can be met elsewhere in the community, to begin to build the bridge of greater independence and possibly life changing events for the ones in greatest need, thus increasing the positive impact of the program in the wider community.

Implications for Other Communities

The provision of evidenced based home visiting methods and curriculum will reduce negative birth outcomes and provide family support. The primary benefit of a program such as this is to improve the health and well-being of peri-natal women and their infants. The one on one, face to face educational approach uses culturally and linguistically appropriate methods to encourage, model, and increase compliance.

NEBRASKA

Rural Comprehensive Care Network

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12652 |
| Grantee Organization | Rural Comprehensive Care Network |
| Organization Type | Rural Network |
| Address | 995 E Highway 33, Suite 2, Crete NE 68333 |
| Grantee organization website | www.rccn.info |
| Primary Contact Information | Joleen Huneke Executive Director Phone number: 402-826-3737 Fax number: 402-826-3746 jthserpa@rccn.info |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-------------------------------------|-------------|-----------------------------------|
| Blue River Valley Network | Crete NE | 18 member rural hospital network |
| South East Rural Physicians Network | Crete NE | 79 Rural Physician member Network |
| SEAHEC | Beatrice NE | AHEC |
| Rural Comprehensive Care Network | Crete NE | Hospital & Physician Network |

Community Characteristics

Area:
Counties in Nebraska: Boone, Valley, Howard, Merrick, Polk, Butler, Hamilton, York, Seward, Adams, Fillmore, Saline, Webster, Nuckolls, Thayer, Jefferson, Johnson, Otoe. Communities served were: David City, Geneva, Crete, York, Fairbury, Friend, Hastings, Tecumseh, Genoa, Seward, Superior, St. Paul, Hebron, Red Cloud, Syracuse, Osceola, Albion, Central City, Aurora, Clay Center, Ord, Milford.

Community description:
Hospitals are all CAH's located primarily in County seat communities, rural agricultural driven economies. Recruiting professionals to the area includes a "grow your own" component.
We have a mix of Independent practice physicians and employed physicians along with patient care providers employed in health care environments.

Need:
The workforce program has two priority goals. 1. To increase the number of patient care professionals that choose to be employed by network members. 2. Decrease the turnover rate at network facilities. Our partnering rural health care facilities are seeing increasing challenges in recruiting and retaining patient care providers. Similar to most Midwest rural areas we are experiencing an aging population in healthcare positions. The retirement of these workers is leaving unfilled gaps in healthcare workforce. The migration of youth to metro areas and out of state leaves fewer replacement workers in rural communities. Our program addresses these challenges in several ways; through a grow your own program, by connecting students to rural communities earlier in their education process, by educating communities on how to recruit and connect students back to rural, and assisting in rural rotations for students so they are in rural areas more often through the education process. Retention programs consist of community engagement, local continuing education opportunities, and mentoring and leadership skills enhancement.

Program Services

Focus Areas

Access: Primary Care
Health Professions Recruitment and Retention/Workforce Development

Target Population

School aged children - teens
Adults

Description:

Activities conducted through our outreach grant period include recruiting and retention of patient care providers. We worked with hospitals to provide nursing education programs, assisted in providing consultants for workshops, worked with communities to provide better understanding of healthcare as an economic driver within the communities. We worked with schools and training institutions to strengthen the tie to rural training programs and enhance those programs to keep students better connected with rural during the training/ education process.

Role of Consortium Partners:

RCCN focused of retention programs, including educational workshops and educational program along with leadership training.

AHEC was to focus on increasing the number of students and youth choosing health care careers and choosing rural including direct contact with high school students and hosting science fairs and career academies.

BRVN collaborates with RCCN to host educational workshops annually.

Outcomes

We worked with 125 students at the University of Nebraska Medical Center each of the 3 years the grant was funded, contact was made with each student 9 times annually for a total of 3375 individual contacts made through formal meetings and educational programs. We hosted and participated in rural recruiting events contacting a total of 185 physician candidates and another 100 ancillary service providers including PA's PT, Pharmacy, and nursing students. We established contacts with rural residency programs in the mid west allowing contact with over 50 residents who have not committed to a practice location. From these events we have currently placed 5 patient care providers in rural communities. We have developed relationships with many of the students that are still in their professional education program and not in the job world currently.

Job seeker awareness of the Rural Comprehensive Care Network has increased. The Network has become known as a source for rural employment opportunities and placement. We have positioned the Network as a source for retention programs, and find our members and regional health care facilities seeking our expertise.

Summer retention workshops have been held with staff of local hospitals. There have been a total of 1,509 paid registrations in the past three years. The workshops have dealt with topics that will make the staff more engaged and part of their local facilities workforce team. The evaluations have stated that 89% will use the information in their current positions.

RCCN developed relationship with the Southeast Nebraska Career Academy Partnership (SENCAP). The program is providing juniors and seniors in high school the opportunity to become both career and college ready. Through this program there are 40 college level courses offered through Southeast Community College. There are 300 high school students participating from 32 different school districts. Besides being able to take dual credit classes, students enrolled in the Academy Program also have opportunities to do job shadowing, take field trips and see firsthand what happens in the workplace, meet with professionals in their career field of interest, and, have the chance to be active and engaged learners. We serve multiple school districts and provide opportunities for students in many of our smaller schools that they would not ever receive without this partnership.

The AHEC had conducted Science Fairs and reached over 125 students the first year of the grant. Since the AHEC closed the second year RCCN developed the relationship with the Rural Health Education Network to conduct the Science Fairs again there were approximately 125 students in attendance. This year the numbers were not as encouraging as several of the schools had budget cuts and were unable to travel. Over the three years of the grant there were over 280 junior high students reached through the regional Science Fair.

RCCN contracted with CIMRO of Nebraska to develop an evaluation/ tracking tool that allows us to compile data about the program and track the student participants as they progress through medical training programs. This valuable tool allows us to monitor the progress of the students over a several year period and to monitor professionals in rural areas over the course of their careers.

Challenges & Innovative Solutions

Length of training in metro areas creates a difficult transition to rural environments; we have developed programs that allow students to have rural contact more frequently during the training period.

Our AHEC lost funding and closed so we needed to establish mechanisms to work with the target population they had previously worked with. We established relationships with others who work with the high school populations in career options and career counseling.

Sustainability

On-going Services and Activities:

We will continue to hold workshops and training programs to enhance retention of nurses, consortium partners will fund these programs.

We will continue to hold science fairs for high school age students to encourage choosing health care careers, others will absorb this function. The Rural Health Education Network (RHEN) will be taking over these events for the youth.

The partnership with SENCAP will continue this is a great opportunity to encourage high school students to choose health care as their career choice.

Sustained Impact:

By establishing a closer connection between training facilities and communities we have eased the ability of communities to recruit patient care professionals. Strengthening the connection between rural areas and metro located institutions makes the transition easier for the professional. These connections allow for enhanced and more frequent training to be done in rural areas thus strengthening the connection between future practitioners and rural.

The relationships that RCCN has built with the UNMC will be critical in recruiting the students back to rural areas. RCCN is just starting to see the fruits of our labors as the students are starting to come out of the professional education programs and starting to seek jobs.

Implications for Other Communities

This program can be easily replicated in other rural areas. We have identified that recruiting early and establishing a culture of connections with students eases the pipeline of providers available to work in rural environments. It creates a culture where rural practice is exemplified and sought after thus providing more options for placements in rural. "Grow Your Own" allows communities to be supportive and connect with students more likely to come home to practice after training and keeps the student connected to community.

NEBRASKA

West Central District Health Department

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12649 |
| Grantee Organization | West Central District Health Department |
| Organization Type | Non-profit organization |
| Address | 111 North Dewey Street, North Platte, NE 69101 |
| Grantee organization website | www.wcdhd.org |
| Primary Contact Information | Mandy Brandes Program Coordinator Phone number: 308-696-1201 ext. 256 Fax number: 308-696-1204 brandesm@wcdhd.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|------------------|----------------------------|
| North Platte Schools | North Platte, NE | Public school system |
| Hooker County Schools | Mullen, NE | Public school system |
| Jefferson Elementary School | North Platte, NE | Public school |
| Jefferson Elementary PTA | North Platte, NE | Parent-teacher association |
| Dr. Jim States | North Platte, NE | Local dentist |
| Dr. Trent States | North Platte, NE | Local dentist |
| Dr. Jonathan Simpson | North Platte, NE | Local dentist |
| Logan County Commission | Stapleton, NE | County government |
| Hooker County Commission | Stapleton, NE | County government |
| Nebraska Department of Health & Human Services | Lincoln, NE | State health department |
| University of Nebraska Medical Center | Lincoln, NE | Public university |

Community Characteristics

Area:

The coverage area for the Outreach grant started out as an eight county area and it is now a three-county area in West Central Nebraska: Lincoln, Logan and McPherson Counties.

Community description:

Located in the heart of Nebraska, Lincoln County is the most populated county with 35,865 people that we serve. Logan County has a population of 749 and McPherson County with a population of 497 is comprised of one town in each county. These towns are very rural and have a very small population. Most of the population of these two counties is made up of farmers. Some of the counties have frontier population densities (less than two people per square mile) and are designated as Medically Underserved Areas (MUA) and Health Professional Shortage Areas (HPSA). The area has poverty rates generally at or above the states average. There are fifteen dentists practicing in North Platte, a rural community of 23,878 people.

Need:

The region is classified as a Medically Underserved Area and is a Health Professional Shortage Area, especially for dentistry. Residents outside of Lincoln County are forced to travel distances of up to two hours or more to see a dentist. Individuals would have to travel from 34 miles one way to North Platte to as far as 259 miles one way to Lincoln depending on the kind of dental care they may need and if providers take Medicaid. These counties have no public transportation and live a great distance from North Platte, making access to oral care even more complicated. Out of the fifteen dentists in North Platte, there is only one that accepts new Medicaid patients, so for families on Medicaid, getting dental care has been difficult. When we did the research for the initial grant application statistics showed that an average of 62% of children in Lincoln County were eligible for Medicaid, 69% in Logan County, and 68% in McPherson County.

Program Services

Focus Areas

Oral Health

Target Population

Pre-school children
School aged children - elementary
Caucasians
African Americans
Latinos
Uninsured
Underinsured

Description:

The focus of the grant program was to provide access to preventative oral care and oral health education to elementary students. The target populations of the program were those who elementary students on Medicaid, uninsured and under insured.

The grant activities were coordinated and implemented through West Central District Health Department, with some staffing support and dental care provided by some of the consortium partners. The Outreach grant supported the implementation of three main activities:

1. *In-classroom oral health education:* Education for elementary students was provided through the West Central Smiles dental program. Oral health education was offered to all elementary students in our service area and provided to 17 out of the 20 schools in the service area. The education consisted of the importance of having a healthy diet and how certain foods help your teeth, education on what sugar can do to the teeth, the importance of brushing and flossing as well as what to expect when you go to the dentist.
2. *Preventative oral care services:* Services that are provided are x-rays, exam by a dentist, cleaning and a fluoride treatment. These services were determined by the consent and medical history form that was completed by the parents/primary caregiver. Follow up calls were made to parents if needed for further clarification of information that was provided. Consent forms and medical history forms were sent home ahead of time to the parents through collaboration with the schools and returned to the schools by the deadline. The date for the portable unit is set with the school by the grant coordinator before the consent forms are sent home.
3. *Reporting to parents on services provided and recommendations:* For each of the students that we provided services to would have a report card mailed home to their parents/primary caregiver stating what services were provided and the results of the exam with recommendations from the dentist for follow-up care.

Role of Consortium Partners:

The grant program had a very active consortium in the beginning of the grant. As staff changed and the WCDHD service area changed, we lost consortium members and meetings became less frequent and occurred less often. This three year program provided an important opportunity for the consortium partners to develop stronger working relationships and jointly plan and implement a much needed service for our rural communities. The consortium played an active role in all the processes of the development of the dental program:

- *North Platte Public Schools and Mullen Public School:* Developed the consent form that would be going home to parents. There was a lot of time and effort put into the development of the consent form so that it would be easy for parents to fill out but yet be able to get all the information that would be needed. These schools were supportive of the service that WCDHD would be bringing in to the school system.

- *Jefferson Elementary PTA*: Led by Shelly Stiffler, the PTA helped line up times for the health department to attend the Family Fun nights, helped with the coordination of the dental days at the school, assisted with the mailing of consent forms, assisted with handing out information packets and promotion of the portable dental unit.
- *Nebraska Department of Health and Human Services*: The state health department supported our activities, but could not participate directly in the day-to-day activities of the consortium.
- *Logan County Commissioner and Hooker County Commissioner*: Representatives of local county governments were supportive of our work, but did not participate directly in the day-to-day activities of the consortium.
- *University of Nebraska Medical Center*: The University assisted with providing information on oral health, how the process should work with a portable dental unit, as well as provided resources for the WCDHD staff in regards to oral health education and oral care.
- *Local Dentists*: Local dentists, particularly Dr. Trent States and Dr. Jonathan Simpson, committed to volunteering their time to the program and providing exams on the portable dental unit.

Outcomes

We collected evaluation data in area of oral health access for elementary students. The findings that we found over the course of the grant are listed below.

- A total of 2,730 elementary student's grades pre-kindergarten through 5th grade received in the classroom oral health education.
- A total of 216 elementary student's grades pre-kindergarten through 5th grade received in-chair services which included: x-ray, exam, cleaning, and fluoride varnish treatment.
- In the first two years of the grant there were five schools in the West Central District Health Department service area that participated in the program.
- In year three, there were 12 schools in the West Central District Health Department service area that participated in the program. We did have additional schools asking West Central District Health Department to continue to come to their schools in the future.

Challenges & Innovative Solutions

One of our initial challenges was gaining the support and participation of several schools. When we moved into Year 2 of the grant, we brought in an additional staff member who already was working closely with the schools. This individual had a great working relationship with the schools in the WCDHD service area and went out and talked to the principals at each school about the portable dental unit. Once there was a better understanding of what the service was and the benefits of it coming to the schools, principals were on board to help with getting students signed up and identifying those students who could benefit from it the most. With the recruiting that was done by WCDHD and schools, our number of students served increased slightly, but we felt even more improvement was possible.

Our second challenge was making parents aware of the program and getting them to enroll their children in our services. Initially, marketing to parents and schools was difficult because few knew about WCDHD and many didn't understand the services we provide. We needed to find a way better reach parents and to make this a fun and exciting thing that we were bringing to their children in schools. We contacted a marketing firm out of Kearney, NE called SCORR Marketing. Through several conversations with SCORR Marketing, we told them what our service was and the barriers we were struggling with getting parent and student participation in the program. SCORR Marketing came up with a couple of marketing campaigns to get kids interested in the program. In the end we came up with what is called the "Tooth Tour." The Tooth Tour had its own logo and along with this we had radio ads, posters, t-shirts and even toothbrushes with the Tooth Tour logo on it. The marketing of the Tooth Tour went over great with the schools, parent's, students and even the community. With the Tooth Tour, we increased our school participation as well as our student participation. In Y3 alone, we provided oral health education to 2,231 students in the WCDHD service area and provided in-chair services to 70 students. Defiantly having a Marketing company involved in promoting the program made a significant difference in the number of students that we were able to provide services to.

We also experienced challenges in targeting the program. Initially, our focus centered on a limited population within the larger population of all schoolchildren. We targeted our program only toward children who were uninsured or insured by Medicaid. We found this led to limited participation because of students not wanting to be singled out due to their "financial" status. Furthermore, we were

targeting only those children who did not have a pre-existing dental home established. However, with the increase in participation, we noticed that many of the consent forms being completed and returned for enrollment in the program were for students who already had a dental home and/or didn't meet our insurance criteria. Rather than exclude these potential patients, we opened the service all students. By doing so, we increased the number of students who were permitted sign up for the service, and boosted our productivity.

Another lesson that we learned involved coordination of our oral health education sessions in the schools with the visits by the portable unit for dental services. In the first year, we completed all the oral health education sessions first, then returned to the schools at a later date (sometimes months later) with the portable dental unit. By the time we had returned, the interest generated by the oral health education sessions had waned. Toward the end of year two we tried to have the oral education and the portable unit day on the same day. This produced problems with staffing shortages – with project staff delivering education, they could not assist the dentist. We simply didn't have enough staff to do both the education and the portable unit at the same time. The happy medium appears to be to have the oral health education and follow up a week or so later by having the portable unit at that same school to do the cleanings, x-ray, exams, and fluoride treatments. This is an area that we see as an area of improvement. By scheduling the education and the clinic days close together the students connect the two.

Looking at this whole project, there are several things that could have been done differently but as we moved into our third year we did make some changes and the program finished out well. There were several successes as well as failures but to each was an opportunity to grow and improve the program.

Sustainability

On-going Services and Activities:

The main components of the grant-funded program will continue after the grant period ends. The preventive services that will continue to be provided will be x-rays, exams (if a dentist is available), cleanings and fluoride varnish treatment. If there is no dentist available to perform the exams, then that particular service will not be offered. These services will be charged to the patient based on our sliding fee scale or through Medicaid. The Tooth Tour theme will continue to be used to draw in the participation from parents, kids and schools.

Sustained Impact:

Our community has been impacted in significant ways since this program was funded. The West Central Smiles "Tooth Tour" portable unit has created a community of local school officials who better understand the challenges faced by the uninsured and underinsured in our community and the need for dental care. We have seen their attitudes change over the past three years as a result of the positive working relationship between providers, WCDHD dental staff and our schools. As we have worked more and more with the schools they understand the services that we are providing not only benefit the children and parents but it is also beneficial to the school. We are able to provide x-rays, exams, cleanings, and fluoride treatments to the students and they only have to be out of the classroom for 30 minutes. Finally, as mentioned above, this program has encouraged a deeper collaboration among the schools and the health department and we will continue to collaborate on access to oral care for the underserved beyond the grant period.

Implications for Other Communities

We feel our project offers a useful model that can be copied by other communities. Specific lessons learned, like the value of professional marketing assistance, will help other communities provide similar programs with fewer initial problems and more rapid success.

NEW HAMPSHIRE

Mid- State Health Center

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12688 |
| Grantee Organization | Mid- State Health Center |
| Organization Type | FQHC Look-Alike |
| Address | 101 Boulder Point Drive, Plymouth, NH 03264 |
| Grantee organization website | www.midstatehealth.org |
| Primary Contact Information | Sharon Beaty Chief Executive Officer Phone number: 603-536-4000 Fax number: 603-536-4001 sbeaty@midstatehealth.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,694 May 2010 to April 2011: \$124,550 May 2011 to April 2012: \$99,394 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|---------------------|---|
| Mid-State Health Center | Plymouth/Grafton/NH | FQHC Look-Alike |
| Speare Memorial Hospital | Plymouth/Grafton/NH | hospital |
| Pemi-Baker Community Health | Plymouth/Grafton/NH | home health and hospice |
| Genesis Behavioral Health | Plymouth/Grafton/NH | behavioral health/mental health |
| Newfound Area Nursing Association | Bristol/Grafton/NH | home health |
| Community Action Program – Belknap-Merrimack Counties | Plymouth/Grafton/NH | family planning, social services resources |
| Communities for Alcohol and Drug-free Youth (CADY) | Plymouth/Grafton/NH | youth substance abuse prevention organization |
| Plymouth Regional Clinic | Plymouth/Grafton/NH | free medical clinic |

Community Characteristics

Area:

Mid-State Health Center's *PRO Health* project served Alexandria, Ashland, Bridgewater, Bristol, Campton, Dorchester, Ellsworth, Groton, Hebron, Holderness, Plymouth, Rumney, Thornton, Wentworth, and Woodstock in Grafton County, NH; Danbury in Merrimack County; & New Hampton in Belknap.

Community description:

The service area is comprised principally of communities with underserved /shortage area designations reflecting limited access to primary care professionals and related health services. The service area is rural in nature, with small, often remote towns where isolated families with multiple risk factors have limited access to resources, and socially vulnerable and medically underserved residents have difficulty navigating a non-centralized system of health and social services. The area faces significant economic challenges, with the area becoming increasingly dependent upon tourism and service industries. The accompanying combination of seasonal employment fluctuations and a small employer base contributes to a high level of poverty, low-income, and lack of insurance. These economic and social issues affect the health outcomes of our population. It is not unheard of for service area residents to defer preventive or episodic care. The service area crude death rate for hypertension is double that of NH and the crude death rate for suicide and unintentional injury exceed the NH rates by 86.4% and 31.8%. The age-adjusted death rates for cancer and coronary heart

disease are extremely high. In comparison to the state, a greater percentage of area residents are elderly, and a higher percentage of births are to teen mothers. In addition, in comparison nationally, NH residents are more likely to suffer from asthma, exhibit alcohol abuse, and less likely to receive a flu shot. The typically-New England characteristics of individual stoicism and pride add to the complexity of residents' ability to access services and health care when it is needed at the right time, at the right place, with the right providers.

Need:

Care for socially vulnerable and medically underserved individuals and families in the greater Plymouth region of Central NH is often fragmented, episodic, and delayed. Root causes of illness such as poor diet, limited income, lack of adequate housing, and fragile social support systems often go unaddressed and complicate treatment interventions. As a result, socially vulnerable and medically underserved patients often have less favorable health outcomes. Therefore, the basic goal of the *PRO Health* project is to more effectively and seamlessly connect medically underserved and socially vulnerable populations with the right services at the right time.

Program Services

Focus Areas

Access: Primary Care
Coordination of Care Services

Target Population

Infants
Pre-school children
School aged children - elementary
School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
African Americans
Native Americans
Uninsured
Underinsured
Bi-racial clients

Description:

The *PRO Health (Plymouth Regional Outreach for Health)* project serves families and individuals in 17 rural communities in central New Hampshire. The basic goal of the *PRO Health* Project is to more effectively and seamlessly connect medically underserved and socially vulnerable populations with the right set of services at the right time. The Project integrates community-based outreach with clinical care management and interagency care coordination. A Patient Support Specialist, based at Mid-State Health Center, serves as the member of the health care team by assessing the needs of socially vulnerable and medically underserved patients, then providing care coordination and assistance in accessing resources important to addressing clinical conditions and access to health care. The services of the Patient Support Specialist are most often delivered to the adult population of the community. A Family Resources Coordinator, based at Whole Village Family Resource Center, assesses the needs of socially vulnerable and medically underserved populations, most often delivering care coordination and resource connections to families with children. The Family Resources Coordinator and Patient Support Specialist often collaborate on patients needing to establish a medical home, needing resources referral, care coordination and/or wrap-around support. The Patient Support Specialist and Family Services Coordinator provide assistance and services to clients in areas of focus that include (but are not limited to): Social services (food, housing, etc.), mental health, clinical/medical management, developmental/behavioral, referral management, legal/judicial, insurance/eligibility assistance.

Role of Consortium Partners:

Planning - Each consortium partner provided input related to the assessment of community need. Each partner was able to delineate system and service gaps that impacted the target population, contributing data and experiences from the unique perspectives of each of their organizations, including the current and potential collaborative climate. In planning an effective intervention, several strategies were examined prior to drafting a proposal. Partners gave feedback and assisted in the development of the particular strategies employed by the program.

Implementation – The grant award included funding for a new staff position. Several partners served together to evaluate candidates, conduct interviews, and collectively choose a candidate suited to the Program's strategies. The consortium partners provided input to

the Projects Manager regarding their preference for a reporting structure that would allow Partners to oversee the Program effectively. Ongoing roles and responsibilities of the consortium partners were to monitor reports for program effectiveness and quality assurance, serve as program advocates within the community, and promote the services and strategies in the community through their own organizations, and to foster collaborative efforts between staff and agency representatives working for the target population.

Outcomes

The *PRO Health* Project has met its goal of providing assessment, referral, and care coordination services with centralized points of access through a Patient Support Specialist and a Family Resources Coordinator for socially vulnerable and medically underserved individuals and families in our community. Consistent with its work plan, the Project supported the establishment of these two service provider positions as a community resource, set up assessment and referral processes and procedures to deliver services, promoted these services to the community, and established a process of assessing client and provider perceptions and satisfactions. Number and type of encounters, measured monthly, show success in meeting/exceeding the outreach goals set up in the initial project plan for each year of the funded project. Client and provider survey data indicates a moderate to high level of satisfaction with the project resources and services and perceived positive outcomes as a result of the project activities. The majority of project activities centered on Level 2 encounters (Assessment and Referral) and Level 3 encounters (Case Management). Level 1 (Requests for Information) and Level 4 (Wrap-Around Support) constituted a less frequent use of resources. A CHART (Community Health Access Resource Team) set forth in the initial work plan to provide program oversight and quality improvement functions was modified after Year 1 to a less centralized, more point-of-care model of quality improvement among partnering agencies.

Challenges & Innovative Solutions

Staff providing services are located in two different facilities using two different data collection systems. Initially, getting “on the same page” in terms of data collection and reporting of encounter numbers and types was a challenge, as the focus of the two different agencies and how they interpreted the data collection definitions was different. This was worked out in Year 1, when we realized that there were inconsistencies in how the numbers were being reported, by having several meetings to make common definitions, interpretation decisions, and reporting structures. We created a common way of reporting and a common way of collecting and documenting encounters. This was then reported monthly in an aggregate report to the Consortium Partners for program oversight and quality control.

The “Patient Support Specialist” role was a new role in the community. It took several months beyond the start of the grant period to hire into this position, and several more months to “get going” on the responsibilities and outreach activities of this role. The services and capabilities of this new role were unfamiliar to area agencies, providers, and staff. Initial referrals to this function were slow. Medical providers were slow to adopt the model of assistance of care coordination and resolution of barriers to care by the Patient Support Specialist. The Patient Support Specialist needed to spend significant time early in the grant period orienting area providers to her function, encouraging referrals, and reminding partners of her availability for services.

Because the services and the inter-agency coordination were relatively new, the “how do we do this from a practical standpoint” took longer than anticipated. The specifics of the Patient Support Specialist role evolved over time.

Sustainability

On-going Services and Activities:

The Central New Hampshire Health Partnership plans to continue all activities/strategies in place at the end of the grant period. The CNHHP plans to fund the continued activities through a mix of the following funding sources: a) other grants, b) in-kind support by partner agencies, c) billing for billable services, d) funding from partner agencies commensurate with direct and cost-savings benefits derived from the program’s services, e) funding from municipalities whose residents are positively impacted through the program, f) funding from local area organizations who support efforts to improve the health and well-being of community members.

Sustained Impact:

Input from the CNHHP members regarding sustained impact indicates that the partnership believes that service providers are working together in a new way by meeting regularly and sharing information. The regular meetings and care coordination between the Patient Support Specialist and Family Resources Coordinator and other community partners demonstrate new connections and procedures for

service providers to work together. There has not been a change in practice standards, but changes in practice have occurred in the utilization of the care coordinators (Patient Support Specialist and Family Resources Coordinator), which leads to increased integration of clients into the community and community resources. The purchase of additional software licenses and the resultant ability to share client information electronically represent new capacity and purchased resources that will remain after the end of the grant, another sustained impact as a result of the Project.

Implications for Other Communities

Outcomes data analysis (based on encounter data, client and provider program perception and satisfaction surveys, cost-savings estimates, and consortium partner feedback on collaborative services) indicate a significant value to the clients and community. Of particular note, much of the value is realized in negative outcome avoidance and associated cost savings. For example, care coordination between collaborating staff from several agencies decreased the potential for costly hospital Emergency Department visits, unnecessary readmissions, and unnecessarily lengthy hospital stays. Case management and client wrap-around activities assisted some clients in avoiding homelessness (and hence use of the local homeless shelter), avoiding further dysfunctional family experiences that put children and families at risk of law enforcement or other serious social service agency intervention. Benefits on the positive side include connecting individuals and families to the resources they need when they need them, before further complications arise, either medically or socially. Assisting individuals and families with barriers to care resulted in better compliance with medical recommendations (example; resolving transportation issues allowed clients to attend doctor's appointments as scheduled, adhering to care regimens and improving health). The collaborative nature of the program design strengthened connections between organizations who service the target population, resulting in system and workflow improvements and adding processes that previously did not exist.

NEW HAMPSHIRE

Center for Rural Emergency Services and Trauma Trustees of Dartmouth College

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12689 |
| Grantee Organization | Center for Rural Emergency Services and Trauma (Office of Sponsored Projects Trustees of Dartmouth College) |
| Organization Type | Non-profit organization |
| Address | Section of Emergency Medicine, 1 Medical Center Drive, Lebanon, NH 03756 |
| Grantee organization website | www.dhmc.org/goto/crest |
| Primary Contact Information | Scott Rodi Project Director Phone number: 603-650-3554 Fax number: crest@hitchcock.org |
| Project Period | 2009-2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | County | Organizational Type |
|--|---|-----------|-------------------------------------|
| Dartmouth-Hitchcock Medical Center | One Medical Center Dr., Lebanon, NH 03756 | Grafton | Level I Trauma & Academic Center |
| New London Hospital | 273 Country Rd., New London, NH 03257 | Merrimack | CAH (Rural) |
| Upper Connecticut Valley Hospital | 181 Corliss Lane, Colebrook, NH 03576 | Coos | CAH (Rural) |
| Weeks Medical Center | 173 Middle St., Lancaster, NH 03584 | Coos | CAH (Rural) |
| Northeastern Vermont Regional Hospital | 1315 Hospital Dr., St. Johnsbury, VT | Caledonia | CAH (Rural) |
| Cottage Hospital | 90 Swiftwater Rd., Woodsville, NH | Grafton | CAH (Rural) |
| Valley Regional Hospital | 243 Elm St., Claremont, NH | Sullivan | CAH (Rural) |
| Alice Peck Day Memorial Hospital | 125 Mascoma St., Lebanon, NH | Grafton | CAH (Rural) |
| Gifford Medical Center | 44 South Main St., Randolph, VT | Orange | CAH (Rural) |
| Mt Ascutney Hospital and Health Center | 289 County Rd., Windsor, VT | Windsor | CAH (Rural) |
| Springfield Hospital | 25 Ridgewood Rd., Springfield, VT | Windsor | CAH (Rural) |
| Androscoggin Valley Hospital | 25 Page Hill Rd., Berlin, NH | Coos | CAH (Rural) |
| North Country Hospital | 189 Prouty Dr., Newport, VT | Orleans | CAH (Rural) |
| Brattleboro Memorial Hospital | 17 Belmont Ave., Brattleboro, VT | Windham | CAH (Rural) |
| Cheshire Medical Center | 580-90 Court St., Keene, NH | Cheshire | CAH (Rural) |

Community Characteristics

Area:

The coverage area for the Outreach grant is Vermont and New Hampshire, specifically in the counties listed above by partner.

Community description:

The 16,000 square miles that constitute New Hampshire and Vermont are mainly mountains, valleys, lakes, and rivers. Our rural patients thus start considerably further from timely provision of urgently needed medical care than nominal distances might suggest. Rural residents are significantly older, poorer, and less well educated than their non-rural counterparts. They are also significantly less likely to have health insurance. They are far more likely to be unemployed or out of the labor force altogether, and those who are

working are more likely to be self-employed or to work for employers who provide less health insurance or none at all. Compared to their non-rural counterparts, our rural residents are less likely to use preventive screening services or to exercise regularly. They suffer accident and injury-related deaths at dramatically higher rates --- 40 percent more injury-related deaths, and 35 percent more accidental deaths, even after adjusting for age differences. They also suffer from elevated rates of heart disease, cancer, and diabetes, and have higher rates of risk factors associated with poor health.

Need:

The focus of the grant program was to support high quality local care whenever possible, improve the quality and lower the cost of the care provided in connection with patient transfers, and improve the care provided by every community and Critical Access Hospital in northern New England.

The region is classified as a Medically Underserved Area and has a dearth of healthcare providers, especially specialists.

Program Services

Focus Areas

Access: Primary Care
Coordination of Care Services
Health Education and Promotion
Health Professions Recruitment and Retention/Workforce Development
Integrated Systems of Care
Provider Education

Target Population

Adults
Emergency and trauma providers in rural northeast New England

Description:

The activities of the grant were focused on expanding the CREST network as well as providing quality continuing medical education experiences for emergency and trauma care providers.

- Network Hospitals
 - Develop and Disseminate Transfer Guidelines.
 - Develop and Promote Use of Transfer Templates.
 - Transcribe Referring Provider Notes.
 - Establish a One-Call Transfer System at DHMC.
 - Provide Feedback to Referring Providers.
 - Place clinical protocols developed by DHMC specialists on a website accessible by all hospitals in the region. Update regularly, review biannually.
 - Appoint Evaluation Coordinator, On-site Coordinators
 - Select and invited new members.
 - Expand geographic footprint year by year, giving priority to new hospitals who need the support the network has to offer.
 - As the network expands to include larger hospitals
 - Transition from free to fee-based membership, with fees set on sliding, able-to-pay scale commensurate with hospital and community resources.
 - Focus groups of community members/patients
 - Identify "on-site" coordinator at consortium hospitals
 - Quarterly meetings of consortium members
- Annual Conferences
 - CREST Symposium
 - Trauma Conferences
- CREST Educational Initiatives
 - Teleconferences
 - Skill training workshops
 - Outreach Rounds
 - Develop and disseminate a list of specialists willing to train/educate continuing local providers

Role of Consortium Partners:

After participant organizations were identified, a Steering Committee consisting of representatives from Emergency Services at all hospitals, CEOs from all hospitals, a regional planner, a QA expert, critical care/cardiology/pediatric and trauma representatives from the tertiary center, experts in outcomes research, and the tertiary center's chief financial officer was created. This group provided initial guidance and support for CREST. The Steering Committee has since evolved and is currently comprised of administrative (CEO), and clinical (ED Nursing and Medical Directors) from each of the original four Network member hospitals. In addition to the Steering Committee, an Advisory Board has been developed on which every community and critical access hospital that joins the Network will have equal voice and representation. This Advisory Board consists of the hospital CEO and an ED physician and nurse leader from each network hospital. These bodies provide oversight and direction to the CREST core leadership group which is based at DHMC and is made up of the Program Director, Program Manager, and Program Assistant (core group) as well as the Educational/Evaluation/Clinical/Technical teams. The core group then met on a biweekly basis to ensure that all activities moved forward, and work group teams comprised of team members and core leaders were formed as needed around support of specific initiatives throughout the year.

Beyond this list, network members supported successful achievement of the project goals through a number of specific activities. Network providers have (through a process of face-to-face meetings, monthly teleconferences, and electronic communications) jointly crafted the content of the annual Provider Symposium and have selected topics for monthly Case Review and Outreach Round teleconferences, and have identified skills training needs. Network hospitals have identified best practice/protocol development needs. CEOs identified a local On-site Coordinator to gather data, organize conference participation, evaluate progress and related matters. CEOs have also participated, in-person or via teleconference, in quarterly meetings, development of new initiatives, identification of provider needs and clinical challenges, and expansion and development of the network.

Outcomes

In addition to expansion of the network from our original pilot group of 3 to a group of 15, as outlined above, we collected data in three main areas: provider participation, hospital participation and provider satisfaction with the program. Selected evaluation findings are summarized below:

- Surveys with providers participating in the CREST network, specifically those who attended the CREST Annual Symposium, showed an increasing number of providers representing an increasing number of institutions. Of those in attendance, 95% of participants reported they were likely or very likely to attend the Symposium in the future, while 97% shared that they would recommend this Symposium to others. 89% of participants either agreed or strongly agreed that the Symposium was relevant to their job and 100% of participants said the information provided was interesting to them.
- In 2008, the number of providers in attendance was 78; 2009: 79; 2010: 88; in 2011, that number jumped to 97.
- In 2008, the number of represented institutions was 26; 2009: 29; 2010: 31; in 2011, there were 32.
- When asked to report their thoughts on the following statement: "CREST programs improve the quality of rural emergency care in the region through improved educational opportunities for providers..." 92% of CREST participants either agreed or strongly agreed with this statement.

Challenges & Innovative Solutions

We believe that the biggest challenge we faced in managing and implementing this project is the problem that creates the pressing need for the project itself – the rural hospitals in our region are desperately short of resources of every kind, including staff. When first approached, CEOs and senior medical staff sometimes respond that they are too stretched for resources and immediate problems to take on any new or longer-term responsibilities.

In the months that we have spent so far reaching out to many local hospitals meeting face to face with the people in charge, and discussing the issues addressed in this proposal of our aims, we have quickly found receptive and enthusiastic partners. DHMC is a large hospital with many resources, and most of our proposal hinges on projecting our strengths outward, and extending our relative abundance in equipment, medical personnel, and administrative resources to help cover their often grave scarcity. By building a robust network we believe that we can offer our rural partners network efficiencies and economies of scale that they can never realize alone – and from everything we have seen so far, they are eager to embrace that opportunity. We have overcome inertia and successfully engage rural hospitals in this project by offering them resources and expertise that will simultaneously improve patient care and improve the day-to-day working for both medical and administrative staff.

On-going Services and Activities:

The main components of the grant-funded program will continue after the grant period ends, though they will be much reduced in scope. We will continue offering an annual educational conference and regular QI case reviews. Our primary educational offerings are established and are now sustainable based on tuition. We plan to gradually transition to fee-based membership within the CREST consortium, with the fees tiered according to ability to pay, and all the revenues used to maintain and expand the network and its services.

Sustained Impact:

Our DHMC community has been impacted in significant ways since this program was funded. The program has created a community of tertiary specialists who better understand the challenges faced by rural providers in our community and are more willing to lend a hand. We have seen their attitudes change over the past three years as a result of the positive working relationship between referring hospitals.

In addition to the initial benefits of the program, we believe that through our sustainable approach, CREST will have long-lasting effects that will continue to positively impact the community in the future:

- We developed the capacity for rural health provider education during the project, so once the grant funding period ends, the activities of the project will contribute to the sustainability of the project by supporting well-qualified staff in healthcare facilities and academic settings across the region. The continuing education offerings will also support faculty in their efforts to integrate rural emergency service content within existing education and training curricula and clinical experiences.
- By improving the transfer process, time to definitive care should be decreased. This should not only reduce patient discomfort, but in time-sensitive diseases such as acute coronary syndrome, stroke and trauma resuscitation this change should reduce both morbidity and mortality.
- The project will help reduce unnecessary transfers, expedite necessary ones, and accelerate the transfer patient's return to his or her home community. It will improve patient care by promoting use of standard templates and patient records, and streamlining the process of creating records and moving them in tandem with the patient. Patients will spend less time in transit, and will undergo fewer expensive, duplicative diagnostic procedures.
- Maintaining outreach to and needs assessments of these rural communities will help CREST continue to advocate for change within DHMC, and we anticipate increasing institutional support for many of our proposed programs, particularly as we continue to provide evidence of successful initiatives and collaboration. The consortium continues to explore future funding initiatives (particularly to support a more extensive telemedicine program) and other sources of funding.
- We plan to improve the efficiency and quality of care by creating more efficient methods of record-keeping, testing, and over time, shorten the time patients are in hospital beds or in transit between them. All of these improvements should lower administrative costs and simultaneously increase reimbursement levels under both private and public insurance programs, and reduce denied claims.
- The key personnel within the Consortium are frequently identified as a resource for various clinical resources. Faculty and clinicians frequently provide outreach education, clinical resources, and consultation. Such efforts will continue beyond the initial funding period. Products, such as protocols, publications, curriculum, related to the project will continue beyond the initial funding period.
- As mentioned above, this program has encouraged a deeper collaboration among the consortium partners and we will continue to collaborate on expanding access to healthcare for the underserved beyond the grant period.

Implications for Other Communities

While the project's immediate impact will be on patients served by members of the CREST consortium and proposed target population, its longer term impact should extend more broadly. Much of the CREST website will be publicly accessible, and we are eager to respond to inquiries from other rural systems that face similar challenges. Providers not currently in the network will also benefit from the same streamlined referral and transfer system and may also participate in local educational offerings. DHMC is an academic hospital, the project includes numerous activities that will engage students and residents in the provision of rural care at smaller hospitals, and over time, these young providers will help export the methods and capabilities we develop to other communities.

Our objective is to develop general, portable skills and tools to improve collaboration between small rural hospitals and larger centers wherever they located. The protocols, training, and education programs developed as part of this project will be based a systematic, scientific study of data, they will be accessible and open to all providers in the region, whatever their size, and equally open to

interested providers anywhere else in the nation. We will facilitate and encourage their adoption and use by other institutions of any size, wherever located. This will be particularly easy with training and educational materials provided online; we will also explore the possibility of inviting broader participation in our *Outreach Rounds*, annual conferences, list serve, etc.

Details regarding transfer processes will be disseminated by direct communication at meetings and through e-mail. In addition, the general mechanism for transfer and specialty referral will be made widely available to all providers, along with a compilation of locally available educational offerings, on a website to be created and maintained by CREST for this purpose. Although the intention of this network is to address local barriers to care, it is anticipated that, as many other rural systems face similar challenges, this website may enhance dissemination of our strategies to other parts of the country for replication in other communities.

NEW MEXICO

Ben Archer Health Center

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12651 |
| Grantee Organization | Ben Archer Health Center |
| Organization Type | Non-profit organization |
| Address | PO Box 370, Hatch, NM 87937 |
| Grantee organization website | www.bahcnm.org |
| Primary Contact Information | Mary Alice Garay Executive Director Phone number: 575-267-3280 Fax number: 575-267-1747 mgaray@bahcnm.org |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|------------------------------------|-----------------------------|
| Palomas Family Cooperative | Columbus, Luna County, NM | Mexican Promotora Group |
| Chihuahua State Health Services Jurisdiction #5 | Mexico | Mexican Health Department |
| Luna County Health Council | Luna County, NM | Health Council |
| Southern New Mexico Promotora Committee | Las Cruces, Dona Ana County, NM | Health Council |
| Village of Columbus | Columbus, Luna County, NM | Local Government |
| NM Office of Border Health | Las Cruces, Dona Ana County, NM | State Department of Health |
| NM Department of Health Region 5/Deming LPHO | Luna County, NM | State Department of Health |
| Luna County Healthy Start | Luna County, NM | County Government |
| Mimbres Memorial Hospital | Deming, Luna County, NM | Hospital |
| Binational Health Council | United States and Chihuahua Mexico | Health Council |
| Deming Women's Center | Deming, Luna County, NM | Private Healthcare Provider |

Community Characteristics

Area:
The coverage area for the Outreach grant is the border area including Luna County, New Mexico and Palomas, Palomas, Chihuahua, Mexico.

Community Description:
The total population of Luna County is 25,095 (2010 US Census). The county is comprised of the town of Deming with a population of 14,855 and the smaller more isolated community of Columbus that has a population of 1,664 (2010 US Census). The remainder of the population is scattered throughout the county. Columbus' sister city, Puerto Palomas, Chihuahua, Mexico is only three miles south of Columbus (36 miles south of Deming). The great majority of the population is of Hispanic or Latino origin (62%), and is very poor and dependent on many government services, including health care in the Palomas Health Clinic (2010 US Census). One of the distinguishing factors of the border region that serves as a determinant of border health is transmobility of the population—the flow of people back and forth across the border.

Need:

Some of the alarming statistics that influence the life of this community include; ranking 3rd in the state for teen pregnancy with a rate of 81.5 (womenscommission.state.nm.us), and approximately 75% of the population have up to date immunizations (NM State Department of Health). According to Department of Health 23.3% didn't access care prenatal care at all in 2008. By 2010, the data showed that 4.8% of women had no prenatal care. This is significant improvement.

The focus of the grant program was to provide access to primary and preventive health care and promote child immunizations, the importance of early prenatal care, educate adults to talk to teens about sexual health topics, train and support community health workers, and increase community collaboration. The project addressed selected elements contained in the *Comprehensive Public Health Management Plan for the Luna County – Palomas, Chihuahua Binational Corridor*, a binational three-year strategic plan developed by local and state government agencies and healthcare provider organizations active in Luna County and Palomas, Chihuahua. The project focused in the areas of health education and outreach, and provision of preventive and primary healthcare services. The following health issue was directly addressed by the project: prenatal care, teen pregnancy, prevention of sexually-transmitted diseases (STDs), and immunizations.

Many of Palomas' residents are U.S. citizens, born in Mimbres Memorial Hospital in Luna County or hospitals in nearby Doña Ana or Grant Counties. Pregnancy, prenatal care, and birthing services are significant issues in Luna County. The undocumented and/or the medically uninsured were more likely to get no or low levels prenatal care during pregnancy. New Mexico ranks as one of the states in the nation with the highest teen birth rates (59.8) and Luna County ranks one of the worst in the state with a rate of 102.4 (New Mexico Teen Pregnancy Coalition, 2005).

Program Services

Focus Areas

- Access: Primary Care
- Children's Health
- Community Health Workers/Promotoras
- Coordination of Care Services
- Health Education and Promotion
- Integrated Systems of Care
- Maternal/Women's Health
- Migrant/Farm Worker Health

Target Population

- Infants
- Pre-school children
- School aged children - teens
- Adults
- Pregnant Women
- Caucasians
- Latinos
- Uninsured
- Underinsured

Description:

The outreach grant supported the implantation of three main activities:

1. The project deployed a community-based sexual health education and STD prevention curriculum that was applied primarily in the Columbus-Palomas border area:
 - To create consensus among parents and adults about the need to protect sexually active youth by encouraging early and consistent use of contraceptives;
 - To give parents and other community adults information and skills they need to communicate more effectively with teens about responsible sexual behavior; and
 - To improve adolescent access to high-quality, age-appropriate and readily available reproductive health care, including contraception.
2. The project catalyzed and expanded a comprehensive binational community health worker (CHW, known regionally as *Promotoras*) network, including training and develop of a volunteer Promotora Corps in Palomas to improve health education and outreach services to Spanish-speaking only immigrant and migrant subpopulations, strengthening the capacity of Promotoras working with consortium partners throughout Luna County in a variety of health education topics, and by hiring additional Promotoras.
3. The project also featured the implementation of a culturally-appropriate and innovative immunization methodology in selected Luna County communities employing door-to-door outreach campaigns.

Role of Consortium Partners:

The project organized all relevant healthcare services providers in the targeted service area, including Chihuahua State Health Services, into a binational Consortium. The consortium is comprised of all relevant health services providers in the County, including the Department of Health, Mimbres Memorial Hospital, Healthy Start, and relevant private practice physicians and clinics. In Palomas, Chihuahua State Health Services (the principal Mexican consortium member) operates a community clinic currently staffed with one physician, two community service residents, and two nurses.

- New Mexico State Department of Health provided prenatal immunization card posters to be distributed to all medical providers in Luna County, and provided staff and immunizations for the door-to-door campaigns as well as program promotion.
- Luna County Health Start and Health Council provided staff to assist in the door-to-door immunization project, assisted in the development of a county-wide resource guide, and allowed a venue to report on program successes and progress.
- Ben Archer Health Center (BAHC) served as the grantee and fiscal agent for the grant and staffed the program with two community health workers, a part time nurse and program coordinator. BAHC coordinated the community health worker trainings and all program activities.

Outcomes

BAHC in collaboration with an independent evaluator collected evaluation data, measuring beliefs, knowledge, and attitudes, as well as knowledge gained and program effectiveness.

- 600 community mapping surveys were conducted throughout Luna County measuring the population's beliefs, attitudes, and knowledge related to sexual health.
- Pre/posttests were also used to measure program success through knowledge gained.

Health care access:

- More than 1,000 houses were visited during the door-to-door immunization campaigns, and approximately 100 vaccinations were administered.
- Health information was distributed and conveyed to a minimum of 6,000 people.
- 25 Community Health Workers in Palomas, Mexico and Luna County were trained on a variety of health topics including; reproductive anatomy, birth control, chronic disease management, and the importance of prenatal care.
- A community-wide resource guide was developed and distributed through-out the community.
- Procedures and processes were developed to manage the flow of pregnant women from Mexico accessing labor and delivery services in the United States to create cost savings for the hospitals.

Challenges & Innovative Solutions

One of the barriers impacting this binational project was the violence related to turf wars among narcotic-trafficking and crime organizations throughout the State of Chihuahua and especially in Juarez and Palomas. While Palomas was quiet and free of violence at the time of the preparation of this grant application, violence increased drastically, thus altering the method for outreach of project activities in Palomas. Slight modifications in the delivery of services were made to overcome this barrier, which included; providing trainings for Mexican Community Health Workers in the United States and working with customs to allow for a temporary day visa, and working with a trainer from Mexico to provide trainings in Mexico.

In order to carry out truly binational activities in the realm of border health, effective coordination with state and federal Mexican health authorities was a must. For political, personnel, security and/or financial reasons, participation of Mexican authorities could be erratic or curtailed. Changes in personnel at the state health services level also affected the project sometimes leading to delays in scheduling of activities.

Sustainability

On-going Services and Activities:

Sustainability was achieved with the majority of health strategies of the Health without Borders project. Health topics and projects will continue to be sustained well past the duration of the project. These include promotora trainings, children immunization outreach, teen pregnancy and STD prevention efforts, increased utilization of the Palomas clinic, collaborative relationships and the resource

directory. Methods for sustainment include; securing private foundation funding to continue outreach and education related to teen pregnancy and STD prevention, and integration of policies and procedures internally and within the community. We achieved this by working with the Mexican Government to make policy changes regarding entry into the U.S. from Mexico. The clinic on the Mexican side triages women with only high risk pregnancies crossing the border into the U.S. for delivery. Some aspects of the grant will be sustained through partner absorption. For example the Southern NM Promotora Committee in conjunction with the Binational Health Council is funding a trainer from Juarez Mexico to provide trainings in Palomas Mexico. The Department of Health will continue working with us on many of the aspects of the immunization coverage.

Sustained Impact:

Luna County and Palomas, Mexico have been impacted in significant ways since this program was funded. The Health without Borders project created a community of local providers who better understand the challenges faced by the uninsured and underinsured in our community and are more willing to lend a hand. We have seen their attitudes change over the past three years as a result of the positive working relationship between providers and the Health without Borders Project and with the patients. This program has also created new capacity within the community through the community health worker trainings. These volunteer lay health educators have become community leaders with knowledge and skills that they can continue to share with their families, friends, coworkers and neighbors. Finally, this program has encouraged a deeper collaboration among the binational consortium partners that will continue to collaborate on expanding access to health care for the underserved beyond the grant period.

Implications for Other Communities

The aspects of this program that have the most potential to be replicated and adapted for the use in other similar communities include the employment of door-to-door immunization campaigns. This component of the project will be a great resource for other border communities throughout the nation that are dealing with similar concerns. This method could also be adapted to meet other health care needs that are related to a community's inability to access services. Replication would be appropriate in other rural communities, and communities designated as professional healthcare shortage areas, not just in border communities. Another method in the project will be easily replicable, and applied to a wide variety of health topics is the use of the home health party model to deliver health education in a home setting. This model was adapted from a national model that uses this strategy to educate people on topics related to sexuality. BAHC has used this model for the past five years with great success.

NEW YORK

Chautauqua Opportunities, Inc.

Organizational Information

| | |
|-------------------------------------|---|
| Grant Number | D04RH16282 |
| Grantee Organization | Chautauqua Opportunities, Inc. |
| Organization Type | Community Action Agency |
| Address | 17 West Courtney Street, Dunkirk, NY 14048 |
| Grantee organization website | www.chautauquaopportunities.com |
| Primary Contact Information | Aaron Kaminski Health Support Services Manager Phone number: 716-661-9430 Fax number: 716-661-9436 Akaminski@chautopp.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|----------------------------------|--------------------------------------|
| Chautauqua Opportunities Inc. (COI) | Dunkirk, Jamestown/Chautauqua/NY | Community Action agency |
| WCA Home | Fredonia/Chautauqua/NY | Senior Living Facility |
| Chautauqua County Office For the Aging | Mayville/Chautauqua/NY | Community Resource for the Elderly |
| Westfield Hospital | Westfield/Chautauqua/NY | Hospital |
| Lakeview SICF | Brocton/Chautauqua/NY | Correctional Facility |
| Ripley Central Schools | Ripley/Chautauqua/NY | School |
| Dunkirk Schools | Dunkirk/Chautauqua/NY | School |
| Cassadaga Schools | Sinclairville/Chautauqua/NY | School |
| Chautauqua County Health Network | Jamestown/Chautauqua/NY | Hospital/healthcare provider network |
| Silver Creek Central Schools | Silver Creek/Chautauqua/NY | School |
| Clymer Central Schools | Gerry/Chautauqua/NY | School |
| Brocton Central Schools | Brocton/Chautauqua/NY | School |

Community Characteristics

Area:

The Coverage Area for the outreach project served is Chautauqua County, NY.

Community description:

Chautauqua County is a primarily rural area in the extreme southwest corner of NY State and covers 1,065 square miles. Bordered by Lake Erie, the State of Pennsylvania, and Erie and Cattaraugus Counties in NY State, it includes the small cities of Dunkirk and Jamestown that are located in the northern and southern ends. At the time of the 2010 U.S. Census Chautauqua County's population was 134,905.

The leading industries in Chautauqua County are health care, social assistance and education followed by manufacturing and retail trade. This increase in service jobs correlates to lower wages for workers.

Chautauqua County is part of the upper boundary of the Appalachian Region. Access to quality health care is difficult, since the county is designated as a "Health Professional Shortage Area" by the U.S. Health Resources and Services Administration. The problem is

compounded by the fact that 17.7% of Chautauqua County residents live below the federal poverty level (2009 American Community Survey).

Need:

The focus of our program was on school and community-based obesity prevention, and diabetes prevention and management.

County Health Assessment Indicators from the NY State Department of Health indicate that 61.6% of Chautauqua County residents are considered overweight or obese, exceeding the upstate NY rate of 60.6%. For every 100,000 population, 27.6 persons in Chautauqua County died as a result of diabetes for the period from 2006 to 2008.

Program Services

Focus Areas

Children's Health
Chronic Disease Management: Diabetes
Health Education and Promotion
Maternal/Women's Health
Migrant/Farm Worker Health
Physical Fitness and Nutrition
School Health

Target Population

Population
Pre-school children
School aged children - elementary
School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
African Americans
Latinos
Uninsured
Underinsured

Description:

The services provided under the Outreach grant by Chautauqua Opportunities Incorporated (COI) in cooperation with our consortium partners had the primary goal of educating customers in the areas of diabetes prevention and obesity reduction. Diabetes education was offered to Chautauqua Opportunities Inc. customers including pregnant women, seniors in assisted living facilities and Home Health Care customers. Diabetes education was provided to the migrant population at quarterly Migrant Clinics. Guides were designed and distributed to diabetic clients in senior living facilities involved with Meals on Wheels. Guide distribution was followed by educational presentations to senior centers. Post surveys were conducted to see if customers find meal planning easier after receiving guide and education

Measurement of Hgb A1C levels with results in the target range was used as an indicator of the success of the activities.

Chautauqua Opportunities Inc. targeted obesity prevention in several ways. Nutrition and physical activity education were addressed via participation in groups through Chautauqua Opportunities Inc. family night, and Head Start programs based on the I Am Moving I Am Learning program. Activities also included Wii fitness, Zumba and a family exercise challenge. COI improved the nutritional value and content on Head Start menus and provided therapeutic diet intervention for underweight or children with special needs. We implemented the use of age appropriate physical fitness equipment in Head Start classrooms, to increase physical activity. The equipment was also made available for Chautauqua Opportunities Inc. family nights. The CATCH! Program was offered to after school program participants. COI participated in the Nutrition and Health advisory committee (via Head Start) which consisted of a group of professionals and community members who come together to review ideas and progress towards improving health and wellness of children. The Gleaning project provided fresh produce to families. A local correctional facility planted, grew, and harvested all the donated fresh produce. Healthy recipes for using these vegetables were provided as well.

Role of Consortium Partners:

Chautauqua Opportunities Inc.

- Facilitated quarterly meetings
- Organized programs and activities with participating schools
- Collected and analyzed data
- Initiated partnerships needed to facilitate program activities

Chautauqua County Health Network:

- Training for walkability assessments
- Engage customers in healthy community planning
- Advocate for Complete Streets policy and local playground improvement
- Facilitate CHP Jamestown Garden Group
- Provide links for produce distribution as needed
- Promote utilization of farmers market

WCA Home:

- Facilitate ongoing collaboration with Registered Dietician to improve health and fitness for seniors
- Facilitate intergenerational activities with Head Start that promotes increased education, awareness and healthy lifestyle practices

Chautauqua County office for the Aging:

- Increase the awareness and health practices of senior citizens with diabetes through education, healthier meal planning and nutrition
- Increase number of diabetic Meals on Wheels (MOW's) recipients who have the knowledge of how to fit their MOW's meals into their meal plans
- Distribute guides that provide carbohydrate breakdown of MOW's meals

Lakeview SICF:

- Provide fresh vegetables for Chautauqua Opportunities Inc. customer
- Provide starter plants for customer gardens and arrowhead apartments

Schools including Clymer Central, Cassadaga, Dunkirk Ripley Central, Brocton Central and Silver Creek Central:

- Students participated in afterschool programs designed to increase knowledge of healthy eating practices and physical activity including the CATCH curriculum
- Participated in consortium meetings which shared information regarding physical activity, health and healthy eating
- School Health Advisory Committees (SHAC's) participated in consortium meetings, sharing ideas, problems and outcomes

Registered Dietician:

- Provide education in diabetes management, nutrition and the importance of exercise
- Develop and facilitate healthy eating, meal preparation, cooking, active lifestyles, activities and education
- Implement nutrition education, including CATCH curriculum in after school programs
- Provide outpatient diabetes education

Outcomes

Outreach and Program Impact

- 497 adults received the self-care and information aids.
- 91 adults participated in training sessions targeting the topics of surveys. Pre-post results indicate most participants increased their knowledge in every category.
- 88 Head Start staff participated in a targeted in-service.
- Diabetes classes and one-to-one counseling was provided to 536 adults.
- The Nutritional Health Educator (NHE) customized the menus for 54 Head Start children with special dietary needs.
- Starting with the beginning of the programming in summer 2009, a total 858 (unduplicated) Head Start children as of this writing participated in weekly IAMIAL activities. A significant number of Head Start children demonstrated improvement in physical health and development by the end of program year 2010-11. Only 18% (n=75) needed improvement at the beginning of the program year. Of these, 7% did not improve, 57% were well along in development, and 36% had established skills. For the 310 who started at the midway point in skill development, 80% became established by the end of the year; the rest neither gained nor lost ground. All of those whose skills were established in the beginning (n=25) maintained that level. *(Analysis includes only children with measures at both points in time. Current program is not completed and cannot be analyzed.)*
- Height and weight for each child (total of 835, unduplicated) were collected three times per year in Head Start and used to calculate BMI. Children who began the year overweight, with one exception, remained overweight. The exception was a child who

was underweight by the end of the year. About a third of the children who started as obese actually moved to the overweight category by the end of the year. Just less than a quarter of the children who started out as normal by the end of the year had become either overweight (17%) or obese (7%).

- The NHE conducted the CATCH After-School Program (ASP) to three schools during Year 2 and two, in Year 3, impacting 96 children. Height and weight were collected for some of the children, depending on the school. For the 29 children with both pre and post measures (with only 10 weeks between), 13 remained obese and three remained overweight. Participants responded to a pre-post knowledge and behavioral survey. Samples for the surveys are small (4 to 18, depending on the session and district) pre-post. Results do not provide a clear picture of change in opinion or behavior but they do provide each district with a good starting point for structuring activities and discussions with their School Health Advisory Committee's (SHACs) and students, in an effort to impact related student behaviors. A large majority of students in each session indicated they enjoyed the activities, learned a lot, and expect to benefit from what they learned. Most children appear to have learned what fiber is in food, what snack contains the most fiber, and how it affects digestion. Most students eat school lunches most or all of the time, which means that the options offered on the lunch menu can have a major impact on leading to healthy eating habits and better nutrition.
- Through the Gleaning Project in partnership with Chautauqua County Correctional Shock Program, 3252.6 pounds of fresh vegetables in 2010 and 3789.6 pounds in 2011 were distributed free of charge to COI clients visiting two sites for any services. Without adjusting for cost increases from 2010 through 2011, the total estimated savings for COI clients receiving the fresh produce was almost \$7,050. In addition, many families reaped the health benefits from adding servings of veggies to their families' meals and received recipe cards for healthy preparation.
- RHO staff, contractors, and partners visited with four school health advisory committees (SHACs) in local districts. Most of these SHACs were represented at the quarterly Collaborative Planning Meetings. As a result, COI and its partners directly participated in three school health fairs. These SHACs invited project staff to assist at planning sessions reviewing related school policies and events. In one district 135 students in grades 6-12 were surveyed and the results were used by school staff and cafeteria managers to revise lunch offerings and snacks available throughout the day and at after-school activities. Potential school-based grant opportunities were forwarded once or twice each month to each SHAC to help them expand their efforts with outside funding.

Challenges & Innovative Solutions

- CATCH implementation: In Year 2, school partners were only able to implement CATCH for ten-week periods rather than for the entire school year as CATCH creators intended. This restriction attenuated the impact of the program, despite the modest gains demonstrated. We urge other projects to work closely prior to the school year of proposed implementation to design a plan for implementing CATCH at least one day per week for the majority of the school year (35 weeks or more). In Year 3, training in CATCH implementation was not delivered consistently at all sites. We urge other projects to establish prior to the school year of proposed implementation at least a full day of *required* training and reflection for staff who will be responsible for delivering CATCH to children. When the program is implemented 35 or more weeks, we urge collecting at least height and weight (for BMI estimates) to be collected monthly, and to consider including blood pressure, as well.
- Clinical measures: Without collaborative partners directly involved in clinical services (e.g., clinics, physicians, hospitals), we were unable to secure periodic clinical measures for participants, such as blood pressure, weight, lipid panels, and HgbA1c results. We strongly urge projects to enlist such partners in their collaboratives, so that (among other benefits) critical indicators such as these can be tracked and compared with participant involvement. Pre-post knowledge from training and feedback surveys are weak measures in comparison.
- Due to the incidental composition of groups of adults attending trainings, a majority of participants were not diabetic and the pre-post results related to diabetes issues were significantly underrepresented. We urge projects to consider additional venues for trainings that coincide with diabetic client services.
- All schools in our state were required in recent history to complete the School Health Inventory (SHI) and use the results in SHAC planning. This somewhat restricted our ability to work with the schools using the SHI. Thus, we assisted them in identifying high-priority targets based on their results and helped them identify strategies to address them.

Sustainability

On-going Services and Activities:

The components of the grant funded program which can continue beyond the funding period include:

- Improved nutrition to children in head start via the improved menus will be sustained by continued use of and improvement to the menus provided. The educational process will allow staff to better look at choices the choices made on behalf of the children.

- Monthly activities at Chautauqua Opportunities Community Events including nutrition activities and physical activities will continue to be implemented by the staff, and will be expanded on or altered as the monthly themes change.
- The after school CATCH curriculum targeting grades 3-6 can be carried on by schools which implemented these programs beyond the grant period.
- The Gleaning project and providing fresh fruits and vegetables to families due largely to the relationship established during grant period.
- The nutrition health advisory committee will continue to meet beyond the grant period to meet its objectives.
- Diabetes education to Home Health and other customers will be able to continue by billing insurance for services based on the registered dietician obtaining CDE status in addition to ADA program recognition.
- Diabetes Management education to the Migrant population will continue by use of the materials and education provided though the grant.

Sustained Impact:

Since we have implemented our program, our community has been positively impacted in the areas of diabetes management and obesity prevention. Our program has laid the foundation for sustainable components of our program beyond the years the funding was for.

The people whom have been exposed to our diabetes education have improved awareness of their diabetes and healthier eating and better lifestyle habits leading to better HgbA1C levels and improved quality of life. Our program has also brought about a better awareness of obesity prevention including the benefits of healthy eating and increased physical activity to a variety of age groups.

Additionally the cooperation and efforts of the consortium partners involved with our project has created opportunities for continued effort towards diabetes management and obesity prevention and other programs

Implications for Other Communities

Our experiences in organizing a program such as this one suggests that the involvement of diverse groups such as community action agencies, schools , incarceration centers and community members can have positive impacts on the community while creating lasting relationships which have the capacity to provide benefits beyond what the program intended. Despite any difficulties encountered, we have seen many positive outcomes including enthusiasm from school health committees, renewed interest in community and home based gardens and involvement from prison inmates with regards to providing for the local community. Partnerships such as those we have engaged have the ability to continue to provide benefits to the community beyond the designated grant period.

NEW YORK

Mary Imogene Bassett Hospital

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12647 |
| Grantee Organization | Mary Imogene Bassett Hospital |
| Organization Type | Hospital |
| Address | 1 Atwell Road Cooperstown, NY 13326 |
| Grantee organization website | www.bassett.org |
| Primary Contact Information | Jane V Hamilton, RN Manager, School-Based Health Phone number: 607-746-9332 Fax number: 607-746-8838 jane.hamilton@bassett.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-------------------------------------|-----------------------------|----------------------------|
| Sidney Central School | Sidney/Delaware/New York | Central School |
| Schenevus Central School | Schenevus/Otsego/New York | Central School |
| The Sidney Area Hospital Foundation | Sidney/Delaware/New York | Foundation |
| The Friends of Bassett | Cooperstown/Otsego/New York | Foundation |

Community Characteristics

Area:

Sidney, New York - Otsego County
Schenevus, New York - Delaware County

Community description:

Delaware and Otsego Counties are part of an economically depressed rural region of south central Upstate New York. These counties are among the most northern edge of Appalachia, as designated by the federal legislation forming the Appalachian Regional Commission. Within the two school districts in this project, the percentage of students receiving a free/reduced lunch range from 37% to 52%. The percentage of the population living below the poverty line in Delaware County is 14.2%, and the percentage of children and youth living below poverty is 19.1%. In Otsego County 12.6% of the population is living below the poverty line and 16.8 % of the children and youth are living below poverty level. This poverty has been compounded in recent years by severe flooding. The 2011 Fall flooding in the Sidney area resulted in the displacing of many from families from their homes and the temporary closure of one of the areas largest employers. Both communities lack adequate primary care however suffer from a severe shortage of mental health care of children and youth. There is one child psychiatrist in Otsego County, he is the only child specialist in a nine county region. Delaware County has only one psychiatrist serving a county the size of the state of Rhode Island. Students in these school communities reported in the recent Youth Risk Behavioral Surveys as using alcohol and other substances along with tobacco at rates from 27%-39%. In a similar manner between 25%-34% of the youth self reported being slightly or very overweight.

Need:

The focus of the program was to provide comprehensive primary health and mental health care to the children and youth in the Sidney and Schenevus, New York communities. Care is provided to all regardless of insurance status. All families without health insurance have been referred to an outreach worker within the Bassett organization or outside human service organization to help facilitate and

guide the family through the application process. The multi-disciplinary SBHC team is able to provide both somatic health care with a focus on prevention along with mental health care. The team works closely to insure continuity of care, incorporating such elements as health promotion, education and participating in policy changing forums. The team has embraced a chronic care model when managing children with chronic conditions such as obesity, ADHA, and asthma. All services are provided daily when school is in session within the school building itself; fully addressing any concern or barrier to access to health and mental health care.

Program Services

Focus Areas

School Health

Target Population

Pre-school children
 School aged children - elementary
 School aged children - teens
 Caucasians
 African Americans
 Latinos
 Native Americans
 Uninsured
 Underinsured

Description:

The project funding supported the establishment and operation of school-based health centers in two school districts resulting in three SBHC locations: Schenevus , Sidney High School and Sidney Middle/Elementary School. (Basically a SBHC is a pediatric clinic located in a school building.) These SBHC provide high-quality, accessible, comprehensive primary, preventive, and mental health services to students through the presence of these SBHCs. The School-Based Health Centers offer the most effective means to deliver primary health services to the greatest number of students, and to diminish health disparities in this rural population. This project provided funding for the operations and supplies for school-based health clinics staffed by a nurse practitioner/physician assistant, an LPN, a medical staff assistant, a mental health worker, in each of these two school districts. A collaborating physician and child psychiatrist provide medical and clinical supervision. Staff works with families to facilitate needy students' enrollment in Medicaid and New York State's Child Health Plus Insurance Program. At the completion of this funding 71% of the 1457 students enrolled in these two school districts are presently enrolled and using the SBHC. This is slightly less than predicted, however the SBHC operation did not begin until 6 months into the funding period.

The primary health care which includes the treatment of acute illnesses, management of chronic conditions such as asthma, obesity, and ADHD, immunizations, health education and promotion. Mental health care provided by licensed clinical social workers includes assessment and treatment of mental health illnesses using both group and individual therapies. All services are provided at no out-of-pocket cost to those students enrolled in the program.

Role of Consortium Partners:

- Mary Imogene Bassett Hospital (MIBH) is the health care organization responsible for providing direct patient services within the SBHC. They also assumed the responsibility for planning and executing the SBHC operation, obtaining approvals from the New York State Department of Health (NYSDOH) and abiding by the DOH SBHC Guidelines
- Schenevus and Sidney Central Schools both provided and continue to provide space and infrastructure for the SBHC. They provide phone, fax, lighting, heat, light and maintenance of the SBHC suite at no charge to MIBH. Additionally and more importantly they provide promotional opportunities for the SBHC service through their school websites, newsletters, and automated phone calls. They support enrollment activities such as at Kindergarten Registration. The school nurses, school employees, work very closely with the SBHC staff assisting with triage of patients
- The Friends of Bassett the philanthropic organization was instrumental in obtaining supplemental funding for the SBHC. FOB was successful in obtaining funding from a local foundation and regional business totaling \$205,000. The FOB also coordinated Grand Opening events for the SBHCs.
- The Sidney Area Hospital Foundation serves as active members of Sidney SBHC Community Advisory Committee and has supported promotional SBHC activities.

Outcomes

Health care access and clinical findings:

- Presently 71% of the student populations are **enrolled** in the SBHC.
- Approximately 93% of those student enrolled have **used** the SBHC
- 88% of users of the SBHC have a documented BMI
- 62% of the users of the SBHC have updated immunizations (note per CDC recommendations)
- 91% of all SBHC enrollee had a documented comprehensive physical examination (CPE)
- 100% of students receiving CPEs complete a Guideline for Adolescent Preventative Services (GAPS) survey on health and health behaviors.
- Approximately 30% of all SBHC visit were for mental health services

Operational:

- Both SBHCs operate in an properly equipped facility with full staffing
- Community Advisory Committees (CAC) has been established and meets regularly. The purpose of the CACs is to guide the SBHCs and provide feedbacks and recommendations.
- Presently 10% of the SBHC enrollees are uninsured. 100% of uninsured students are referred to outreach worker.

Challenges & Innovative Solutions

- The biggest challenge encountered during the implementation of this project was the interface with the New York State Department of Health. The NYSDOH requires the submission of a lengthy application of which once reviewed supplemental information is always required. Once the application is fully acceptable to the Department a site visit must be scheduled. This progress once the application is completed takes up to 8 weeks. The process was fairly inflexible.
- Within two weeks of the SBHC opening in Sidney the Physician Assistant needed to take an extended medical/personal leave thus interrupting service. Advanced Practice Practitioners from other SBHC sites rotated into Sidney to provide intermittent coverage.
- Difficult recruitment of Mental Health Worker for Sidney SBHC. SBHC Mental Health supervisor assist with urgent referrals. SBHC staff was made aware of limited referral options. Recruitment completed and successful candidate began in April 2011.
- A few community members in the Schenevus school district expressed concerned about a sign welcoming all student including those lesbian, gay, bi sexual or trans-gender. The sign was initially removed and hung on an inside wall. The situation was presented to the Community Advisory Committee who advised to put the sign back in the initial location.

Sustainability

On-going Services and Activities:

- The SBHC program has evolved as planned. All partners continued to be fully engaged and supportive. Enrollment continues to grow and services expand. Most recently preventative dental services have been added. The Community Advisory Committee meets twice a year however is engaged via email when needed. It will not be possible unless there is a dramatic change in reimbursement schedules for the SBHC to be totally sustainable without outside funding. The Sidney Hospital Foundation and the Friends of Bassett are committed to assisting SBHC in acquiring outside funding, both from private and public sources.
- Work is continually being done to maximize reimbursement for services rendered by analyzing coding practices with the electronic health record EPIC. Adjustments will be made to maximize efficiencies and reimbursements
- Bassett SBHC is extremely active in SBHC advocacy. Efforts are focused on educating decision makers about the short term and long term value of SBHC. The advocacy work is both on the local, state and federal levels.

Sustained Impact:

- The school communities have been impacted in significant ways. The schools have fully adopted the SBHC into their communities. They have become to rely on the medical and mental health expertise of the SBHC staff. There on ongoing discussion about the increasing of dental services in both school communities. An Expanded Oral Health Grant from HRSA will bring restorative dental care to the Sidney SBHC.
- The Friends of Bassett and the Sidney Hospital Foundation have become sustained supporter of the SBHC both financially and philosophically
- Children and youth in the Sidney and Schenevus communities have ongoing access to high quality health and mental health care.

Implications for Other Communities

It would be recommended that careful and deliberate cultivations of coalition partners be the first step in the development a consortium. All partners need to understand and share the passion of the project. Clearly defining partner's roles in the consortium will facilitate stronger relationships. Lastly, developing a community advisory committee as early as possible in the project development will give the community more ownership in the SBHC resulting in greater initial buy-in of the SBHC concept.

NEW YORK

Newark-Wayne Community Hospital

Organizational Information

| | |
|-------------------------------------|---|
| Grant Number | D04RH16281 |
| Grantee Organization | Wayne County Rural Health Network, Newark-Wayne Community Hospital |
| Organization Type | Rural Health Network |
| Address | 111 Driving Park Avenue, Newark, NY 14513 |
| Grantee organization website | http://www.rochestergeneral.org/rochester-general-health-system/news-and-events/all-news-releases/press-releases-2010/13034001/ |
| Primary Contact Information | Emilie C. Sisson Program Manager Phone number: 315-483-3266 Fax number: 315-483-3270 emilie.sisson@rochestergeneral.org |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|------------------------------|--|
| Wayne County Rural Health Network | Sodus, Wayne County, NY | Rural Health Network |
| Alzheimer's Association | Rochester, Monroe County, NY | Not-for-profit Organization |
| Blossom View Nursing Home | Sodus, Wayne County, NY | Nursing Home |
| Cornell Cooperative Extension | Newark, Wayne County, NY | Not-for-Profit (Cornell Cooperative Extension) |
| DeMay Living Center | Newark, Wayne County, NY | Nursing Home |
| Finger Lakes Geriatric | Ithaca, Tompkins County, NY | Not-for-Profit (sheltered by college) |
| Education Center at the | | |
| Ithaca College Gerontology Institute | | |
| Finger Lakes Health System Agency | Rochester, Monroe County, NY | Regional Health Planning Agency |
| Finger Lakes Migrant and Community Health | Sodus, Wayne County, NY | FQHC and migrant program |
| Geriatric Consultative Service | Rochester, Monroe County, NY | Specialist Provider |
| Newark-Wayne Community Hospital | Newark, Wayne County, NY | Hospital |
| Rochester General Health System | Rochester, Monroe County, NY | Regional Health System |
| Rochester General Wayne Medical Group | Wolcott, Wayne County, NY | Medical Practice |
| Victim Resource Center | Newark, Wayne County, NY | Not-for-Profit (Domestic Violence and Sexual Assault Program) |
| Wayne ARC | Newark, Wayne County, NY | Non-Profit (association for retarded citizens, developmental disabilities) |
| Wayne County Office for Aging & Youth | Lyons, Wayne County, NY | County Agency |
| Wayne County Department of Social Services | Lyons, Wayne County, NY | County Social Services Department |
| Wayne County Emergency Management Services | Lyons, Wayne County, NY | County Agency |
| Wayne County Public Health | Lyons, Wayne County, NY | County Public Health Department |
| Wayne County Action Program | Lyons, Wayne County, NY | Community Action Program |

Community Characteristics

Area:

The primary area is Wayne County, New York State. The project also includes some residents of Cayuga, Ontario, Seneca, and Yates Counties in NYS.

Community description:

Wayne County is located in the Finger Lakes region of New Your State. Approximately 13% of the population are above age 65 and 14% of the total population are uninsured; 23% of all households have a household member over 65 years of age. Primary occupations are agriculture and farming. Wayne County ranked poorly (below both the state and nationally) for patient/physician ratio; Wayne County was identified and rated as HPSA designated with physician shortages in the areas of primary care, mental health, and dentists.

Need:

The Geriatric Assessment Program was designed specifically to address the gap in medical services, diagnosis, and treatment for the elderly with geriatric medical syndromes by utilizing telemedicine consultations with a Geriatrician in Rochester, NY. When this grant was written, neither Wayne County nor surrounding counties had a geriatrician and had no specialized medical services for syndromes in the elderly. There was limited education available for care givers and health care professionals regarding syndromes in the elderly, and Geriatric Pharmacotherapy/Polypharmacy. To access a geriatrician for a consult or evaluation, senior residents were required to travel to the nearest metropolitan areas of Rochester or Syracuse NY; in many cases this was a more than 100 mile trip (Wayne County itself is 604 square miles). There were limited care managers available to provide in-home support and assessment to elderly and their caregivers.

Program Services

Focus Areas

Access: Specialty Care
Aging
Chronic Disease Management: Cardiovascular
Chronic Disease Management: Diabetes
Chronic Disease Management: Geriatric Syndromes
Coordination of Care Services
Health Education and Promotion
Integrated Systems of Care

Target Population

Elderly
Uninsured
Underinsured

Description:

The grant's activities coordinated specialty consultation services with an urban-based geriatrician in Rochester, NY, via a telemedicine connection to a rural PCP office in Wolcott, NY. The specialist is from Rochester General Health System, Geriatric Consultative Services office, and utilizes the Syndrome Based Geriatric Assessment model. The care management component provided an extensive in-home assessment and follow-up ensured treatment protocols were being followed and that other needed community supports and referrals were completed and implemented, including those addressing psycho-social needs, nutrition, familial and in-home aide support, etc. The grant project also provided education and training for formal and informal caregivers on geriatric topics, as well as specialized medical education for health care providers. The three components of this project included:

- 1.) Telehealth consults in a rural PCP office (connecting rural elderly to a geriatrician in a metropolitan area) with prior in-home care manager visits to conduct mental status evaluation, medication inventory, assessment of familial and community support systems already in place. After consultations, reports to PCP and follow-up visits with Geriatrician and care manager occurred to assess efficacy of treatment plan, compliance with medication changes, and follow-up patient assessment, as well as referrals to other community services as needed.
- 2.) A strong care management component followed patients and his/her family before, during, and after the consultation intervention to ensure and document care, as well as working to meet other needs affecting the health and welfare of the patient.

- 3.) The program also delivered a series of education seminars to informal and formal caregivers as well as health care professionals in order to increase knowledge and skill levels of those caring for the elderly with varying conditions.

Role of Consortium Partners:

- **Newark-Wayne Community Hospital** acted as the grantee and fiscal agent for this grant, with the project director's time provided as in-kind for the grant.
- **ALL** consortium members referred patients and participated in all grant activity planning
- **Finger Lakes Geriatric Education Center and Alzheimer's Association** delivered specialized seminars.
- **Emergency Medical Services and Wayne County Department of Aging and Youth** worked on project sustainability after the grant funding ends to ensure that the valuable care management component remains.
- **The Finger Lakes Health System Agency** (the regional health systems planning agency) conducted the project's evaluation.
- **The medical group, nursing homes, and hospitals** (Newark-Wayne Community Hospital and Rochester General Hospital) modified their policies and protocols to work with providers and refer patients.

Outcomes

- In the rural Wolcott, NY, medical practice site, 131 consults were conducted via telemedicine for those patients identified as appropriate for geriatric syndrome evaluation. The care manager (sometimes in conjunction with the Geriatric Nurse Practitioner) conducted 167 home visits, assessing the home environment, familial support, prescription inventory, and other needed services, as well as completing a mini-mental status evaluation. The care manager followed each patient; in some cases making additional home visits and connecting to other community resources and services. During the grant cycle the care manager made 1,182 such contacts and ensured that appropriate referrals and services were in fact implemented; this number averages to 12.39 contacts per patient completed by the care manager.
- Additional geriatric assessment consults were offered through a second telemedicine set-up in Newark, NY (also a rural area); over the course of the grant, there a total of 232 consults completed at the Newark, NY site.
- No-show rates were reduced through the efforts of the care manager (compared to the geriatrician's office without a care manager; this office experienced a no show rate of approximately 6%).
- Hospital admissions and readmission rates were reduced; cost avoidance was estimated to be more than \$500,000 as a result of patient enrollment in this geriatric assessment program. Extrapolated cost savings of avoiding ED visits and inpatient charges were estimated to be \$340,000 by the program's participants. Although not statistically significant, overall medication usage by participating (active) patients was reduced by 8%.
- Patient satisfaction was nearly 100% with geriatrician (reported by patients after their telemedicine consultation). Patient satisfaction with the care manager was 100%; feedback was provided after week, 1 month, 3 month follow-up calls after initial geriatric consult. Care manager promoted patient engagement and compliance, facilitated collaboration between providers, family, patient, ensured that the patient's wishes were heard and identified what made a difference for this patient.
- Education of providers and care givers was improved as indicated by educational program surveys; education programs were provided to 400 people. One program on depression, delirium, and dementia had to be repeated because of the demand.

Challenges & Innovative Solutions

The program faced and overcame multiple challenges throughout its start-up and implementation operation; these included:

- Equipment acquisition, installation and training of staff were initially problematic. The recommended solution is to identify equipment purchases and have approval for capital purchases at the onset of grant funding and assertively remind the purchasing organization that costs are reimbursed and that there are funding requirements and deadlines with which all involved must comply. We also recommend training for staff at time of equipment installation.
- We underestimated the time required to acquire credentialing of the Geriatric Nurse Practitioner through the hospital system. Understanding the requirements and total documentation of clinical staff hiring and credentialing processes, along with requisite applications, to partner with umbrella organizations is recommended if relevant.
- Business and medical processes and policies should be addressed ahead of time, including bridging current medical processes with clinical service partners and linking these providers prior to system existence of EMR HIT.
- Identifying the best parameters to define success was challenging. Summative and formative evaluation designs had to be revisited, including the redefinition of program success. Wisely choosing what to measure and to assign costs to specific

metrics are paramount in making the case for activities and programs with cogent, convincing, and persuasive arguments and justifications. While we had originally decided to measure readmission rates, the program had multiple patients who experienced syndrome resolution or control under the Geriatric Assessment Program but were later admitted to hospital for unrelated issues such as cardiac events. Thus, while the program was successful, the patients were admitted due to other issues.

- Developing trust with PCP community for referrals was very challenging. Initially there was concern among the PCP's about patient loss to the specialist. This challenge was resolved by implementing closer communication with the medical director at the local hospital and the county's physician group. Frequent contact and reminders of program and patient benefits, along with physician champions to share patient success, helped to increase referrals.
- More effective communication linkages that ensured smooth care transitions for the patient between community and medical providers were required. Our solutions were multiple presentations, programs, and education to organizations to encourage networking and relationship building.
- Part-time staff required tremendous flexibility by all involved in program. We recommend the following: hiring appropriate staff who are committed, energized, determined, professional, independent, creative, flexible, and experienced.

Sustainability

On-going Services and Activities:

The telehealth component providing rural access to the Geriatrician in urban setting will be sustained through the Telehealth program of the regional hospital system. Equipment purchased by the grant will continue to be used for these telemedicine consultations, as well as for staff education and other specialty consultations. The care manager position will potentially be absorbed by an independent physicians' association, hospital system or through regional hospital system owned medical group.

Sustained Impact:

The Geriatric Assessment Program has dramatically increased the perceived value of in-home Care Management, awareness of the specialty of geriatrics, and the quality of life impact that access to a Board Certified Geriatrician can provide. The program served as a conduit between multiple community and hospital providers, identifying the challenge of elderly patient care transitions and the difficulty of navigating a system, and potential breakdowns with this chain of communication. The program reduced readmission rates reducing overall costs for the hospital, and subsequently the county, through Medicare cost savings. The program encouraged providers, care givers and patients to recognize the many benefits of telehealth.

The issue of costs and reimbursement to ensure the continued operation of care management directly impacts sustainability. We have worked with the hospital system to identify total cost savings and cost avoidance relating to readmissions, for all payers including the county. We have initiated partnerships with other existing providers such as EMT, EMS providers, and paramedics to provide some in-home follow up support. We are encouraging the PCP community to hire embedded care managers and are also working with the regional health planning agency as they address the roles and functions of care management in total patient care.

Implications for Other Communities

Other communities can replicate this program, by following the lessons learned and recommendations for easier program development and implementation. Appropriate patients for the Geriatric Assessment Program are patients with geriatric syndromes such as: Dementia, Urinary Incontinence, Falling, Polypharmacy, Chronic Pain, Depression, Function Decline, Non-compliance, End-of -Life Care, and Comprehensive Functional Assessment. The GAP program received valuable and positive feedback from elderly patients. Comments around this non-emergency program included, "Thank you for helping my family avoid a crisis." and "My mother was at the Emergency Room it seemed every month for months... She hasn't been back to the ED since we saw the Geriatrician."

The benefits and strengths of this program include:

- Providing access to a Board Certified Geriatrician serving elders in this small rural farming community through holistic and patient centered assessments. The Geriatrician defines patient success with the following metrics: quality of life improvement; placement prevention; and, patient functionality.
- The telehealth consults offered in a rural setting afforded patients comfort, ease of limited commute, no parking fees or parking garages to navigate, personal interaction with provider in familiar rural setting and provision of county transportation services.

- The Care Management component was instrumental in success of program with initial in-home assessments, continued monitoring of in-home progress including care giver and familial support and compliance post medical consult.
- Clinical and community experience of staff serving the elderly is critical; our experienced care manager provided appropriate and comprehensive connections to needed services and existing resources.

NORTH CAROLINA

McDowell Hospital

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12683 |
| Grantee Organization | McDowell Hospital |
| Organization Type | hospital |
| Address | 430 Rankin Drive, Marion, NC 28752 |
| Grantee organization website | N/A |
| Primary Contact Information | Heather T. Barrier Project Officer Phone number: 828-659-5714 Fax number: 828-652-1262 heather.barrier@msj.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$122,623 May 2010 to April 2011: \$122,533 May 2011 to April 2012: \$99,808 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|---------------|--|
| Rutherford-Polk-McDowell District Health Department | Marion, NC | Health Department |
| NC Oral Health Section | Marion, NC | NC Department of Health and Human Services |
| McDowell County Partnership for Children & Families | Marion, NC | Non-Profit |
| Mission Hospital | Asheville, NC | Hospital |
| Corpening Memorial YMCA | Marion, NC | YMCA |
| McDowell County Schools | Marion, NC | Public Schools |
| Centro Unido Latino Americano | Marion, NC | Non-Profit Latino Center |
| Dr. Jim Gaskill, DDS | Marion, NC | Private Dentist |

Community Characteristics

Area:

McDowell County, North Carolina

Community description:

McDowell County is located in the Appalachian Region of Western North Carolina. The current population is 44,996 with 2,456 children under the age of six and not enrolled in kindergarten. The county's economy is dependent on manufacturing, specifically textiles and furniture, which have been on the decline for the past two decades. The county unemployment rate typically remains two percentage points higher than the state average. The average median household income is \$31,514, or roughly 72% of the state average. Thirty percent of children in McDowell County live in poverty, with 34% eligible for Medicaid. Additionally, only 79% of the adult population holds a high school diploma and only 14% hold a bachelor's degree, compared with the state rate of 26%.

Need:

The western region of North Carolina has historically struggled with high rates of child tooth decay and a lack of education about oral health habits. According to the NC Oral Health Section, the percent of kindergarteners entering school with untreated tooth decay in McDowell County was 30% with an average of 2.6 missing, decayed or filled teeth per child in state fiscal year 2007-08.

The North Carolina Oral Health Section provides screenings and case management for school age children. The Mission Hospital Tooth Bus has recently expanded its dental outreach services for elementary school age children in the county. McDowell is one of two

counties in the state that does not have a public transportation system. There are no dentists in McDowell County that will provide dental services to children less than four years old. All pediatric dentists are located a minimum of a 45-minute drive from the county seat of Marion. While there are limited dental services available for school age children in the county, there are no services available for children under the age of four and limited access for four- and five-year-olds.

Program Services

Focus Areas

Health Education and Promotion
Oral Health

Target Population

Infants
Pre-school children
Pregnant Women
Caucasians
African Americans
Latinos
Uninsured
Underinsured

Description:

The grant activities were coordinated by The McDowell Hospital's Preschool Dental Coordinator in conjunction with the McDowell County Health Department and NC Oral Health Section hygienist housed at the health department. A Dental Consortium was created to assist with the coordination of services. The grant included three activities: 1) screenings, 2) case management and restorative dental services, and 3) education and outreach.

The focus of the grant program was to identify children ages birth to five with untreated tooth decay and connect them with a dental home. Using a contracted dentist from Mission Children's Dental Program, screenings were provided at child care centers. Parents of children screened received a report, educational materials, and a list of area dentists if their child did not have a dental home. During the screenings, children identified with problem areas were provided with case management by the Preschool Dental Coordinator. If oral surgery was needed, the grant provided funds to families not eligible for Medicaid. The grant provided education and outreach about good dental health habits to children ages birth to five, their parents and expectant moms. This was done through dental puppet shows, community events, presentations, and outreach to doctor's offices.

Role of Consortium Partners:

The grant proposal was created as a collaborative effort by Mission Hospital in Asheville, Mission Children's Dental Program, The McDowell Hospital, and the NC Oral Health Section hygienist at the Health Department.

The Partnership for Children provided information and planning for the screenings in child care centers was provided by with assistance from the McDowell County Schools. They also served as the project evaluator and provided ongoing evaluation services.

The Preschool Dental Program convened a Dental Consortium that met quarterly to receive updates about the grant-funded program, identify gaps in services, and serve as a resource for program delivery.

The YMCA provided a location for community screenings and educational events.

The Latino Center provided translation services and screenings for Hispanic children. Dr. Gaskill provided the Consortium with the perspective of private dentists in the area for coordination of dental homes.

The Health Department provided in-kind space for the Preschool Dental Program and its supervision.

The NC Oral Health Section provided assistance with case management and educational outreach.

Mission Children's Dental Program provided the contracted dentist, access to OR services, and Medicaid billing for sustainability funding.

Outcomes

According to unofficial 2010-11 figures from the local Dental Health Hygienist working for the NC Oral Health Section, the rate of untreated decay in children entering kindergarten has dropped to 20%. This is a ten percent drop in a three year period. We attribute the change to the efforts of the Preschool Dental Program. The program has provided more than 1700 free dental screenings to young children with 200 children identified as needing additional dental treatment.

Challenges & Innovative Solutions

At the start of the grant-funded program, the Preschool Dental Coordinator was surprised that child care centers and parents were not excited about the free dental screenings. The addition of the dental puppet show helped the Coordinator build a good relationship with child care providers by offering a service that was fun and educational for the children in addition to the dental screening. By the end of the grant period, attendance at community events had doubled.

During the grant period, staff in the positions of Program Manager and Hospital CEO both changed. The support of all community partners associated with the program helped orient new staff during the transition. One of the lessons learned is understanding that change happens and to be successful you must be prepared to adapt to change.

During the first Latino dental screening, only a handful of children came to the event which was held at a Baptist Church. A year later, after the establishment of the county's first Latino Center, The Preschool Dental Program had been able to increase its outreach to Latinos through translated educational materials and additional screenings held at the Center.

Throughout the three-year grant period, the number of children eligible for Medicaid increased significantly due to the increases in unemployment. Children who are eligible for Medicaid are not eligible for oral surgery services at Mission Children's Dental Center. The Preschool Dental Coordinator addressed the issue by assisting families with Medicaid enrollment and increasing case management for those families seeking oral surgery.

Sustainability

On-going Services and Activities:

Some components of the Preschool Dental Program will continue after the period ends, although they will be much reduced in scope.

- As identified in the proposal, Medicaid funds from dental screenings will be used to continue to support dental health services for young children. The amount of funds collected during the three-year period is approximately \$15,000.
- The gap in oral health services for children birth to age five will continue to be addressed through the Dental Consortium or the Partnership for Children's McDowell Advisory Board. The Consortium will support continued dental varnishing programs at local pediatric offices and the Health Department. Coordination and case management will continue among members of the consortium, including the NC Oral Health Section, Mission Children's Dental Program, the McDowell County Health Department, and the Partnership for Children.
- The Partnership for Children will continue to administer its privately-funded Healthy Smiles Dental Grant program.

Sustained Impact:

While funding for the project is coming to an end, the sustained impact of the program will last for many years. The Dental Consortium provided an opportunity for health care professionals, private providers, and teachers to interact around dental health education for young children. The prevention strategies learned by those children are likely to last a lifetime. The education provided to teachers in child care centers will also benefit new children coming through the programs after the end of the grant period.

Implications for Other Communities

The Preschool Dental Program can serve as a model for other rural counties that want to decrease the rates of untreated tooth decay. With a relatively small investment of money and staff, the program effectively provides young children with screenings, education, and access to dental homes primarily through child care centers. The use of a contracted dentist, who does not have his own dental practice, eliminates any competition for services from private providers. The Dental Consortium alone can be used as a community collaboration tool for identifying gaps in service and increasing professional connections among agencies. The project has also shown

the value education plays not only in the understanding of good oral health practices but in the engagement of children and their families in screening events.

NORTH DAKOTA

City-County Health District

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH16387 |
| Grantee Organization | City-County Health District |
| Organization Type | Non-profit; Local Public Health Unit |
| Address | 230 4 th St. NW, Rm 102, Valley City, ND 58072 |
| Grantee organization website | www.citycountyhealth.org |
| Primary Contact Information | Theresa Will Executive Director Phone number: 701-845-8518 Fax number: 701-845-8542 twill@co.barnes.nd.us |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------------|-------------------------|--------------------------------------|
| Central Valley Health District | Jamestown, Stutsman, ND | Non-profit; Local Public Health |
| South Central Adult Services | Valley City, Barnes, ND | Non-profit; Regional Senior Services |

Community Characteristics

Area:

The coverage area for our Outreach grant is a three-county area in Southeast North Dakota; Barnes, Stutsman and Logan Counties.

Community description:

The 3 county service area population is 98% Caucasian. When assessing our community needs in 2008, prior to writing the Outreach proposal we noted that there was an urgent need to increase medical services in our profoundly rural area. At least 56 townships/cities within the service area were designated as "Health Professional Shortage Areas." North Dakota also has the highest proportion in the nation of elderly who are 85 years and older. The median age in our service area is even higher than North Dakota as a whole. Forty-one percent of Barnes County residents had high cholesterol (ND 32.7% and US 33%); 28.8% in Barnes County had hypertension; and 68.9% of Stutsman county residents were either overweight or obese (ND 64.5%). Diabetes rates in our service area dramatically exceeded the state rates. The population within our service area is also financially poorer than North Dakota's overall population. Ultimately the data told us that residents within our 3 county service area needed additional services but could not afford the needed services.

Our local community is an ACHIEVE community, actively working on ways to increase physical activity, increase healthy eating, decrease smoking related disease and decreasing chronic disease by policy, systems and environment change. The ACHIEVE partnership has served as an advisory group for our Chronic Disease Management Program, offering support by promoting the program within their employing facilities and in their own social networks, providing feedback regarding community comments about the program, community needs and offering input for ongoing program decision making.

Need:

Our outreach program was designed to address the increasing rates of chronic disease and related soaring health care costs. Many residents with chronic disease are not following their provider ordered regimen for various reasons (cost of medications, lack of knowledge, side effects of medications, unable to get to the clinic for follow-up, etc.). Public Health also documented a growing demand

for services in our rural area, with the number of home visits in Stutsman County doubling between 2006 and 2007 and also increasing in Barnes County (see data provided in previous section).

Our program empowers clients to better self manage their healthcare and their chronic diseases. We proposed to increase preventative services for the clients with chronic disease, thus decreasing health care spending, improving clients' quality of life, and enabling clients to stay safely within their homes and remain a viable part of the community. We planned to work with clients on an individual basis, assuring that they received needed preventative services, utilizing the evidence based protocol that we would develop.

Program Services

Focus Areas

Access: Primary Care
 Access: Specialty Care
 Aging
 Chronic Disease Management: Cardiovascular
 Chronic Disease Management: Diabetes
 Chronic Disease Management: Other
 Coordination of Care Services
 Health Education and Promotion

Target Population

Adults
 Elderly
 Caucasians
 African Americans
 Latinos
 Uninsured
 Underinsured

Description:

The Tri-County Chronic Disease Management Program is a Registered Nurse-led program with a mission to empower and educate individuals so they can better manage their diseases and communicate more effectively with their providers, ultimately improving quality of life while decreasing healthcare costs.

The grant activities were coordinated through City-County Health District as the lead agency. To implement our chronic disease management program, we:

- Assessed and researched standards of care for chronic diseases.
- Two RN's completed "Certified Chronic Disease Specialist" training on-line.
- Developed evidence based protocol to follow clients with Diabetes 2, Hypertension, Asthma, COPD, Heart Failure, Alzheimer's dementia and Coronary Artery Disease.
- Created and implemented educational handouts for each disease.
- Developed the personal health journal.
- Developed a marketing brochure and marketing plan.

Our Registered Nurses were able to provide ongoing education for these clients, assess their progress on a more regular basis, contact the providers with concerns, questions or need for changes to the client's medical regime. We implemented the "My Personal Health Journal" for each client which contained their medical history, medication list, educational handouts, blood sugar/blood pressure/weight logs, their health care directives, medical appointments, immunizations and lab results.

Role of Consortium Partners:

- City-County Health District: Program Director, financial oversight, had one RN who received the Chronic Disease Certification, took the lead in researching standards of care, developing protocol, doing the on-going public relations, and in developing the tracking system. Provided RN visits (both in the office and in the home, depending on client need) and aide visits for clients in Barnes County.
- Central Valley Health District: hired a .5 RN position who received the Chronic Disease Certification, assisted with standards of care, provided program input throughout the 3 year grant, data tracking/input, regularly attended consortium meetings, assisted in developing protocol and provided the RN visits in Stutsman and Logan Counties.
- South Central Adult Services: Provided client transportation for medical appointments, provides both fresh and frozen meals for much of the population that was served, supported the program through public relations, provided referrals for the program, was a direct link to clients providing ongoing feedback for the program throughout the 3 year grant period.

Outcomes

- **Client satisfaction:** Individual client survey responses were very positive. Clients have voiced their individual satisfaction with this program with clients making statements such as: "This is the longest that I have stayed out of the hospital in years", "If this program stops, I will need to move into a nursing home", "I suppose I will need to move closer to my family so they might be able to help me more", etc. A total of 143 clients were followed throughout this program with over 2000 nursing visits and 490 aide visits made through December of 2011.
- **Provider satisfaction:** Survey with the providers, though limited in number due to a low response rate, show 60% satisfaction with the program, the other 40% stated they were neutral as they had not referred any clients into the program at that point. Ongoing individual surveys of providers showed overwhelming support and satisfaction with the program, feeling that the program provided ongoing support and excellent follow-up for the clients who do not come to see them on a regular basis.
- **Patient visits:** In 2010 there were 88 clients with an average of 10.64 visits/client; in 2011, 91 clients with an average of 11.6 visits/client; and in 2012, 54 clients on service with a current average of 4 visits/client.
- **Patient characteristics:**
 - 2010: Of the 88 clients seen, 73 clients had a Hypertension diagnosis, 27 had heart failure, 8 with asthma, 4 with CAD, 1 with Alzheimer's, 43 had DM-2, and 13 had COPD.
 - 2011: Of the 91 clients seen, 76 clients had a hypertension diagnosis, 26 had heart failure, 8 had asthma, 12 with CAD, 1 Alzheimer's, 50 DM-2 and 10 had COPD.
 - 2012: Of the 54 clients on service, 46 of these clients have hypertension, 17 have heart failure, 3 have asthma, 6 with CAD, 32 with DM-2 and 6 clients with COPD.
- **Patient outcomes:** Overall clients have shown an improvement in all of the indicators which were tracked: Blood pressure, HbA1C, total cholesterol and BMI. We have had individuals showing up to a 45 point decrease in systolic BP and 23 point decrease in diastolic; We continue to analyze the data as we are nearing the end of this 3 year pilot.

Challenges & Innovative Solutions

- We got off to a slow start as we were in the group that was funded in September of 2009, then public health was hit with the H1N1 pandemic so there was little work that could be done with this program until after January 1, 2010. The initial months were spent researching standards of practice and evidence based approaches to chronic disease management as well as developing the program materials (personal health journals, educational handouts, brochures, marketing plan, etc.).
- Finding the appropriate tracking system: We began tracking data in the free CDEMS program which proved to be too clinical based, so was not helpful in tracking the data that we needed to analyze. An IT person at the Center for Rural Health assisted us in setting up an access database to track clients. This data base has been useful for our small group of users but will be difficult to utilize if additional counties are utilizing the same database.
- Since much of the program was developed within the public health units and the services were provided by public health, the role of our 3rd consortium member was somewhat limited. We felt that there would be more of a need for assistance from South Central Adult Services in the area of transportation. We discovered that transportation in our service area must not be a barrier to getting the care that our clients needed. Although South Central was very supportive and assisted in promoting the CDM program, their involvement in the day to day functioning of the program was not as originally envisioned when developing the program.

Sustainability

On-going Services and Activities:

We have been actively working with the North Dakota State Health Officer and North Dakota Blue Cross, sharing outcome data and seeking support for third party reimbursement to sustain these services. During our initial meeting, Blue Cross was very supportive and requested a second meeting to dig further into the data, and to determine the best way to move forward, allowing public health to bill for these services when provided for Blue Cross insured clients. There is also discussion regarding how to utilize these services within worksites and to assist clients who are currently on North Dakota Medical Assistance.

Our clients have been primarily Medicare age. Although there is great potential to develop a billing/payment structure for clients with Blue Cross, this is a small percentage of our client base. We are using the current data and will approach ASTHO and then CMS regarding a structure to bill for these services.

We have applied for another 3 year Outreach grant to expand the current services into an 8 county region and to add protocol to assist clients with mental health diagnoses, and are awaiting a response from HRSA. Local providers have volunteered to be on a steering committee for the new/expanded program as they feel that ongoing feedback and connection will assist in developing and improving an already successful and necessary program.

If additional external funding is not secured, public health in our service area will continue to offer the service on a fee basis. Public health has always done home visits to assist clients to maintain their quality of life. This program has allowed us to develop an evidence base to apply to many of our home visits.

Sustained Impact:

Public health has always been respected and viewed as credible in our community but this program has allowed public health to increase credibility with providers, community and with other public health units across the state of North Dakota.

Numerous forms, education handouts, marketing brochures etc. were developed to form this comprehensive, evidence based CDM program. The model can be easily replicated in other local public health units. This program has demonstrated positive outcomes for the clients who participate. We are currently working with Blue Cross/Blue Shield of ND who has shown sincere interest in developing a payment structure to sustain and further develop this program.

Implications for Other Communities

North Dakota Blue Cross/Blue Shield is currently interested in replicating this program across the state and would like to see public health provide this service. We feel this program can be easily replicated in other areas. We have developed the forms, educational handouts, etc. so the program is ready to go. There were some who felt we were unrealistic in our vision to sustain this service by working with insurers, convincing them that the outcomes and the need warrant that the services be covered by 3rd party payers. We have not totally accomplished this, at this point, but we are well on our way to reaching this goal. Small communities can promote major changes that can be effective in decreasing health care costs as well as improving quality of life.

NORTH DAKOTA

Park River Health Corporation DBA First Care Health Center

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH16385 |
| Grantee Organization | Park River Health Corporation dba "First Care Health Center" |
| Organization Type | Non-Profit Critical Access Hospital |
| Address | PO Box I, Park River, ND 58270 |
| Grantee organization website | www.firstcarehc.com |
| Primary Contact Information | Louise Dryburgh CEO Phone Number: 701-284-4538 Fax Number: 701-284-7568 stald@polarcomm.com |
| Project Period | 2009-2012 |
| Funding Levels | Sept 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|------------------------------|-------------------------------------|
| Altru Home Services – Park River branch | Park River, Walsh County, ND | Non-Profit Hospital |
| Walsh County Health District | Grafton, Walsh County, ND | Non-Profit Health Department |
| First Care Health Center | Park River, Walsh County, ND | Non-Profit Critical Access Hospital |

Community Characteristics

Area:

The coverage area for the Outreach grants is Walsh County, eastern Ramsey County, northern Nelson County, and southern Pembina County in northeastern North Dakota, which includes the cities of: Adams, Crystal, Dahlen, Edinburg, Edmore, Fairdale, Fordville, Hoople, Lankin, and Park River.

Community Description:

Much of the population lives in communities ranging in size from 25-1500 who travel 20-50 miles for healthcare. Area climate factors make it difficult, if not impossible, for residents to be active outdoors five months out of the year (November-March). The Walsh County residents are primarily Caucasian, with 9.6% of Hispanic/Latino origin and 1.5% American Indian. Our population over 65 and our disabled population are above the state and national averages, respectively. Just over 22% of the population are children zero to seventeen years of age; 30% of children ages zero to twenty participate in Medicaid. Median household income for eight of the ten communities falls into the \$25,000.00-\$32,000.00 income range. For the ten communities combined the median overall age is 47.

Walsh, Ramsey, and Nelson County resident occupations are roughly 16% agriculturally based. However, the most common occupations for all three counties are management, professional occupations, sales, services, and office and government occupations (13%-36%). Economically the area holds its own and has for quite some time, with constant collaborating and consolidating efforts amongst existing businesses, institutions, and family farming operations. A collaborative mind-set seems to encompass the culture.

Need:

The focus of the Outreach grant was to address the following needs and concerns that were identified through local community forums and surveys:

1. An increase in obesity
2. An increase in chronic disease conditions
3. Lack of Mental Health providers

First Care Health Center, Park River, North Dakota, the applicant and fiscal agent for the grant, is located in a Medically Underserved Area (MUA) for primary care as well as for mental health providers; the outreach communities are also located in Healthcare Professional Shortage Areas for mental health professionals. Most Mental Health providers are at least 65 miles from Park River and further from the outlying communities. Taking time off from work, extended travel time, and transportation costs may actually increase mental stress making the lack of nearby mental health providers an even greater issue.

Given the history of this farm-based area and the ethnic background of the residents, a fitness mind-set is not the norm, but a “hard day’s work” is. Despite a major decrease in manual labor required of certain trades, such as farming, the high fat diets continue to be common amongst the farming culture. Individuals who are 45 years or older tend to take an interest in preventative practices; unfortunately this is only when health issues begin to surface. Other needs include: lack of indoor facilities, accessibility, disability and age.

National, state and county health statistics indicate the incidence of chronic diseases for area residents continues to rise. Rates of diabetes in the area are all above the state’s overall average. Walsh and Nelson Counties have the 2nd highest mortality rate for oral cancer in the state. Walsh, Pembina, and Nelson Counties report the highest incidence and mortality rate of colorectal cancer in the state.

Program Services

Focus Areas

Aging
 Behavioral/Mental Health
 Chronic Disease Management: Cardiovascular
 Chronic Disease Management: Diabetes
 Community Health
 Health Education and Promotion
 Physical Fitness and Nutrition

Target Population

School aged children - elementary
 School aged children – teens
 Adults
 Elderly
 Caucasians
 African Americans
 Latinos
 Native Americans

Description:

The grant activities were coordinated and implemented through First Care Health Center with support provided by the consortium partners. The Outreach grant supported the implementation of three main ideas:

1. Decreasing obesity rates by promoting wellness and lifestyle change programs to improve overall health. This was done by giving all communities included in the grant an allowance to “Design Their Own Wellness Program.” This could be creating a wellness facility or promoting wellness activities and ideas that meet their community’s unique needs. Many of the communities purchased equipment that was made available to the community members at a minimal cost. Over 25% of community members are utilizing the equipment on a regular basis in six of the ten communities. Staff were certified as personal trainers and provided free personal training sessions to all communities. Senior fitness classes were established in seven of the ten communities to encompass the needs of all age groups. Park River is the largest community involved with this grant so an aerobics studio was created which holds various aerobics and weightlifting classes five days/week, as well as Tae Kwon Do classes offered to both adults and children two days/week. Class size is limited to 30 participants in the weightlifting class and 40-50 participants take part in various aerobics classes on any given night. Tae Kwon Do runs quarterly and is limited to 25 participants per class. The grant sponsored a farmers market to promote healthy eating during the summer of year three. On average 20 vendors were present each week, along with 150 community member attendees. A county Worksite Wellness program was established, which provided information and ideas to businesses on how to begin a worksite wellness program; thirty-two businesses are participating in the program.
2. Increase availability of chronic disease prevention programs and provide health screenings. Health screenings were administered in each community over the three years for a total of 27 health screenings for approximately 465 community members. Screenings provided measured blood pressure, body mass index (BMI) and blood sugar. A brochure was created and distributed to area communities and businesses that outlined all of the chronic disease prevention programs

available in Walsh County; these services ranged from diabetic help to alcoholics anonymous.

3. Increase availability of mental health services. First Care Health Center contracts with the University of North Dakota Counseling Psychology Department to provide psychology interns to its hospital every year. This program has been well received by the communities and keeps on growing as this service continues to be utilized. Number of visits and individuals using this service increased each year of the grant, serving over 200 people by the end of year three. A brochure outlining the mental health services that are available in Walsh County was also published and distributed to area communities and businesses highlighting services that range from psychiatric help to counseling.

Role of Consortium Partners:

1. **First Care Health Center (FCHC)** located in Park River, North Dakota will provide in-kind contributions including staff time to attend meetings; overhead costs for office space, telephone, internet services for the project coordinator and personal trainer; an AED for the Park River Wellness Center; and the recruitment of a mental health provider.
2. **Walsh County Health District (WCHD)** is located in Grafton, ND and will provide in-kind contributions including collaboration and assistance with identification and access to existing resources for the purpose of advancing the goals of the grant; tobacco prevention services including education, counseling, and NRT (Nicotine Replacement Therapy); staff time to travel and attend network meetings; provide health screenings; and marketing of specific grant goals through the Walsh County Health District newsletter and news articles published in local papers.
3. **Altru Home Services (AHS)** branch located in Park River, ND, is affiliated with a tertiary center located in Grand Forks, ND. AHS will provide in-kind contributions including staff time to have a representative at network meetings and provide health screenings.

Outcomes

Throughout the three years of our project we were able to expand and offer more services to our target population. The expanded services included elderly care, health education, weight management counseling and health promotion/disease management activities. By increasing the services offered, the number in our target population that received services grew and encompassed all age groups from children to the elderly.

In the community of Park River, a wellness center was opened providing various aerobics classes with over 100 participants. We had a group of 13 women from these classes who worked with the personal trainer on a regular basis and averaged a loss of 12 pounds and 3.5% body fat over a five month period. Health screenings for blood glucose and blood pressure were provided in all communities. Those who were found to be in an above normal category were referred to their local physicians for further evaluation.

A survey was conducted on participant's attitudes towards a range of health status and health functions. As determined by our evaluator, a score of 3.1 is a supportive score on this evaluation. The lowest score out of the 14 questions was 3.87 ("When I have health problems, I have the skills that help me cope") and the highest was 4.51 ("It is important for my community to have access to wellness and fitness services"). We also asked a few questions concerning their overall health. Respondents found their overall health status to be very good (41%) or good (38%). A majority (68%) of respondents knew their blood pressure and 54% knew their cholesterol reading.

Overall, the results showed that people have positive attitudes toward health and our WOW₂ Network. They understand they are responsible for their health and that they can change it by participating in the wellness activities established in their communities. This shows a good foundation and support for wellness efforts to continue in communities.

Challenges & Innovative Solutions

Throughout the ten communities that were involved with our Outreach grant, there were a few recurring challenges that each community dealt with due to their similar size and make up.

1. Finding a place to house wellness activities. Through local collaboration communities were able to team up with established organizations (churches, schools) ensuring the existence of wellness activities as long as the organization continued serving in the community.
2. Motivation and sustainability. Without the motivation of community members to take part in wellness activities, sustainability will suffer, especially in small communities where population is already limited. We addressed this challenge in a few different ways. First, we let the communities design their own wellness programs to fit the needs of their specific

communities. They also hosted fundraisers, enlisted the help and support of city organizations, took donations from community members, or charged a small fee for use to sustain their wellness programs. Making sure people knew what was available to them in the community was also important by publishing frequent local newspaper articles and offering tours of the facilities where wellness activities take place.

3. Finding times available and activities that encompass all age groups. By offering a variety of classes at different times, all age groups were given the opportunity to participate in wellness activities.
4. In Park River there was an existing fitness center that was established during the time of our grant process making it difficult to compete in a small town with something that already existed. By offering different services (aerobics classes) than the established fitness center, we were able to open our wellness center with great success and acceptance from the community.

Sustainability

Ongoing Services and Activities:

The following services and programs will be carried on after the grant ends.

1. All communities that participated in the grant purchased some type of exercise equipment that is available to community members. These pieces of equipment were put in churches, schools, and community buildings and are being maintained by community volunteers. Each community has a plan in place for scheduled maintenance, replacements, or additions.
2. The grant sponsored a Farmer's Market that was a huge success. Area farmers and growers came together on a weekly basis to sell produce and goods. As a result a committee was formed to keep this event going in future years.
3. There were six communities that began a senior fitness program that will be on going. Community members were trained and teach the class and are able to train more instructors.
4. Mental health services will continue at First Care Health Center through the collaboration with the University of North Dakota Counseling Psychology Department.
5. Health screenings will continue to be conducted by local nurses and health departments free of charge.

Sustained Impact:

The area served by this Outreach grant has been greatly impacted. Due to local exercise facilities and programs in all the communities, the number of people taking part in physical activity and wellness activities has increased. There will be a yearly farmers market that will promote healthy eating. Brochures were created and distributed that outline the local chronic disease prevention and mental health services, as well as the wellness activities and facilities that were established in each community. This will greatly increase people's knowledge of the available services. Our network that was formed through this Outreach grant will continue to meet and work to improve our communities.

Implications for Other Communities

The goal of our network formed through this Outreach grant was to promote the health and well being of all persons through local collaborative community efforts. We found the best way to achieve this goal was by community involvement. Positive impacts and programs greatly benefit all communities, no matter the size. We worked with ten different communities and noticed the more people involved, the bigger the impact on the community, which increased the chances that the programs will be able to sustain themselves after the grant funding ends. By involving community members in the decision making process from the beginning, communities have a sense of ownership. Programs are tailored to the community's needs in hopes that everyone will see the importance of being active and making healthy choices to help decrease obesity and prevent chronic disease.

NORTH DAKOTA

Southwestern District Health Unit

Organizational Information

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|------------------------------|---|
| Grant Number | D04RH12748 |
| Grantee Organization | Southwestern District Health Unit |
| Organization Type | Public Health |
| Address | 2869 3 rd Ave West, Dickinson, ND 58601 |
| Grantee organization website | www.swdhu.org |
| Primary Contact Information | Sherry Adams Administrator Phone number: 701-483-0171 Fax number: 701-483-4097 sladams@nd.gov |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|---------------|-------------------------|
| St. Joseph's Hospital and Health Center | Dickinson, ND | Hospital |
| Community Action | Dickinson, ND | Non-Profit Organization |
| Southwestern District Health Unit | Dickinson, ND | Public Health |

Community Characteristics

Area:

The Pathways to Health Lives Program served eight counties; Adams, Billings, Bowman, Dunn, Golden Valley, Hettinger, Slope and Stark Counties in southwestern North Dakota.

Community description:

Rural North Dakota is aging, especially in the southwest region. The 2006 US Census indicated a higher than state average in the number of resident 65 years of age and older (20.1% average for our 8 county area versus 14.6% average in the state and 12.4% national average). This is an important factor supporting the need for healthy lifestyle education and screening in our region since there is a higher incidence of cancer and cardiovascular disease among those 65 years of age and older. Southwestern North Dakota's leading cause of death is cardiovascular disease, and number two is cancer. The population density of the eight counties in Southwest North Dakota is 3.7 people per square mile, well within the accepted definition of frontier. The southwestern region of North Dakota has significant challenges relative to accessing quality health care. Five of the eight southwest counties are fully designated as Health Professional Shortage Areas (HPSAs) and seven out of eight counties are considered Medically Underserved Areas (MUA).

Need:

The report of a Community Health Assessment indicated areas of opportunity for Health Action, with cancer and cardiovascular disease identified as significant health priorities in Southwestern North Dakota. The distance to travel and the challenge of harsh climatic conditions have a significant impact on the ability of Southwestern North Dakota residents to seek medical services, and these distances increase for specialty health care providers. The Pathways to Healthy Lives program provided education and screenings to rural areas, increasing accessibility and reducing the distance people must travel.

Program Services

Focus Areas

Health Education and Promotion
Cancer and cardiovascular disease screening and early intervention

Target Population

School aged children - elementary
School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
African Americans
Latinos
Native Americans
Uninsured
Underinsured

Description:

The Pathways to Healthy Lives program aimed at reducing the risk of cancer and cardiovascular disease through screening and early detection. The program focused on lung cancer, prostate cancer, female breast cancer, colorectal cancer, skin cancer and cardiovascular disease. Activities included:

1. Educational presentations, brochures, flyers, news releases, newsletters, and posters focusing on making healthy dietary choices, being physically active, protecting oneself from sunlight and chemical exposure, preventing initiation or cessation of tobacco product usage, breast health, prostate health, and cardiovascular disease.
2. Free breast, prostate, colorectal, skin cancer and cardiovascular disease screenings were held in local communities within the eight counties. Screening events included exams and education.
3. Collaboration among community leaders, providers, clinics, hospital and Health District staff made it possible to offer these services in local communities. Volunteers for screening and educational events came from local clinics, hospitals and the local college nursing students.

Role of Consortium Partners:

- Southwestern District Health Unit: Fiscal Agent, coordinating agency, program coordination.
- St. Joseph's Hospital and Health Center: Provided space, time, and staff to collaborate and assist with screening events.
- Community Action: Provided collaboration and support for screening events and educational services.

Outcomes

- To date, the Pathways to Healthy Lives program has screened 1731 people and have referred 807 screening participants to their physician for further evaluation due to an abnormal result (243 cancer and 564 high cardiac risk profile). If a screening participant had an abnormal finding, they were referred to their physician. Numerous times the participant did not have a regular physician and made an appointment with the health care provider that conducted their screening.
- Pathways to Healthy Lives sent out monthly newsletters that reached over 3,000 people (per month) with vital information regarding cardiovascular disease, cancer and healthy lifestyles. Monthly Public Service Announcements were sent to local newspapers and radio stations. Staff and volunteers attended 59 public events informing 9374 people on topics such as cancer and heart disease. Pathways to Healthy Lives also provided 82 presentations involving 3531 people.
- Pathways to Healthy Lives developed relationships with multiple organizations including the North Dakota Cancer Coalition, Southwest Area of Safe Communities, Northern Plains Cancer Coalition, Tobacco Prevention and Control, Cancer and Substance Abuse Task Force and Healthy Eating and Active Living Network. The Pathways to Healthy Lives program coordinator serves as Vice Chair for the Healthy Eight Communities Network.
- Pathways to Healthy Lives developed a pilot project promoting heart health for lower income women in Stark County in cooperation with the American Heart Association and Go Red of North Dakota. This pilot program, My Heart, My Health, was intended to provide eligible women with the opportunity to "know their numbers" (cholesterol and blood pressure) for heart health, provide knowledge, skills, and opportunities to improve diet, physical activity and other lifestyle behaviors to prevent, delay and/or control cardiovascular disease. Fifty women were screened; 16 women with cholesterols between 200-239 received follow-up coaching; 7 more with cholesterols between 240-324 were referred to their physicians.

- The My Heart, My Health program gained state wide attention, and the Program Director and Coordinator were invited to speak at the North Dakota Legislative Council. In addition, all the data collected for the My Heart, My Health program was presented to the state legislature in 2011.
- The Pathways to Healthy Lives program received two \$5,000 grants from the American Heart Association and teamed with a local community center to offer the Body Fit Challenge (BFC) in 2010 and 2011. The 10-week BFC incorporated both physical activity and wellness education to maximize results and to enhance the learning experience. In 2010, a total of 60 women and men enrolled into the BFC, and 44 men and women completed the program. Results: 293 pounds were lost, 297 inches vanished, and 597 cholesterol points were reduced. In 2011, 152 participants enrolled with 100 people completing the program. Participants lost 685 pounds, 950 inches, 330% body fat, and 1254 cholesterol points.

Challenges & Innovative Solutions

- Our program quickly found that radio and television stations and newspapers were extremely hesitant to give free advertising, prompting us to become creative by utilizing television community calendars, the Chamber of Commerce website, 4 business marquees, church bulletins and newsletters. We befriended both a newspaper reporter and a television reporter, and they provided free “stories” about the program events. We hung posters in businesses and became members of multiple coalitions. Eventually, we had people calling us for information, education, and future screening dates.
- Another challenge was forming a partnership with the local Native American population. Gaining their trust and establishing contact with the appropriate individuals required persistence and patience. We worked with the Native American Health Educator to plan events, attended a Cultural Competency Conference to understand how cancer and cardiovascular disease was perceived in their culture, spoke with the Elders (this was a huge accomplishment) and their community leaders and provided education and presentations to their schools.

Sustainability

On-going Services and Activities:

Planning for sustainability has been addressed from the beginning of the program. It has been accomplished through alternative grants, donations, absorption by the consortium partners, and in-kind contributions.

- Pathways to Healthy Lives office will continue to be a resource to the public by providing educational brochures and referrals to area programs and agencies.
- Educational materials will continue to be produced at the Southwestern District Health Unit Cardiovascular disease and cancer education material and resources will be made available to Healthy 8 Communities Network members and other agencies to distribute to local businesses and organizations.
- Educational presentations to area schools will be provided by various professionals from the Southwestern District Health Unit.
- The working relationship between providers of services and the consumer entities throughout the region will continue through health fairs, county fairs, fraternal clubs, and civic organizations.
- Screening services with an educational focus on healthy lifestyles will be completed by health care providers with support from local businesses and additional grant funding. Individuals with abnormal findings will be referred to their primary care provider.
- Funding for screening supplies and marketing for screening events will be provided by regional providers, vendors, grant funding and local estate dollars.

Sustained Impact:

The impact that the Pathways to Healthy Lives program has had on Southwestern North Dakota has been remarkable. Each year, thousands of residents are provided with educational information regarding cancer prevention and early detection through community health events, presentations, and media campaigns. We have a survivor who is volunteering her time to tell her story about how her cancer was detected early and treated due to our program. The Pathways program has also opened the doors for local clinics and hospitals to come together and work for the greater good.

Networking is essential to any program that wants to be successful. Pathways to Healthy Lives was involved in numerous local and state coalitions, attended local and state health fairs, visited business and schools and tried to meet with any individual, business or organization that could benefit our program.

Persistence in gaining public support and recognition is another key component. Pathways sent out monthly newsletters that reached about 4000 people, had stories printed in the newspaper, attended coalitions, spoke at local event, and made each screening an event that people anticipated.

Being patient but not taking "no" as a final answer is important. If we had taken no as a final answer, we would have been done before our program even started. It is important to communicate outcomes that will benefit both the program itself and the communities served.

NORTH DAKOTA

Wishek Hospital Clinic Association

Organizational Information

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|-------------------------------------|--|
| Grant Number | D04RH12730 |
| Grantee Organization | Wishek Hospital Clinic Association |
| Organization Type | Non-profit healthcare organization |
| Address | 1007 4 th Ave South, Wishek, ND 58495 |
| Grantee organization website | N/A |
| Primary Contact Information | Melana Howe CEO, Howe Enterprises Phone number: 701-567-4127 Fax number: 701-567-4127 melanah@live.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,735 May 2010 to April 2011: \$124,973 May 2011 to April 2012: \$99,802 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|----------------------------|-----------------------------|
| Community Memorial Hospital | Turtle Lake, McLean, ND | NFP hospital |
| Garrison Memorial Hospital | Garrison, McLean, ND | NFP hospital |
| Linton Hospital | Linton, Emmons, ND | NFP hospital |
| McKenzie County Healthcare Services | Watford City, McKenzie, ND | NFP hospital |
| Mobridge Regional Hospital and Clinics | Mobridge, Walworth, SD | NFP hospital |
| Sakakawea Medical Center | Hazen, Mercer, ND | NFP hospital |
| West River Regional Medical Center | Hettinger, Adams, ND | NFP hospital |
| Wishek Community Hospital | Wishek, McIntosh, ND | NFP hospital |
| Southwest Healthcare Services | Bowman, Bowman, ND | NFP hospital |
| Presentation Medical Center | Rolla, Rolette, ND | NFP hospital |
| St. Andrews Medical Center | Bottineau, Bottineau, ND | NFP hospital |
| Mercy Medical Center | Williston, Williams, ND | NFP hospital |
| Northland Healthcare Alliance | Bismarck, Burleigh, ND | NFP healthcare organization |

Community Characteristics

Area:
The project covered counties in west-central North Dakota and upper mid-central South Dakota. Potentially twenty eight (28) counties in ND and eight (8) in SD will be impacted by the grant and its various sustainability components. The various partner healthcare organizations have overlapping service areas.

Community description:
North Dakota and South Dakota rank 19th and 17th in the United States for size, but 47th and 46th in population. The Dakotas are mostly rural and sparsely populated states. Over 62% of the uninsured live in the rural areas of the state of ND. Premature deaths in non-urban areas of ND are much higher than urban areas using years of potential life lost figures that equal 5,498 in urban areas compared to 7,311 in rural locations. The main sources of employment are agriculture, healthcare and small businesses.

Need:

The focus of the Dakota Cares! Outreach grant was to build and market comprehensive Worksite Wellness Programs for small businesses (less than 50 employees). The primary employment in the grant area is agriculture and small businesses with less than 50 employees. In ND, fewer than 37.5% of businesses with less than 50 employees offer health insurance to their employees. Employees working at firms with ten or fewer employees are nearly half of all working uninsured. In 2007, NDHS data indicated that people without health insurance were 38% more likely to describe their health as fair to poor as compared to those with health insurance. More than one-fifth of the uninsured in North Dakota had not made a routine visit to the doctor in more than four years.

Program Services

Focus Areas

Access: Primary Care
Behavioral/Mental Health
Chronic Disease Management: Cardiovascular
Chronic Disease Management: Diabetes
Chronic Disease Management: Other:
Health Education and Promotion
Physical Fitness and Nutrition

Target Population

Adults
Uninsured
Underinsured

Description:

The grant activities were coordinated and contracted through Wishek Community Hospital Clinic Association and Northland Healthcare Alliance. The Outreach grant supported the implementation of the following activities:

1. Twelve individuals attended the North Dakota worksite Wellness Certification training. Nine individuals completed the certification of an Agri-Safe course. Membership to Wellness Council of America (WELCOA) provided ongoing education and materials to support worksite wellness initiatives and expert training as worksite wellness consultants.
2. Each of the Worksite Wellness Coordinators initiated and developed a comprehensive Worksite Wellness Program in their respective healthcare organizations.
3. A strategic plan for capacity-building of this new service was mapped and completed within the grant timeline. Various tools, including marketing materials, contracts and educational materials were developed and utilized.
4. A learning primer performing a cost benefit/analysis for implementation of a comprehensive worksite wellness program by a hospital was developed and utilized as part of the sustainability process.

Role of Consortium Partners:

The Dakota Cares! Project provided an important opportunity for the partners to develop a collegiality and support system for future development of worksite wellness programs in North and South Dakota.

Wishek Hospital and Clinics acted as the grantee and fiscal agent for the grant and contracted the Project Director and Program evaluation.

Northland Healthcare Alliance provided leadership and technology and support staff.

Each of the **partnering healthcare organizations** contributed in-kind time and funds and identified and supported internal individuals to be Worksite Wellness Coordinators for their organizations.

The nine Worksite Wellness Coordinators were essential clinical providers and instrumental in programmatic planning, development and implementation of the worksite wellness programs. Each organization has its own culture, mission and service area, and the coordinators navigated the program through those elements. The coordinators were educated in the concepts, developed worksite wellness committees with strategic goals and initiatives based on worksite assessments. Services provided were; health screenings, education and individualized healthcare consultations. Also marketing plans and materials, educational materials, health challenges and contests, and business sustainability plans were developed.

Outcomes

We collected data on several key indicators or goals from each participating healthcare consortium member. The indicators identified the successful obtaining or completing of the various steps needed to achieve desired capacity and ability to implement and sustain a successful worksite Wellness Program at the completion of the Dakota Cares! Grant. Of the original twelve (12) medical facilities, eight (8) participated to the end of the grant project. The necessary transition from the original grant focus on employee health coverage to employee wellness resulted in the loss of several initially participating members.

Various evaluations were completed during the grant tenure, a summary of some of the final evaluation findings are below:

Capacity building: The coordinators utilized the materials and knowledge to implement a Worksite Wellness Program within their own organization. The coordinators stated they have the confidence to repeat the process with other businesses.

Sustainability: All eight organizations completed marketing materials. Seven of the eight organizations have their organizational Worksite Wellness committee active. In two years, the total group has conducted 88 meetings of worksite wellness committees, 113 educational offerings at least 1 hour in length total; and 33 health challenges. Seven organizations have committees with results driven goals. Six of the eight organizations are comfortable utilizing the Wellsource software (biometrics, personal wellness profiles for outcome resulting). Five organizations are working in the community promoting the program, and half have at least one outside contract with another business. Seven of the eight worksite wellness coordinators have a proposed budget completed for their program, and two programs have already been approved by hospital leadership for continuation.

Consortium member satisfaction: Evaluation results show satisfaction with the project, with employee support and camaraderie given as major reasons. "I would have not realized there were experts in this field without my participation in the grant....I feel that with the knowledge gained with this grant and the amazing network partners and the understanding of the resources available, we are better prepared to handle the changes (in healthcare focus)."

Challenges & Innovative Solutions

The greatest challenge was the need to refocus the original grant project due to unforeseen circumstances. This occurred 10 months into the first year. Revised goals and objectives were implemented by the consortium members. Budget revisions and the evaluation process were also assessed, redefined, and refined to reflect programmatic and process changes. By the beginning of Year Two, the partners were ready to begin implementation of the Worksite Wellness initiative.

Another challenge was the time constraints on designated Worksite Wellness Coordinators due to multiple job obligations. Two organizations also experienced turnovers. Quarterly meetings, standardization of structure, telecommunications and site visits by the Project Director overcame the barriers.

Plans of action were updated as needed. Frequent evaluations were done to ensure grant goals were met, and frequent feedback helped to identify deficiencies. In this project, it proved beneficial to combine the Project Director and Contract Evaluator positions in order to meet goals and objectives in the limited timeframe efficiently and effectively.

Sustainability

On-going Services and Activities:

All of the participating consortium members recognize the importance of worksite wellness and the value to their organizations. Though several Worksite Wellness Coordinators have not yet taken their program into the communities as a contract service, all have committed to building and strengthening their in-house programs. Most will be applying for other grant funding to support specific challenges or small wellness projects. Most will utilize in-kind time and money, marketing of new services, or absorption of the program within their organizational structure.

Sustained Impact:

The consortium members recognize the value of positioning their respective organizations for the national transition to a wellness and health preservation mindset. "We now have the tools available to hold new programs for our community such as stop smoking education, health screenings and individual education..." The new or enhanced knowledge, skills and educational material in personal

health management and living will become foundational to building programs to the businesses and in the community. All partners identified continued plans to collaborate and network with other worksite wellness coordinators/colleagues as a result of the project.

Five KEY sustainability initiatives have been developed as a result of the Dakota Cares! grant:

- The capacity-building process of developing a new service/product line for hospitals for revenue generation is called Worksite Wellness. It can be implemented in any healthcare organization, rural or urban. It can be replicated in other healthcare organizations in North Dakota and elsewhere.
- The consortium has nine certified providers in Agri-Safe as a result of the Dakota Cares! The process has begun to develop a statewide Agri-business/Agri-Wellness initiative in North Dakota, working with the North Dakota Department of Health and North Dakota State University, the University of North Dakota and Area Health Education Centers. This would include community-based research, education of providers and individuals in health, wellness and safety as it related to the Agriculture industry, the biggest economic driver in the state. Permanent legislative funds are being sought.
- Collaborative efforts exist with Northland Healthcare Alliance membership, Mental Health America of North Dakota, Agri-Wellness and the North Dakota Department of Health to address behavioral health and stress issues in the workplace. A follow-up outreach grant to assist with this collaboration has been submitted to HRSA.
- Collaborative state-level efforts also exist between the ND Department of Health and its Chronic Disease, Community Health and Healthy North Dakota Programs for the next steps in developing a methodology for businesses to embed Worksite Wellness further into corporate culture and structure to secure complete return on investment through results driven programing.
- A primer called Budget Building 101 for Worksite Wellness was created to assist others to create a cost/benefit analysis of implementing a Worksite Wellness Program as a new service/product line for their healthcare organization. This information and summary of the Dakota Cares! Grant will be submitted to HRSA to consideration as a best practices model for dissemination purposes.

Implications for Other Communities

"The experience we had has begun to create a culture of ownership for one's health in the community."

"The project provided wonderful education and insight on the huge impact of Worksite Wellness, not only to decrease absenteeism, but also increase presentee-ism. Increased job satisfaction due to better physical and mental health is the key to a more successful business and productive community."

OHIO

ProMedica Fostoria Community Hospital

Organizational Information

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|-------------------------------------|--|
| Grant Number | D04RH12742 |
| Grantee Organization | ProMedica Fostoria Community Hospital |
| Organization Type | Critical Access Hospital |
| Address | 501 Van Buren St., Fostoria, Ohio 44830 |
| Grantee organization website | www.promedica.org/fostoria |
| Primary Contact Information | Amy L. Preble RN, BSN, MBA Program Director Phone number: 419-436-6854 Fax number: 419-436-6671 amy.preble@promedica.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,985 May 2010 to April 2011: \$124,919 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|-----------------------------|---|
| Fostoria Fire/ EMS Department | Fostoria, Seneca County, OH | Non-profit organization (City Organization) |
| Seneca County Emergency Medical Services (EMS) | Tiffin, Seneca County, OH | Non-profit organization (County Org.) |
| Emergency Physicians of Northwest Ohio | Toledo, Lucas County, OH | For-profit physician's group |
| ProMedica Toledo Hospital | Toledo, Lucas County, OH | Tertiary Care Hospital, Cardiology Group/Cath Lab |
| ProMedica Transportation Network (PTN) | Toledo, Lucas County, OH | Non-profit patient transport company (Air and Ground EMS service) |
| Fostoria Police Department | Fostoria, Seneca County, OH | Non-profit organization (City Organization) |

Community Characteristics

Area:

The focused coverage area for the Outreach grant was primarily Seneca County and the city of Fostoria. However, with the Critical Access Hospital serving a three county area in Northwest Ohio, citizens in Seneca, Hancock, and Wood Counties were impacted by this project.

Community description:

Fostoria is comprised of three predominately rural counties in Northwest Ohio with the largest part of the community in Seneca County. Numerous barriers to healthcare exist including access to primary medical care, mental health services, specialized medical care, and transportation (medical and personal). ProMedica Fostoria Community Hospital is the primary provider of medical care for the area and is designated as a Critical Access Hospital. The facility is also one of the largest employers in the area.

The loss of jobs and downsizing in this predominately industrial area has resulted in added stresses including losses of medical coverage for many community members. The rates of unemployment and poverty in this area are higher than both the state and national averages. In recent years, three major plants have down-sized and one major industrial plant closed completely. The local Emergency Department has witnessed the effects of this stress on individual's mental, physical, emotional, and heart health. Within the primary service area, heart disease and stroke are the No. 1 cause of death, accounting for 49% of adult deaths in Seneca County, compared to 45% in Ohio and 36% in the United States. Heart attack or myocardial infarction rates were reported at 7% for these residents compared to a state report of adult heart attacks of 5%.

Need:

Research shows that patients suffering from a heart attack who received treatment in rural hospitals were less likely than those treated in urban hospitals to receive the recommended treatments. These patients also have significantly higher adjusted 30-day post AMI death rates from all causes than those in urban hospitals. The American Heart Association's *Get With the Guidelines* (GWTG) program recommends that hospitals perform a Percutaneous Coronary Intervention (PCI) to restore blood flow to the heart within 90 minutes. Rural hospitals often cannot meet these types of requirements related to limited resources and/or distance from specialized services (cath lab). Through advanced technology, EMS squads can transmit 12-lead EKGs (heart tracing) directly to a physician and thus activate a chain of events that can expedite the necessary processes and resources to preserve cardiac function, limit infarct size and reduce morbidity and mortality of these patients.

The focus of the grant was to form a consortium that would collaborate and integrate services in an effort to reduce the number of cardiovascular related deaths in Fostoria. With cardiovascular disease accounting for 54% of female deaths and 44% of male deaths in Seneca County, along with an above average heart attack report rate, it was apparent we needed to identify and address the various issues causing these poor statistics.

- Early identification can be achieved through the use of telehealth type equipment and software that links the first responders (city and county EMS squads) directly to the hospital emergency department. When a patient has chest pain and calls an ambulance, the ambulance can transmit a 12-lead EKG tracing of the patient's heart rhythm directly to the emergency department staff. The emergency department interprets the 12-lead EKG immediately to determine if the patient is having a Myocardial Infarction (heart attack) with special attention being paid to those patients suffering from a STEMI (ST segment elevated MI)—the most deadly type of heart attack.. If a STEMI is noted, it is essential that the patient gets to the cardiac catheter lab within 90 minutes (door to balloon time, based on American Heart guidelines). The emergency department can activate the cath lab and an air ambulance.
- Being located a considerable distance from a tertiary care facility (45 minute drive time) a backup plan needed to be implemented for when air ambulances could not fly (weather, availability, etc.). Not only was there a concern for cardiac patients needing treatment at a cath lab, there was also concerns for other types of critically ill or injured patients (stroke, trauma) for which rapid transport to a tertiary hospital was essential to facilitate better outcomes.
- With half of all heart attack deaths occurring outside of the hospital within the first hour of symptoms, educating the community about the signs and symptoms of a heart attack and the actions that a person experiencing chest pain should do was also essential. The placement of Automated External Defibrillators (AED) in the community would also support the initiative.

Program Services

Focus Areas

Access: Specialty Care
Chronic Disease Management: Cardiovascular
Coordination of Care Services
Emergency Medical Services
Health Education and Promotion
Health Information Technology
Integrated Systems of Care

Target Population

Adults
Elderly
Caucasians
African Americans
Latinos
Uninsured
Underinsured

Description:

The grant activities were coordinated through the Project Director at Fostoria Community Hospital, who is also the Director of Emergency Services for the hospital. Funding from the grant supported the purchasing of equipment, supplies, and additional staff so the following main activities could be implemented:

- Cardiac monitors/equipment was upgraded and software installed that would transmit 12-lead EKGs from remote locations directly to the Emergency Department. Both city EMS and county EMS squads who transport to Fostoria Community Hospital (FCH) received updates to their equipment. The Emergency Department installed software and placed the necessary computer support to receive these remote transmissions.
- An Advanced Life Support (ALS) squad was placed at FCH to help facilitate the transport of critically ill and injured patients that needed transport from the Critical Access Hospital to a tertiary care facility. This ground transport service was identified as a need related to the limited availability of air ambulances, i.e. unable to fly related to weather conditions. Initially the staff designated for this unit was integrated within the staffing in the Emergency Department. As the need for their services increased, they went from 12 hour shift days to 24 hour shift coverage. As a result, this staffed was pulled out of the

Emergency Department and replaced with non-transport Paramedics that now provide coverage 10 hours a day during high volume times.

- Community education was provided primarily through news articles and community education events. Large scale education was provided to the public through luncheons during American Heart Month (Red Dress Luncheon) and the annual Community Health Fairs. Smaller groups, such as current cardiac patients and at-risk populations, also received education during golfing events and nationally recognized awareness weeks such as Cardiac Rehab week.
- Several Automated External Defibrillators (AEDs) were also placed within the service area. These areas included a mobile police squad, fire chief's vehicle, and community gathering areas such as two churches, a school sports complex, and the community Early Development Center/ Health Department.

Role of Consortium Partners:

The grant program consisted of an integrated consortium that was very active in meeting the identified needs throughout the three-year program. Working partnerships and relationships were developed initially but had to be redeveloped throughout the grant as key members left and were replaced.

- **ProMedica Fostoria Community Hospital (FCH)** acted as the grantee and fiscal agent for the grant. They provided the Project Director and coordinated all meetings and facilitated all communications between the different members. Community Health Fairs were coordinated and staffed by FCH. FCH coordinated the placement of equipment and software to connect the various agencies. FCH Emergency Department staff completed education essential to the program and developed necessary process improvement protocols. Later in the program, FCH hired Paramedics to work as part of the integral team within the Critical Access Hospital's Emergency Department.
- **Fostoria Fire/ EMS Department (FFD)** provided leadership and coordination through their Fire Chief at the city level. Education was completed by all staff as to the use of equipment and software. Department specific protocols were developed to facilitate appropriate use of equipment and rapid communication of patient. The initial Fire Chief facilitated the placement of Automated External Defibrillators (AED) and education to other organizations.
- **Seneca County EMS (SCEMS)** provided leadership and coordination of implementing our program at the county level through the County EMS Director. SCEMS staff completed education of their updated equipment and developed a protocol for notifying FCH of 12-lead EKG transmission.
- **Emergency Physicians of Northwest Ohio (EPNO)** provided leadership through their designated facility Medical Director. They were active assisting with hospital and first responder protocols/processes. They were integral in communicating and facilitating coordination of patient care with the Cardiology physician group and the Cardiac Cath Lab at the tertiary care facility.
- **ProMedica Transportation Network (PTN)** coordinated the placement of an Advanced Life Support (ALS) ambulance at the Critical Access Hospital in an effort to improve transport times for patients that were critically ill and injured when an air ambulance was not available. They provided the initial staff (Paramedic and Emergency Medical Tech) within the Critical Access Hospital. PTN ground and air ambulance leadership members actively participated in identifying barriers and continue to work at finding long term solutions to improve overall timeliness.
- **ProMedica Toledo Hospital (TH)** was the primary tertiary care facility who received the identified patients needing urgent cardiac catheterization. Cardiologists and Cath Lab leadership helped in coordinating processes that minimized delays. TH also allocated experts to oversee the grant reporting requirements and expense documentation/allocation/reimbursement.
- **Fostoria Police Department (FPD)** supported the programs initiative. The Mayor acted as the communication agent for the department. Identified police officers received training on the use of an AED and were educated as to the grant's purpose.
- Grant Evaluator was hired and started the process of setting goals and objectives. She started the process for data collection in order to evaluate the consortiums effectiveness. Within a year, the evaluator was stricken with a severe illness. After a prolonged period of time, we were able to identify a new Grant Evaluator to assist in our data collection and analysis. This person provided an objective outlook over the program.

Outcomes

EKG transmissions:

- Sixty-two 12-lead EKGs were transmitted from the city EMS to the hospital emergency department in the first year. Five STEMI patients were identified.
- Only 61 transmissions occurred the second year. This lack of growth was the result of city EMS staffing issues related to downsizing/layoffs and education requirements. Twenty-four STEMI patients were identified.
- Year three is very promising with 112 transmissions occurring to date. We also have had two successful county transmissions. Additional data is still being collected.

Patient Transportation:

- During the first year of the grant, 252 patients benefited from the placement of an ambulance at FCH. Of these, 175 were considered directly impacted (need for transportation was acute and time was essential) and 77 indirect.
- Second year data showed a large increase in usage of this service totaling 583 ambulance transports. 346 were considered directly impacted and 237 received the benefits indirectly.
- We project that the last year of the grant cycle will produce similar numbers as year 2 of the grant.

Education:

- More than 300 individuals attended the May 2011 Community Health Fair and received information regarding the signs and symptoms of a heart attack, the actions that need to be taken when a heart attack is suspected, and specific information about the STEMI program. An additional 28 people attended a lecture pertaining to the above. Of these attendees, 100% felt they had a better understanding of why minutes count and time is so important when a heart attack is suspected. This same group also felt they had a better understanding of the warning signs and what to do when a heart attack may be occurring.
- More than 150 individuals attend each of the 2011 and 2012 Red Dress Luncheon community events and received heart specific education and updates concerning the grant funded program being initiated within the community.
- "Your Heart is Our Mission" program was provided to community members November 2011 at Fostoria Community Hospital. Thirty-five participants received individualized screenings and education geared towards heart health. A panel of heart health experts was available to answer questions directly from the attendees.
- Additional small group education sessions also occurred that included a women's golf league (50 years and older group) and a group of 35 current cardiac rehab patients.

STEMI Patients:

- Year one of the grant funded program created an increased awareness and high expectations with our first STEMI patient making his way through the new process without any obstacles —resulting in a Door to Cath time of 73 minutes, easily meeting the established goal of 90 minutes. However, subsequent patients proved more difficult to move through the process thus identifying what seemed like an endless identification of unforeseen obstacles and variables that created delays.
- Of all the STEMI patients identified, only a very small number are included in the final analysis for various reasons (patient refused transfer, deterioration in condition, etc.). With this type of patient/diagnosis being low volume and high risk, turnover of staff and the infrequency created a bigger obstacle than anticipated as efficiency is essential in removing any delays.
- Year one gave us an average Door to Cath Lab time of 101 minutes with 17% less than the 90 minute goal (67% less than 100 minutes.). Year two average was less than favorable with several cases resulting in times just slightly over 90 minutes but never reaching the established goal (50% less than 100 minutes.). Year three data is showing the same trend as year two. However, our inability to reach the ultimate goal has forged a renewed dedication and allocation of resources to the program at a regional level.

Challenges & Innovative Solutions

Staff turnover of key consortium members was a huge obstacle throughout the grant cycle. This turnover included key decision makers: City Fire Dept/EMS Chief, County EMS Director, Emergency Department Medical Director, and the Fostoria Community Hospital President. As a result of these changes, each new incoming person had to be updated on the purpose of the grant, the progress and goals, and establish commitment for long term sustainability. The loss of our Grant Evaluator to a terminal illness had long term impact to our ability to collect and analyze data. We were able to replace this person after a considerable amount of time but as a result, have had delayed and inconsistent data collection and analysis.

Integration of the EMS personnel into the hospital setting was an extensive challenge for the hospital and the transportation entity. The original plan incorporated the EMS transport crew into the hospital emergency department staffing and processes. However, the EMS transport staff and ED staff had different management structures and staffing guidelines. The different cultures clashed when it came to work schedules, expectations, and productivity. Months were spent trying to incorporate the different cultures, staff expectations, and scheduling conflicts without success. In order to meet the needs of both entities, it was agreed upon to reallocate all grant funding for staffing support to hiring Paramedics that would be dedicated to the emergency department only. The EMS transport company would continue to support the grant with an ambulance located at the hospital but the staff would be dedicated to performing patient transports only.

The implementation of the County EMS transmitting 12-lead EKGs to the emergency department created two unforeseen obstacles for the consortium members. Just prior to implementation, the original County EMS Director faced an obstacle when the County

Commissioners challenged the need for this type of program in the area. This issue surfaced when another larger acute care hospital within the county choose not to participate in supporting the County EMS in providing financial support to allow for 12-lead EKG transmissions to their facility. The County EMS Director presented the evidence behind the program and was able to get the County Commissioners to support the program as designed and on an ongoing basis. After support was obtained, another obstacle in implementing the County EMS transmissions to Fostoria Community Hospital Emergency Department occurred when it was realized that the county and city squad's equipment was different and not compatible. As a result, Fostoria Community Hospital would have to sustain two separate programs and processes to receive 12-lead EKGs from outside the hospital. This process took longer than anticipated with Fostoria Community Hospital absorbing the cost for additional upgrades to support the different computer software/technologies.

Established inter-facility transfer protocols created yet another challenge when trying to meet overall goals/objectives. When the air ambulances were unable to transport patients (weather issues, availability, etc.), it was essential that a ground ambulance be available within the immediate area to transport these time critical patients out of the emergency department to the tertiary care hospital (cath lab) without delay. We recognized early in the grant cycle that previously established protocols were limiting the local Advanced Life Support (ALS) from transporting these types of patients. The Emergency Department Medical Director worked diligently with the leaders of the transport company to adjust protocols to meet the intent of their placement in the region and with the physician groups (ED and Cardiologists) to minimize interventions in order to facilitate transport and/or to implement other plans of care when transferring a patient to the cath lab could not be achieved in the time constraints for a STEMI patient.

Sustainability

On-going Services and Activities:

All components of the grant-funded program will continue as implemented after the grant period ends and will continue without any interruption.

All members of the consortium have committed to keep the program running through in-kind contributions and support. Each member will absorb the ongoing costs for their identified individual components of the overall initiative:

- The city and county EMS will maintain/sustain the ability and equipment to transmit 12-lead EKGs to the Critical Access Hospital.
- Fostoria Community Hospital (FCH) will maintain and support the software necessary to receive remote transmissions of 12-lead EKGs from the EMS services transporting to the emergency department.
- FCH will absorb the costs for the Paramedics into their emergency department staffing budget.
- FCH and the EMS departments will support the community agencies/facilities that received AEDs as a result of this grant by providing any requested education.
- Heart education will continue to be provided to area residents via the annual Red Dress Luncheon and Community Health Fair sponsored by FCH.
- ProMedica Transportation Network has committed to continue to provide an ALS squad in the community for transports from the Critical Access Hospital to a tertiary care facility (limiting delays when air ambulances are unable to fly).

Sustained Impact:

This initiative has been instrumental in forging lasting relationships between the leadership and staff members of the consortium members. Integration of services and developing new processes has had an impact on helping members recognize and appreciate the obstacles each entity faces. And just as important, how each entity's action's impacts the others. Increased awareness within the community about the importance of taking action when your body is sending you warning signs of a heart attack will continue long after the grant through community awareness programs. This awareness will continue to be a focus for future community education events throughout the area. Education will continue for consortium staff members as technology changes and as staff turn-over occurs.

For the patients we serve, sustaining the program as designed will undoubtedly save many lives given our current ability now to identify a heart attack earlier and implement process to expedite care. With all of the evidence and support of the American Heart Association, this program will prove to have a lasting effect within our community. Of special note is the impact our program has had on other communities and facilities. As a result, a regional program is now being developed with Fostoria Community Hospital at the table to share experiences, protocols, and processes so other community's can also implement a similar program.

Our experiences, specifically the many variables and obstacles faced, have already been shared with other facilities and organizations.

A recently established program, the ProMedica Heart and Vascular Institutes, has committed resources to form a regional STEMI initiative as the result of our program. This diverse group of experts and leaders has already committed to further identify and address those variables and obstacles that were identified through our program. The Institute has also committed funding and resources to hire a regional STEMI coordinator so that each individual case can get reviewed immediately. Thus any obstacles or preventable delays are identified and addressed immediately.

The county EMS is working closely with another hospital, who they transport county patients to, to obtain the necessary software to receive 12-lead EKGs also. They are stressing the importance of this program and sharing established processes/protocols.

Fostoria Community Hospital has also committed to sharing all protocols and program processes with another Critical Access Hospital who are attempting to initiate a similar program with their local EMS.

OHIO

Ohio University

Organizational Information

| | |
|---|--|
| Grant Number Grantee Organization Organization Type Address Grantee organization website Primary Contact Information | D04RH12664 Ohio University Institute of Higher Education 347 Grosvenor Hall, Athens, OH 45701 www.ipacohio.org Jane Hamel-Lambert, PhD Principal Investigator (PI) Phone number: 740-593-2289 Fax number: 740-593-2350 hamel-lj@ohio.edu |
| Project Period Funding Levels | 2009 - 2012 May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|-----------------------------|--|
| TriCounty Mental Health and Counseling Services, Inc. | Athens, OH Athens County | community mental health center |
| Family Navigator Program, Community Health Programs, Heritage College of Osteopathic Medicine, Ohio University | Athens, OH Athens County | university-based community health program |
| Multiple School Districts: Athens City, Alexander Schools, Federal Hocking Local Schools, Trimble Local Schools | Athens, OH Athens County | public preschools |
| Psychology & Social Work Clinic, Ohio University | Athens, OH Athens County | university –based psychology & social work training clinic |
| Integrating Professionals for Appalachian Children (IPAC) www.ipacohio.org | Athens, OH Athens County | regional rural health network |

Community Characteristics

Area:
Athens County, OH

Community description:

Of the 88 counties in Ohio, 29 are Appalachian, including Athens County, which is classified as an eligible rural community by its zip code (45701). Additionally, Athens County faces significant workforce shortages. It is classified as a Mental Health Professional Shortage Area (MHPSA), a dental health professional shortage area and a Medically Underserved Area (MUA). (<http://bhpr.hrsa.gov/shortage>; <http://muafind.hrsa.gov/index.aspx>). The poverty rate in Athens County, Ohio, is 31.5 percent, compared to 15.9 percent for Ohio and the nation as a whole. Additionally, the Appalachian Regional Commission classifies Athens as "At-Risk," the second most severe economic classification (www.arc.gov, retrieved 9/18/08). At its best, the workforce that serves our region's rural Appalachian children is heavily burdened. At worst, it is chronically beleaguered. Our local educators, human services professionals, pediatricians and childhood mental health professionals operate within a socio-economic landscape rich in risk but poor in resources, particularly human resources.

Need:

"Mental health partnerships with schools are ...an effective method of helping children succeed. By providing information and support to teachers about children's mental health issues, mental health professionals in [schools] alleviate behavioral difficulties in both academic and home settings." (Ohio Department of Mental Health, 2002)

For children, healthy development involves not only the absence of disease but also the ability to form healthy attachments, to cope with day-to-day challenges and to learn. Our nation is home to approximately 25 million children between the ages of birth and five years (<http://childstats.gov>, retrieved September 18, 2008) whom popular culture often depicts as infinitely resilient and well-equipped to survive adversity and stress. However, as many as 7-20% of preschool and early school aged-children exhibit behavioral problems that meet criteria for a mental health disorder (Ohio Department of Mental Health [ODMH], reported in Sites, Collopy, Velilla, Cayard & Graft, 2008). Despite these prevalence rates of mental health problems in childhood, national estimates indicate that 70% of children with diagnosable disorders do NOT receive mental health treatment (U.S. Public Health Service, 2000). Although many would protest the application of the term "mental health" to the population under age six, such a rebuttal fails to recognize the importance of early developmental experiences in establishing a solid foundation for relating to others and regulating one's affect and behavior and for learning (Shonkoff & Phillips, 2000).

Program Services

Focus Areas

Behavioral/Mental Health
Children's Health
Coordination of Care Services
Integrated Systems of Care
Nurse Family Navigators
Psychological Assessment Services

Target Population

Pre-school children
Caucasians
Uninsured
Underinsured
Families of preschoolers

Description:

Building Capacity- Raising Resiliency provided three services to young children: the Early Childhood Mental Health Consultation services, Family Navigator Services and psychological assessment services. The ECMH program provided universal, targeted and intensive services through classroom-based consultation program. ECMH services facilitated the development of self-control, attachment and initiative skills in young children, while reducing problematic behaviors. The Family Navigator Program provided families with resources to facilitate their understanding and participation in health care decisions affecting their families. The Family Navigator addressed parent concerns regarding a child's health and behavior and encouraged parent participation in their child's treatment by providing anticipatory guidance and support during the service period and by acting as a communication bridge to physicians, school personnel and the ECMH consultant for the purpose of developing, implementing and evaluating a comprehensive service plan. Psychological assessments were used to inform intervention services for children who were already struggling to demonstrate age appropriate developmental milestones and achievement. Building Capacity- Raising Resiliency also provided for workforce development.

Role of Consortium Partners:

The grant program participants, three of whom are longstanding members of Integrating Professionals for Appalachian Children, worked together to deliver an interagency, interprofessional service to public preschools. This three-year program provided an important opportunity for the consortium partners to develop stronger working relationships. Each consortium partner played an active role in the program:

- TriCounty Mental Health and Counseling Services is the regional community mental health center that provided the Early Childhood Mental Health Consultation program director and consultant staff. This staff delivered universal, targeted and intensive consultation services. The Director of Early Childhood Mental Health at TCMH designed the evaluation strategy working with a statistical consultant and an independent evaluator.
- The Family Navigator Program at Ohio University's Heritage College of Osteopathic Medicine provided a nurse family navigator who provided education and navigating services to families need assistance knowing what to do for young children with developmental and behavioral concerns. The Director of the Family Navigator Program worked with the independent evaluator to design an evaluation survey administered at the end of the grant.

- The Psychology & Social Work Clinic at Ohio University's Department of Psychology provided in-depth evaluations for children.

Outcomes

The evaluation of the ECMH Consultation Program employed a mixed-methods design. Qualitative outcome data were gathered by an independent evaluator through annual teacher focus groups and individual school administrator interviews. Results were used to assess program satisfaction and inform program design. Quantitative data was collected to measure the effectiveness of program components, which aim to (1) increase capacity of teachers to manage challenging classroom behaviors, and (2) increase the resiliency of children in participating classrooms. To address increased capacity of teachers, we collected the Teacher Opinion Survey (TOS), a teacher completed rating scale. To address increased resiliency of children, the Devereaux Early Childhood Assessment (DECA) was used. The DECA is a standardized, teacher or parent completed resiliency-based behavioral rating scale with subscales for initiative, attachment, and self-control.

Teacher and Administrator satisfaction, ECMH Program

At the end of the first year, six out of nine teachers who had received the program participated in a single session group interview conducted by an independent evaluator. Two of the three school principals, whose schools had received the program, as well as the county preschool coordinator and the city school psychologist, were also interviewed individually. The results indicated that the family navigator and individual intensive consultation services were valued. Concerns were raised about the ambiguity of the universal consultation services and communication challenges. Five key recommendations were emerged: (1) Create a policies and procedures handbook that describes the program, the roles of ECMH-CP staff (2) define and utilize a communication system with two layers that promotes a continuous feedback loop between the school system and the ECMH-CP; (3) Use a child-centered model that those who work in school systems are familiar with, such as the Intervention Assistance Team (IAT) model to refer and serve children and families in need (3) Continue to provide family navigation services (4) Refine the role of the teacher consultant and what services exist within the universal services component of the ECMH-CP.

Substantive changes to the design of the program were implemented in Year 3. The ECMH CL services were concentrated in two districts which allowed for greater intensity of services, on site supervision, and the opportunity to build a model in partnership with school personnel. EMCH consultation staff changes were part of this transition. The original vision of having a seamless team was modified, recognizing that the components (i.e., the Family Navigators, the EMCH staff and the Assessment team) have not been successfully integrated given unique parameters of each component. As such, the ECMH CL program and the Family Navigator Program operated independently of one another during the second half of the grant.

EMCH Program Effectiveness, selected analyses reported:

- **Teacher Opinion Scales:** A *paired sample t test* was used to evaluate the differences in teacher scores between the fall and spring administrations. Year One: The mean score in the spring ($M=49.77$, $SD=3.11$) was significantly greater than the mean score in the fall ($M=46.75$, $SD=2.96$), $t(7) = 2.38$, $p < .05$. The standardized effect size, *Cohen's d*, was 0.84 indicating a large effect size. However, comparison of scores between participating teachers and wait-list teachers were inconclusive. Year Two: Results were inconclusive in regards to the change of participating teachers across the year; and in regards to comparison between participants and control group. For Participants, the pre-to-post differences were not statistically significant: fall ($M=48.7$, $SD=3.31$); the spring ($M=49.8$, $SD=4.79$), $t(9) = -.56$, $p = .6$. However, the shift in teacher opinion across the year reflected a medium effect ($d=0.27$).
- **Universal Consultation/ Whole Classroom DECA Scores:** Comparative analysis indicated wait-list classes had an over-representation of children whose initial scores were in the "strength" range (T score > 60). In order to control for these differences, a sub-group analysis was conducted which included only wait-list and participating classroom children whose initial scores were in the "typical" or "concern" range (T score < 60). Fixed slope, random intercept fit the data so multilevel growth modeling (three level analysis) was conducted to determine the rate of seasonal growth in for each subscale. On the Self-Control Subscale, program children had an average growth rate of 8 points. Again, this rate of growth would move the average child scoring in the "Concern Range" into the "Typical Range." Children in the control classrooms, on average, only made a gain of 1.6 points. On the Initiative Subscale, program children made an average growth of 10 points. Children in the control classroom, on average, only made gains of 5 points. There were no significant differences in rate of growth for the attachment scale.
- **Targeted Consultation:** Teacher and parent ratings on the DECA scale were analyzed using the same fixed slope, random intercept linear modeling. Year One Results: Analysis of the teacher ratings showed that attachment scores significantly

improved over time, however *initiative* and *self-control* did not. Parent ratings reflected that children's *self control*, *attachment*, and *behavioral concerns* as rated by parents, changed significantly over time. Final Results: An individual piecewise growth curve analysis indicated that for teacher ratings, children had a fixed growth rate of 7.465 DECA points between winter and spring. This rate of growth would move the average child who scored in the "Concern Range" into the "Typical Range". A similar analysis conducted for parents' ratings showed a non-significant growth rate of 1.745, $p=0.678$ and 3.111, $p=0.090$ respectively.

- Mental Health Climate Scales: A Bivariate Linear Regression between the DECA subscales and subscales on the MHCS was conducted. Increases in child DECA scores for initiative and attachment were positively related to teacher scores on the following subscales of the MHCS: "Directions and Rules", "Staff Awareness", "Staff-Child Interaction"; "Child Interaction."

Workforce Development

- 20 education professionals attended Jim Gill, Child Development Specialist singer/songwriter symposium on the use of music play to inspire young children and support health development.
- 23 educators participated in the Learning Community on Executive Functioning Deficits at Athens City School.
- 22 school personnel trained on DECA Face the Challenge (n=10), Becky Bailey's "Conscious Discipline" (n= 8), DECA's "Building Your Bounce" (n= 4)
- 250 professionals attended Bruce Perry, MD, PhD presentation on April 2011. It was an interprofessional audience including physicians, mental health professionals, developmental disabilities specialists, educators, legal professionals, parent and health professional graduate students. Presentation was on the effect of trauma and neglect from a developmental perspective, on identifying signs and symptoms of trauma.
- School staff participated in workforce development activities by attending the Georgetown Training Model; the DECA Face the Challenge; the DECA training program, 1 has completed the Parent IY program, and 1 has completed the Trauma-Focused Cognitive Behavior Training program. Additionally, the early childhood mental health consultants and the family navigator attended the National 0-3 Training Institute in December, 2011.
- 4 members of a regional interprofessional assessment team, the Southeastern Ohio Interdisciplinary Assessment Team trained on the Autism Diagnostic Observation Scale
- The ECMH program director gained expertise in: General management skills from the Appalachian Leadership Academy; ECMH program management from Jane Sites, Director of the Therapeutic Interagency Preschool at Cincinnati Children's Hospital; ECMH program development through consultation from Georgetown University's Center for Child and Human Development; CBPR approaches for community public health through the Community-Based Partnership Caucus of the American Public Health Association; Program Evaluation through Robert Wood Johnson's Retooling Professionals Evaluation Fellowship program; Advocacy skills through the Corporation for Ohio Appalachian Development (COAD), and the National Rural Health Association. The director presented a workshop at the All Ohio Counseling Conference which provided 140 participants training on best practices for young children.
- School personnel, state legislators and program staff participated in the advocacy session aimed to educate the Ohio's Children's Caucus about mental health –school partnerships and the importance of socio-emotional development as it establishes its legislative agenda.

Challenges & Innovative Solutions

The original project proposal included creating an advisory group composed of participating school superintendents and the CEO of the mental health clinic. The group was to meet quarterly and address sustainability challenges. During the first year, the group was only able to meet twice due to scheduling issues. While the initial meeting was well attended, the second meeting was not. It became evident that the best way to connect with superintendents was through their already-established county superintendent meeting to provide brief updates and engage in sustainability discussions. It also became evident, that the project would benefit from "internal school advocates" at all levels –teachers, principals, and other school staff—who believed the program had value and could articulate the value to their school superintendents.

Implementation of the ECMH consultation program was originally proposed to serve 19 classrooms with a team. This design was modified entering the third year of the grant such that more concentrated services could be delivered in four classrooms, those who were the most frequently using the program in the first two years. This change reduced the number of children served, but we believe it improved the quality of the programming offered to the schools that were most interested in the ECMH CL services. The Family Navigator Program continued to serve all preschool classrooms.

On-going Services and Activities:**Early Childhood Mental Health Services**

- Cost Share with School Districts: Superintendants signed a Memorandum of Agreement committing \$4,500.00 to fund the universal consultation component of the early childhood mental health consultation program. This commitment was secured between the second and third year of the grant. Since the grant ends prior to the end of the school year, it isn't know yet what level of support will be committed in the future, yet we are optimistic that districts interested in services will continue to provide some support.
- Additional funds were committed by the local 317 Board, and the community mental health center is willing to commit resources to continue these school-based services as long as referrals continue to be robust. Tri-County plans to negotiate each year with participating school superintendents to assess the financial and in-kind contributions they can make to continue the program services in their schools. Tri-County plans to obtain any funds for remaining expenses from the Athens-Hocking-Vinton 317 ADAMHS board. This strategy has already proven successful in sustaining the program's ECMH consultant working with our local Head Start program. Additionally, the ECMH program director will continue advocacy efforts to address policy and legislative actions that would sustain universal consultation regionally, as well as across Ohio.
- The current economic and financial realities facing the districts led to a sobering discussion that funding the program in its existing format, based on the costs projected, will not be likely. Moving forward the program will likely need to bill for services, requiring children to be diagnosed with mental health concerns, thwarting the health promotion/prevention focus on the initiative.
- Given it is anticipated that reimbursement for services will need to sustain the program, the programmatic tiers will be implemented as described: intensive consultation services will continue and will be funded by third party reimbursement; targeted consultation services be limited to 3-5 contacts at which time a decision will be made by the ECMH consultant, teacher, and parent about enrolling the child into intensive services; universal consultation services will be delivered in the same fashion.

Family Navigator Program

- The Family Navigator Program will continue to offer services in the region supported by the SAMHSA Project LAUNCH grant to Ohio and a newly developing care coordination effort to implement AHRQ's Community HUB/Pathway model. The Community HUB/Pathway model, if successful, will establish a funding mechanism for the Family Navigator Program, such that some of the services it provides will be supported through contracts with the managed care plans. This effort is being launched with \$350,000 of funding from Ohio's Governor's Office of Health Transformation.

Sustained Impact:

Our community has been impacted in significant ways since this program was funded. The Family Navigator program is anchored in the community, and continuing with diverse funding streams, ensuring families have access to services that empower them to participate in health care decisions affecting their families. The Outreach funding has helped accomplish this, as it allowed for increased staffing and communication with regional school personnel. The same can be said of the ECMH program; the grant funded allowed the ECMH Consultation Program at our local community mental health center to increase its capacity, hiring new personnel to provide services in the schools. Today, the community mental health center has an administrative unit dedicated to early childhood, complementing its child services. The outreach funds facilitated this institutionalized change. Both programs are strong additional to our regional health care delivery system that serves young children.

The grant funding has also reinforced that importance of interagency partnerships to address access and quality of care in rural communities. Leveraging existing resources, and partnering agencies with services to those with consumers in need, has enabled us to serve children and families that otherwise may not have embraced services delivered through traditional points of access. Successful integration of early childhood mental health consultation services into public preschools has likely reduced stigma regarding mental health services for young children.

Implications for Other Communities

The lessons we learned about how to recruit and retain early childhood mental health consultants into our program are important ones that could be applicable in other communities, rural or otherwise. Through this grant we have developed a competency template for

consultation skills in working with preschoolers. Additionally, we have developed training modules to advance workforce competency of educators, classroom aides, and health professional interested in working with young children. Within our school partnerships, we have adopted a highly participatory model for program design, ensuring that services delivered are valuable to the school districts. To accomplish this we have dedicated much effort to establishing a common language and shared vision for the program.

OHIO

Orrville Hospital Foundation DBA Aultman Orrville Hospital

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH16280 |
| Grantee Organization | Orrville Hospital Foundation dba Aultman Orrville Hospital |
| Organization Type | Critical Access Hospital |
| Address | 832 South Main Street Orrville, OH 44667 |
| Grantee organization website | www.aultmanorrville.org |
| Primary Contact Information | Cy Naumoff Risk Manager Phone number: 330-684-4711 Fax number: 330-683-2130 cy.naumoff@aultmanorrville.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-----------------------------------|---------------------|--------------------------------|
| Smith Dairy | Orrville/Wayne/Ohio | Dairy Products /Employer |
| Schantz Organ | Orrville/Wayne/Ohio | Organ Manufacturer/Employer |
| PackShip USA | Orrville/Wayne/Ohio | Product Logistics/Employer |
| Moog Flo-Tork | Orrville/Wayne/Ohio | Actuator Manufacturer/Employer |
| Mennonite Mutual | Orrville/Wayne/Ohio | Insurer/Employer |
| Dunlap Family Physicians | Orrville/Wayne/Ohio | Family Practice/Employer |
| Family Practice Center | Orrville/Wayne/Ohio | Family Practice/Employer |
| Orrville Area Chamber of Commerce | Orrville/Wayne/Ohio | Local Business Organization |

Community Characteristics

Area:

City of Orrville, located in Wayne County, Ohio

Community description:

Nestled in the beautiful hills of rural Wayne County, Orrville boasts some of Ohio's richest farm and dairy land. Orrville is a community of diverse industry and small to mid-sized employers comprise the bulk of area businesses. These small to mid-sized employers shoulder an excessive healthcare cost burden compared to large employers - leading to increased out-of-pocket healthcare expenses for many employees. Healthcare costs were threatening the ability of these employers to offer affordable healthcare coverage to their employees. Employee wellness programs were identified as a possible solution to increasing employer healthcare costs and decreasing employee access to affordable medical care.

Need:

Despite access to exercise opportunities, grocery stores, medical providers and employment, Orrville-area citizens experience obesity and diabetes rates similar to national averages. In addition, a grant partner, the Orrville Area Chamber of Commerce, identified rising healthcare costs as an increasing burden on small to mid-sized employers. Grant funding enabled the implementation of employee wellness programs with the primary goals of: 1) improving employee wellness; 2) decreasing employer healthcare costs and thereby

decreasing employee out-of-pocket healthcare premium/deductible costs; and 3) increasing employee access to health screens and wellness awareness.

Program Services

Focus Areas

Access to health screens, wellness program, and affordable healthcare premiums

Target Population

Underinsured

Description:

Basic wellness programs were ultimately implemented at the worksites of eight small to mid-sized employers. Number of employees ranged from 25 to 400 for the eight employers. Components of the "basic" wellness program included: 1) annual health risk assessment, including fasting glucose and cholesterol measures; 2) quarterly lunch & learns; 3) quarterly biometrics; 4) employee incentives; and 5) an annual survey developed by the HCRC project to measure changes in participant wellness knowledge.

Know Your Numbers was an annual, no-cost community screening program in which screen results, including glucose and cholesterol measures, were entered directly into an electronic data base. On-site registered nurses and physicians discussed screen results with each participant. In addition, results could be accessed by physicians participating in a local, proprietary health information exchange.

The *On Track* program was developed by a partnering, mid-sized employer as a means to educate individual, pre-diabetic or diabetic employees and their family members on how to live with and control diabetes. Educational programming was provided by the certified diabetic educator employed by grantee, Orrville Hospital Foundation. In order to protect the privacy of workers, identification of pre-diabetic and diabetic employees and follow-up invitations were handled by the third party responsible for administering annual health risk assessment testing.

Role of Consortium Partners:

Smith Dairy, PackShip USA, Schantz Organ and Dunlap Community Hospital were the original partner employers. Of the four, Smith Dairy had a strong history of employee wellness programming and corporate support. Smith's wellness programming went beyond the "basic" offerings; eventually offering employee challenges, case management, prescription reimbursement, and in 2012, the *On Track* diabetes education program. The HCRC consortium looked to Smith Dairy as a model of successful wellness programming and a local resource.

Moog Flo-Tork and Mennonite Mutual joined the coalition early in Year Two. Family Practice Center and Dunlap Family Physicians followed 10 months later. Each employer was responsible for implementing a basic wellness program and identifying a company contact. The company contact was responsible for scheduling wellness appointments and events; distributing employee health risk assessments and incentives; and collecting data.

When searching for additional employer partners, the Orrville Area Chamber of Commerce suggested area business having a possible interest in wellness programming. In addition, the Chamber disseminated information to area businesses for survey and recruitment purposes.

Outcomes

Evaluation data was collected in four main areas: provider satisfaction with the program, participant satisfaction with the program, improvements in knowledge about general health issues, and clinical measures. Selected evaluation findings are summarized below:

Employer Satisfaction

- Grant activities were provided for eight different employer groups, 62.5% which indicated that they had no wellness program in place when they joined the grant activities.
- 37.5% of employer respondents indicated that they were currently participating in ALL wellness program activities, with 62.5% indicating that they had participated in Lunch and Learn presentations.
- 87.5% of employer respondents indicate that they believe that the Wellness Program is effective in improving the health of their employees, and 75% believe that the program is creating a healthier culture within their organizations.

- 62.5% indicated that they will continue grant activities after the conclusion of the grant.

Participant satisfaction with Wellness Program Educational Activities

- The grant activities included data from 560 female participants and 713 male participants across a three year period.
- 257 participants responded to surveys about educational activities (Lunch & Learns). Of these respondents:
 - 77.1% indicated that their “level of awareness” had increased regarding the topic of the Lunch and Learn presentations;
 - 84.4% indicated that Lunch and Learn presentations had provided them with “skills that they could take away” and apply immediately;
 - 55.6% indicated that as a result of the Lunch and Learn presentations they would be making “changes to their personal life”; and
 - 84.0% of respondents indicated that they would “recommend the program” to others, and indicated that the program was of “very good quality”.

Knowledge about General Health

- 553 participants completed a second Annual Wellness Survey in 2011 and a third collection for 2012 is underway. Of these participants:
 - 47.5% were able to correctly identify values for high blood pressure (up from 36.9%);
 - 87.3% were able to correctly identify desirable blood pressure levels (up from 79%);
 - As many as 62% were able to correctly identify desirable cholesterol levels, HDL levels, and LDL levels;
 - 77.2% were able to correctly identify the impact of sodium on blood pressure (up from 46.1%);
 - 62% were able to correctly identify the amount of physical activity that an adult should have on a daily basis (up from 13.4%).
 - Annual Wellness Survey responses indicated that participants reported eating a significantly greater number of fresh fruits and vegetables occurred from year one to year two of the grant activities, with 67.5% of participants reporting that they have made changes in order to improve the healthfulness of their diets.

Clinical Measures

Clinical measures were taken by health professionals and aggregate data were reported in Health Risk Assessments. The changes in the clinical data represent a positive increase in identifying and treating participants with at-risk biometric levels. The clinical data includes data from 522 participants in 2010 and 770 participants in 2011, and data collection is underway for 2012. This data indicated the following:

- From 2010 to 2011, 36% fewer participants had elevated blood pressure levels.
- The number of participants with elevated cholesterol levels dropped from 44.29% to 35.42% from 2010 to 2011.
- The number of participants with at risk LDL levels dropped approximately 7.18% during the 2010 to 2011 of the grant activities.

Challenges & Innovative Solutions

From the onset of the Healthcare Cost Reduction (HCRC) grant project, the objective demonstration of a positive Return on Investment (ROI) was identified. Claims data is an important component in the ROI calculus. However, claims data is typically the proprietary property of an insurer, not the employer. A local insurer supported the project by providing aggregated claims data for their insured grant employers. This claims data was in addition to that provided by our two, partner self-insured employers. A local tertiary care facility also loaned us a consultant experienced in the insurance and wellness fields. The consultant’s expertise proved invaluable throughout the first two years of the grant project.

A concerted effort was made to develop and offer an insurance product specific to employers offering a “wellness program.” AultCare, a local insurer, addressed employer concerns regarding insurance cost volatility by developing a tiered product with two-year insurance rates for employers. This allowed employers to budget their health care costs for not just one year, which is the industry standard, but two years. Any employer was eligible for the program, regardless of their population’s health. The inclusion of a wellness program, which included criteria for incentives along with health care coverage options with two year rates, would over time, be instrumental in helping employers (and employees) better manage their cost of claims/health care, improve the health of their employees, reduce absenteeism, and increase productivity. The plans were well received but no partner employers were willing to move forward. For most employers the inclusion of a wellness product was an additional cost. This may have factored into the lack of interest.

Ultimately, the greatest challenge faced by the HCRC project was convincing area employers to implement worksite wellness programming on company time. Manufacturers were unwilling to pull their employees from production lines for 15-minute evaluation/education periods – despite the fact external costs of the program were grant funded *and* the potential positive impact to employee health and healthcare costs. It is hoped the dissemination of final project ROI values will influence additional area businesses to implement wellness programs.

Sustainability

On-going Services and Activities:

At a minimum, employee wellness programs will remain in place at six of the eight partner employer worksites. Employers are moving to a cash incentive / premium differential combination to incentive participation in company wellness programs. In addition, the final ROI data will be presented to partner, Orrville Area Chamber of Commerce, for dissemination to area employers. It is hoped this dissemination will influence additional area businesses to implement wellness programs.

At the time of this report, grantee, the Orrville Hospital Foundation, is exploring ways to continue the annual offering of the community-wide screening program, *Know Your Numbers*.

Finally, the 2012 *On Track* diabetes education program will be supported by the partner employer, who was responsible for the program's development. If successful, the program will be shared with other area employers through grant partner, Chamber of Commerce.

Sustained Impact:

The desired impact of the HCRC Outreach grant project is the improved health of area employees and their communities. Flowing from this impact is a reduction in the healthcare costs for employees and employers. Not as obvious are the secondary impacts of the HCRC program. The HCRC program fostered personal and working relationships with area employers. As a result, the hospital experienced an increase in support from the local business community.

In addition, a healthier workforce may affect the annual healthcare costs of employers. One of the HCRC mid-sized partner employers held their average cost per member claims to 33% below the industry average over the three-year grant period. Kaiser reports national average increases of 5%, 3% and 9% for the same time period. A healthier workforce and lower healthcare costs is attractive to potential employers and may be a driver of economic development.

Finally, the concept of premium differentials between wellness participants and non-participants was introduced to the Orrville business community. Differentials serve several purposes: 1) motivates employees experiencing pay differential on paychecks; 2) provides alternative "incentive model" to employers unable to provide direct financial incentives for wellness participation; and 3) allows employers to offset cost of wellness program using differential of non-participants.

Implications for Other Communities

For better or worse, United States employers became enmeshed with employee healthcare in 1942 – the year Congress made employer-provided health care tax deductible for employers. In recent years the percentage of American adults receiving their health insurance from employers hovers just below 50 percent. With the increasing burden of providing healthcare benefits to employees, employers are realizing they have a vested interest in the health of their employees. In addition, employers are in a unique position to encourage employee health through incentives and disincentives.

In order to improve the overall wellness of a community and its citizens, employers must be educated on the positive ROI associated with employee wellness programs. They must also understand that a positive ROI can only be obtained through an active wellness program in which the employer has a vested interest. Simply offering an annual screening exam and a one-time incentive will not result in the outcome sought by employers. Finally, hospitals may benefit financially as providers of wellness programs.

OHIO

PathStone Corporation

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12665 |
| Grantee Organization | PathStone Corporation |
| Organization Type | Not for profit organization |
| Address | 2-453 CO. Rd., V Liberty Center, OH 43532 |
| Grantee organization website | Pathstone.org |
| Primary Contact Information | Heather Cruz Deputy of Community Health Phone number: 410-875-6654 ext. 230 Fax number: 419-875-4010 hcruz@pathstone.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---------------------------------|------------------------|---|
| Fulton Co. Health Dept | Wauseon/Fulton/OH | Health Department |
| Henry Co. Health Center | Napoleon/Henry/OH | Hospital |
| Defiance Mercy Hospital | Defiance/Defiance/ OH | Hospital |
| Migrant Health Promotion | Defiance/Defiance/OH | Migrant health agency |
| OSU Extension | Bowling Green/Wood/OH | University extension |
| Community Health Services | Fremont/Sandusky/ OH | Community health clinic |
| Allen Co. Health Partners | Lima/Allen/OH | Community health clinic |
| Project Hope | Archbold/Fulton/OH | Immigration Clinic |
| Williams Co. Health Dept. | Montpelier/Williams/OH | Health Dept |
| Defiance Co. Health Dept. | Defiance/Defiance/ OH | Health Dept |
| Wood Co. Health Dept. | Bowling Green/Wood/OH | Health Dept |
| Ridge Project | Defiance/Defiance/OH | Hispanic Outreach to Youth |
| Northwest Ohio Community Action | Defiance/Defiance/OH | Community Services Head Start, Rental, Utility Assist. |

Consortium Partners

Area:

Nine counties: Defiance, Henry, Fulton, Putnam, Sandusky, Seneca, Williams, Wood, Ottawa

Community description:

According to the Ohio Department of Job and Family Services, Farmworker Monitor Advocate Report (Lucio, 2004), Ohio hosts 15,782 Migrant Farmworkers. The report documents 151 licensed migrant camps in Ohio in 2004. PathStone has identified an additional 50 unlicensed camps and other locations where farmworkers live. This information alone does not include the poultry or dairy production, National Agricultural Workers Survey, or migrant statistics. Therefore, it could be estimated that there are anywhere from 20,000 to 40,000 farmworkers in Ohio. Over 99% of the population is Hispanic, 80% have limited English proficiency, and over 85% have less than a high school education, earning less than \$7000 a year.

Need:

Provide a brief description of the need that your Outreach program was designed to address.

Farmworker health barriers are inherent in the farmworker lifestyle, including: lack of education, language barriers, poverty, isolation, poor nutrition, pesticide exposure, lack of insurance, lack of money, lack of transportation, and distrust. Fear is generated by cultural differences and lack of knowledge regarding resources. Farmworkers and settled-out Hispanic/Latinos often live near their work, in rural areas. It can be a long distance to the nearest health service provider. Families with only one vehicle, needed to transport family members to work in the fields face tremendous difficulties getting access to health care or health education. Through the Outreach grant, PathStone served Ohio's underserved and vulnerable farmworker and rural Hispanic/Latino population by addressing address maternal and child health, diabetes, and domestic violence in northwest Ohio through outreach, prevention education, care coordination and other services.

The National Farmworker Health Center estimates the infant mortality rate for farmworker women is 25% to 50% higher than the national average. Farmworkers and other rural Latinos often suffer from poverty-linked poor nutrition and diabetes.

Program Services

Focus Areas

Access: Primary Care
Children's Health
Chronic Disease Management: Diabetes
Community Health Workers/Promotoras
Coordination of Care Services
Health Education and Promotion
Maternal/Women's Health
Migrant/Farm Worker Health

Target Population

Infants
Adults
Elderly
Pregnant Women
Caucasians
Latinos
Uninsured
Underinsured
Farmworkers

Description:

The program focused on three areas: diabetes prevention and control, child and maternal health, and safety planning with victims of Domestic Violence. The participants were provided with interpretation, transportation, education, and care coordination by two Promotoras.

- **Access to Quality Healthcare Services** – Promotoras counseled individuals about health behaviors and educated clients on specific sources for ongoing care.
- **Diabetes** – Increased the proportion of persons with diabetes who receive formal diabetes education and case management. Decreased the number of pregnant women with gestational diabetes through health literacy and healthy lifestyle changes.
- Provided **injury and violence prevention** though education and referral to community resources.
- **Maternal, Infant, and Child Health** - Provided education on the important of prenatal care, infant safety, breastfeeding and the abstinence from alcohol, cigarettes, and illicit drugs.

Role of Consortium Partners:

The Consortium Partners worked in identifying resources to improve health access for migrant and seasonal farmworkers and the rural Latino population with a focus on diabetes, maternal and child health and domestic violence. Patients were often times referred to local health department or hospitals for follow-up care after home visits. During the last year of our Outreach grant, the Consortium Partners grew by more than 50%.

Outcomes

Through the Outreach grant program, 64 individuals at risk or diagnosed with diabetes received prevention and self-management education and care coordination, 82 prenatal women and children received information on keeping healthy during pregnancy, care coordination and what to expect during the delivery for first time mothers-to-be. For those victims of intimate partner violence, PathStone guided them in the development of a personalized safety plan and provided them with referrals to shelters, victim services and immigration clinic for U-Visa assistance.

The results for the three years of the Outreach Programs were as follows:

Diabetes:

- 38.7% had Type II Diabetes
- 3.0% were Type I Diabetics
- 9.8% were Gestational Diabetes
- 19.9% were at risk for Type II

High Blood Pressure

- 32.2% recorded at or below 130/80

Life style changes

- 51.5 % reported a start on or increase in physical activity
- 54.4% reported changes in diet
- 39.1% lost weight

Challenges & Innovative Solutions

Because of the rural nature of the service area, many health care providers do not provide interpreters for patients. PathStone in some instances would have to serve as the interpreter or transport them to Community Health Services that had a medical interpreter on staff. Many of the pregnant farmworker participants were enrolled in the program at the end of their second or in the third trimester due to their mobile lifestyle. Many doctors refused services because they were considered high risk patients and a liability. Toledo Hospital agreed to accept PathStone patients; however, it was sometimes more than 60 miles away from patient's residence. New point systems established by employees, where points can be deducted for those who are absent for medical appointments, in combination with being under or un-insured, many patients do not seek medical attention or attending yearly check-ups. Promotoras were able to meet with patients individually at their residence in the evenings to ensure that they understand their options and care.

Sustainability

On-going Services and Activities:

PathStone has developed a strong consortium, Northwest Ohio Hispanic/Latino Health Coalition (HLHC) that meets monthly. It is a combination of health care providers and health service providers that want to create better access to health care for Latinos in northwest Ohio. During the monthly meetings members are able to discuss projects, issues and collaboration ideas. Currently members are planning a networking evening and activities for Rural Health Day. A committee is compiling a resource book for the area that can be used by organizations to ensure that they are making the proper referrals. PathStone hopes that as awareness around access to health care for Latinos in northwest Ohio increases that there will be absorption of services. For example, Community Health Services, has hired a Spanish interpreter, however it is a male, and many female patients do not feel with him in the exam room.

In addition, PathStone is currently looking for funding for staff to become certified interpreters. With the certification PathStone will be able to develop contracts with health care and service providers for interpretation services. This will be mutually beneficial for partners and PathStone, but also increase the quality of care for farmworkers and rural Latinos.

With this funding, PathStone and HLHC have realized that there are many farmworkers who do not have access to healthcare and are not aware of resources that are available to them. Further, providers are not equipped to provide culturally sensitive services. HLHC and other community partners are realizing the role that PathStone plays in connecting farmworkers and rural Latinos to health care services and acting as liaison between the two. In the future PathStone and HLHC partners hope to collaborate on grants to benefit farmworkers and rural Latinos.

Sustained Impact:

The Promotoras model that PathStone used to disseminate prevention education had a positive impact on patients and empowered them to be experts. Many of those who have received individualized education have shared the information with friends and family or have referred them to the program. The interest and success of the program can be attributed to the Promotoras model and empowering patients to feel like they can be capable to share knowledge around health. In year 3 of the program, the majority of the participants were referred from previous ones.

PathStone initiated an educational campaign around the importance of bringing copies of medical records with them when they travel to Ohio for the agriculture season. We encourage women who are being seen by a doctor in their home state to travel with their medical records to prevent them from being considered a “high risk.”

Through the work with the consortium, there is dialogue and consideration for farmworkers and rural Latinos in decision making. Health care organizations are evaluating their services to see if they are linguistically and culturally appropriate for the population.

Implications for Other Communities

PathStone’s outreach strategies and Promotoras model will be useful for those who want to reach farmworkers and rural Latinos.

OHIO

Trinity Hospital Twin City

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12658 |
| Grantee Organization | Trinity Hospital Twin City |
| Organization Type | Hospital |
| Address | 819 N. First Street, Dennison, Ohio 44621 |
| Grantee organization website | www.trinitytwincity.org |
| Primary Contact Information | Dr. Timothy McKnight Fit for Life Project Director Phone number: 740-922-7471 Fax number: 740-922-6945 tpoland@trinitytwincity.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|------------------------------------|-------------------------------|
| Trinity Hospital Twin City | Dennison, Tuscarawas, Ohio | Critical Access Hospital |
| Dr. Tim McKnight | Dennison, Tuscarawas, Ohio | Physician practice |
| Tuscarawas County Health Department | Dover, Tuscarawas, Ohio | Health Department |
| Carroll County Health Department | Carrollton, Carroll, Ohio | Health Department |
| Tuscarawas County YMCA | Dover, Tuscarawas, Ohio | Non-profit |
| Ohio State University Extension Office of Tuscarawas County | New Philadelphia, Tuscarawas, Ohio | Non-profit education |
| Dr. Nina Kucyk | Dennison, Tuscarawas, Ohio | Private practice psychologist |
| Dr. Michael Jakubowski | Dennison, Tuscarawas, Ohio | Private practice chiropractic |

Community Characteristics

Area:
Outreach project services were offered in several communities within Tuscarawas County, Ohio and Carroll County, Ohio. Some residents of the neighboring counties of Harrison and Guernsey Counties also traveled to Tuscarawas County for project services.

Community Description:

Fit for Life's target population includes all adults of Carroll, Harrison and Tuscarawas Counties, Ohio. Tuscarawas County has a population of 91,490 people according to data from the Ohio Department of Development's Ohio County Profiles 2010. According to the same data source, Carroll County has a population of 29,166, and Harrison County has a population of 15,890. The race breakdown average for the three counties is as follows: 98% Caucasian, .8% African American, .6% Hispanic, .4% Asian & Pacific Islanders, and .2% American Indian. According to the 2011 report from Trust for America's Health and the Robert Wood Johnson Foundation, Ohio is the 13th most obese state in America with an adult obesity rate of 29.6%. Ohio ranks 21st highest in type 2 diabetes and 17th highest for hypertension. In the project's service area counties, heart disease (which is most often a result of obesity) is the number one cause of death according to the Ohio Department of Development County Profiles Report from 2008. The residents of the Fit for Life service area are mostly low-income to middle-income, as Trinity Hospital Twin City (lead agency) is located in a federally designated low-income population Health Professional Shortage Area (HPSA) for the southern half of Tuscarawas County. According to data from the Ohio Department of Development Ohio County Profiles 2008, the median household income for Tuscarawas County is \$42,995 with 30.7% of residents living at or below 200% of the Federal Income Poverty Level. Many in the project's service area lack

reliable transportation, and many are among the working poor population and either do not have health insurance or are underinsured for health services.

Need:

Our outreach program was primarily designed to reduce the number of overweight and obese adults in our service area by meeting the following needs: 1)lack of affordable diet and exercise training; 2) need for a central location where people can access health and wellness information; 3) need to provide treatment for obesity; 4) need for enhanced diabetes treatment and education; 5) need for more fitness programs; 6) need to address health concerns of the working poor; and 7) need to provide local access to services due to the lack of affordable public transportation. Prior to our outreach program's founding, none of the above needs were being met in our service area. Nutrition and exercise training and wellness programs were only available to people who had the extra income to pay for such services which left a large portion of the population without help.

Those in the target population desperately needed the weight management and healthy lifestyle training that the Trinity Hospital Twin City Fit for Life Program provides. In a 2002 Ohio Department of Health Study of Tuscarawas County, the following needs were identified:

- 90.5% of Tuscarawas County residents eat fewer than the recommended daily allotment of five servings of fruits and vegetables. This percentage is higher than the State rate of 78.6% and the National rate of 76.8%.
- 43.2% of Tuscarawas County residents have been advised by a health professional that their cholesterol is high, as compared to the State rate of 32.4% and the National rate of 30%.
- 30.7% of Tuscarawas County residents have been told by a health professional that they have high blood pressure, higher than the State rate of 27.4% and the National rate of 23.9%.
- Heart disease (an obesity-related disease) is the number one cause of death in Tuscarawas County with 37% of annual deaths attributed to the disease.
- Diabetes (an obesity-related disease) is the seventh leading cause of death in Tuscarawas County, and incidences of type 2 diabetes are on the rise.

More recently, an Ohio Department of Health Study of Tuscarawas County in 2010 found that 32.4% of residents are obese. If Tuscarawas County were a state, it would place second only to Mississippi which ranked as the fattest US state with a 34.4% obesity rate in the July 2011 "F as in Fat" Report by Trust for America's Health and the Robert Wood Johnson Foundation. Furthermore, the other consortium member counties do not fare much better. According to County Health Rankings 2008, Carroll and Harrison Counties have an obesity rate of 30%.

Program Services

Focus Areas

Health Education and Promotion
Physical Fitness and Nutrition

Target Population

Adults

Description:

The Trinity Hospital Twin City Fit for Life outreach grant project provides nutrition and exercise training through Fit for Life wellness and disease prevention classes hosted at both the community level and at workplaces. The grant project also provides community health promotion. The Fit for Life class program is designed specifically for men and women who are adults, age 18 and over, who want to learn how to lead a healthy lifestyle. These adults are provided with a 12 week session of classes that meets once a week for 60 to 90 minutes. Fit for Life participants learn how to eat and exercise. In addition to learning about nutrition and physical activity as ways to wellness, Fit for Life also addresses mind wellness issues by covering the reasons for emotional eating and how to overcome the stress that leads to emotional eating and other eating disorders.

In the Fit for Life Program, individual instruction is provided by the Program Director, Dr. Tim McKnight, who is a Board Certified Family Practitioner. The 12-week curriculum emphasizes realistic lifestyle changes, resulting in enhanced levels of health and fitness. Customized nutrition and fitness plans are enhanced by class topics that include the wellness choice, nutrition for life, eat to live, understanding food labels, cardiovascular fitness, stress management, strength fitness, disease prevention, healthy aging and others. Additionally, Fit for Life participants benefit from the opportunity to interact one-on-one with wellness experts that include Dr. McKnight, a psychologist, a dietitian, a chiropractor, and fitness professionals.

The ultimate goal of the Fit for Life classes is not necessarily weight loss; the ultimate goal is to improve the overall health of participants, with weight loss being a natural outcome. Community Fit for Life class sessions are offered at least two times each year, and workplace Fit for Life classes are conducted several times each year based upon the needs of specific employers. Fit for Life class success is evaluated by using participant satisfaction surveys, participant pre and post health knowledge tests, and the results of specific health measurements including weight, waist circumference, body mass index (BMI), body fat percentage, cholesterol and blood pressure.

The Fit for Life program often succeeds where other weight loss programs have failed because Fit for Life provides a more holistic approach to achieving wellness. Traditional wellness programs focus primarily on how much a person eats or exercises. Fit for Life curriculum emphasizes a balance between might, mind, heart and spirit to achieve overall wellness. Participants are encouraged to make gradual changes to their lifestyles—changes that are much easier to sustain over time. Another major contributor to Fit for Life's success is the leadership and expertise of our Project Director, Dr. McKnight, and the other health experts in the classroom.

Trinity Hospital Twin City's Fit for Life outreach program also provides community health promotion by regularly offering health and wellness information on local radio stations, at mini seminars held at local libraries and schools and at community health fairs.

Role of Consortium Partners:

Trinity Hospital Twin City, Dr. McKnight, the Tuscarawas County YMCA, psychologist Dr. Nina Kucyk, chiropractor Dr. Michael Jakubowski and the Ohio State University (OSU) Extension Office of Tuscarawas County staff play instrumental roles in conducting the Fit for Life community and workplace classes. Dr. McKnight and the hospital serve as project director and lead agency respectively and conducted most of the work of actually registering Fit for Life participants, developing the Fit for Life curriculum and hosting the classes. The YMCA, psychologist, chiropractor and extension office provided expert presentations in the Fit for Life classes. The Tuscarawas & Carroll County Health Departments assisted the outreach program by conducting several of the health promotion activities of the project and providing for some class facilitation.

Outcomes

As of April 3, 2012, more than 1,200 adults have completed or nearly completed (25 adults will complete the program on April 30, 2012) Fit for Life programming (About 683 adults completed programming during our first 3-year HRSA outreach grant, and another 517 in the 2009-2012 grant timeframe). During the 2009-2012 project period, 20 Fit for Life sessions were conducted to reach a total of 517 adult participants.

Data collected from past Fit for Life participants demonstrates that the average participant achieved the following results:

- Lost 7 pounds from starting weight, lowered systolic blood pressure by 7 points
- Lowered diastolic blood pressure by 2.5 points
- Lowered total cholesterol by 13 points
- Lowered triglyceride level by 20 points.

Additionally, pre and post behavioral surveys of the participants revealed that the number of participants exercising regularly increased by 40%, the number of participants exercising at least three days a week increased by 60%, and the number of participants eating four or more servings of fruits and vegetables daily increased by 37%.

The community Fit for Life classes has been the project's most successful endeavor. The 12-week sessions are currently offered every winter and fall, and there has always been a waiting list of adults who want to register for the next class session. The average session attendance rate for Fit for Life is 81%.

The majority of class participants attend at least 9 of the 12 weekly sessions, and the rave reviews from Fit for Life graduates have made promoting Fit for Life easy thanks to word-of-mouth referrals. To accommodate the high demand for the Fit for Life community classes and still keep the average class size at a reasonable number, our program has had to offer two different class times during each session resulting in two winter classes and two fall classes. During the three year time-frame of the grant project, a total of ten community Fit for Life sessions were held resulting in 306 adults having completed the program.

During the three year grant period, 211 adults have completed Fit for Life programming through ten class sessions offered at ten different worksites. Some workplace groups did better at meeting wellness goals than others. The successful worksite groups seemed to have one characteristic in common—they all had a positive business culture with owners/managers taking an active and positive role in assuring that employees were supported in their wellness efforts. The calculation of return on investment for one of the worksites

was \$17.45 for every dollar spent on their employees to participate in Fit for Life resulting in an estimated \$50,206 five year decrease in the company's medical spending and an estimated increase in economic productivity across five years of \$53,611.

Past Fit for Life participants all reported on post surveys that they would recommend Fit for Life to friends. Here's the testimonial of just one of our satisfied graduates:

Larry W. Parrish, 66, of Uhrichsville, Ohio, waged the weight loss battle daily. Looking for help, he registered for Trinity Hospital Twin City's Fit for Life health and wellness education program in the fall of 2011. After twelve weeks of attending Fit for Life classes and learning from the Fit for Life Director, Dr. Tim McKnight, and other presenters, Larry's results spoke for themselves. "I lost a little over thirty pounds and went down about three or four pant sizes," he shared. "I feel a lot better. I'm more mobile than I was. I can tie my shoes and bend down to the floor to pick up things. I can even drive my car comfortably. Before losing weight, my stomach used to touch the steering wheel, and now I have more room." Before Fit for Life, Parrish had trouble breathing, had high blood pressure and was borderline diabetic. Now he's feeling better and planning to continue his weight loss progress. "I consider Fit for Life to be a life extender," noted Parrish. "I think the program's terrific and that everyone ought to at least try it. Fit for Life focused on helping the whole person--spiritually, mentally, physically and emotionally." Parrish enjoyed learning about proper portion sizes and what foods were essential for good health. He also looked forward to the weekly motivation and accountability of the classes. "Dr. McKnight is wonderful," he shared. "He's a really a good motivator. He explains the stuff so you can understand it." Now Parrish, a retired steelworker, is enjoying his new lease on life and has more energy to spend with his wife, son and two grandchildren.

Challenges & Innovative Solutions

During the grant project, we experienced three primary challenges. First, during the second year of the grant program, a new community-wide collaborative focusing on health and wellness was formed in our county. Known as Healthy Tusc, this new collaborative was funded in part by a grant from the Robert Wood Johnson Foundation. Our solution was to become an active participant in the collaborative group to merge the partnerships between the Fit for Life consortium and Healthy Tusc to establish a united front on wellness for our county. This solution has resulted in our county hosting a Wellness Summit in the fall of 2011. More than 600 adults attended the event which featured presentations by National wellness experts.

Second, recruiting employers to host workplace Fit for Life sessions was much more challenging than we anticipated. Many employers were interested in our program but were unable to afford the nominal cost of our program due to the economic difficulties that many businesses in our region have experienced. Additionally, many area employers are already accessing a basic wellness program through a local health insurance provider that offers monetary rewards to businesses that use their program. In spite of the economics, we still conducted ten Fit for Life sessions at ten worksites. Our program is more in-depth than the insurance provider's program which was attractive to employers. We also adjusted our program to meet the employer's needs by offering flexible scheduling and price sharing with their employees.

Third, given the large volume of scientific data available about health and wellness, it was challenging for our project director, Dr. McKnight, to adapt his class presentations to include the proper balance of research and hands-on demonstrations and activities. We addressed this challenge by regularly surveying participants and then reviewing those surveys to make necessary program improvements.

Sustainability

On-going Services and Activities:

Trinity Hospital Twin City's Fit for Life program will be sustained beyond the outreach grant period. Specifically, we will continue to offer community Fit for Life class sessions and community health promotion activities. We will discontinue our workplace Fit for Life class sessions because our community classes are open to anyone in the community. Also, we feel that without grant subsidies, most of our local employers won't be able to absorb the full cost of hosting a Fit for Life session at their worksites.

We will fund the continuation of the community Fit for Life sessions through participant fees to cover blood work, handouts and incentives and through major sponsorships from local businesses. We will ask businesses to provide a three year sponsorship commitment for which we will give their business recognition. The sponsorships will enable us to offer two 12-week Fit for Life sessions each year. We will fund the continuation of our community health promotion activities through the hospital's community benefit investment.

Sustained Impact:

The Trinity Hospital Twin City Fit for Life Outreach Program has created the following sustained impacts in our community:

- Increased community awareness around health
- Wellness curriculum developed by Dr. McKnight will enable the educational components of Fit for Life to be used in other settings
- Improved health and increased wellness knowledge of 517 adult Fit for Life participants
- Strengthened Healthy Tusc county-wide wellness collaborative with a long-term commitment to health thanks to the investment of our program staff's time and expertise

Thanks to the participation and support of our hospital's leadership in the Fit for Life program, our hospital's wellness policies and culture have changed positively resulting in healthier menu options in the cafeteria, healthy foods served at hospital events and more fitness activities being encouraged.

Implications for Other Communities

The Fit for Life program curriculum could easily be adapted to other communities; however, other communities should keep in mind that the use of the wellness experts who are passionate about wellness to present the curriculum was the key component of our success. Therefore, we suggest that other communities utilize their own experts if they undertake a similar program. Fit for Life incorporates many of the same principles of other best practice models around weight loss.

OREGON

La Clinica Del Carino

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12684 |
| Grantee Organization | La Clinica Del Carino |
| Organization Type | Community and migrant health center |
| Address | 849 Pacific Avenue Hood River, OR 97031 |
| Grantee organization website | www.lcdcfh.org |
| Primary Contact Information | Paul Moyer Health Promoter/Project Director Phone number: 541-308-8341 Fax number: 541-386-1078 pmoyer@lcdcfh.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--|-----------------------------------|
| Nuestra Comunidad Sana | Hood River/Hood River/Oregon The Dales/Wasco/Oregon | Community health promotion agency |
| Providence Hood River Memorial Hospital | Hood River/Hood River/Oregon | Hospital |

Community Characteristics

Area:

Hood River and Wasco Counties, Oregon Klickitat and Skamania Counties, Washington

Community description:

The majority adult population in all four service counties is Caucasian, however demographic change has been exceptionally rapid in both Oregon and Washington since the late 1980s. Approximately 9,200 permanent residents of the Mid-Columbia are now of Hispanic or Latino descent, primarily first-or second-generation immigrants from Mexico, comprising 25% of the Hood River County population and 12% of the Wasco County population. In addition 800 Migrant and Seasonal Farmworkers (MSFW) and their families come to The Gorge for the cherry harvest each June and July. Hood River and Wasco Counties have both been designated a Medically Underserved Areas (MUAs). They also have designation as a Health Profession Shortage Area (HPSA) for migrant seasonal farm workers, mental health and dental. Both counties are also considered "Critical Access Areas" in terms of medical care with the nearest metropolitan being Portland, Oregon. Skamania & Klickitat County residents work and seek healthcare in Hood River County. Hood River County is among the poorest counties in the state and has been designated by the State of Oregon as a Distressed County. The overall poverty rate for the County is 14% (compared to the State rate of 12%) with the childhood poverty rate at 18.9% (compared to 12.8 for all of Oregon) and the elderly poverty rate at 8% (equivalent to the rate for the State). Cascade Locks is the most economically distressed city in Hood River County due to an extreme paucity of jobs, businesses and services. Poverty rates in Wasco County were in general slightly lower, however the percentage of children who qualified for free and/or reduced lunch (58.4%) was substantially higher than Hood River (49%). Fifty-eight percent of Hispanics in the Mid-Columbia region do not have health insurance, compared to 18% of the Anglo families, based on a health survey conducted in 2000, at a time when Oregon Health Plan insured more Hispanics than it does today.

Need:

The overall goal of the ¡Pasos Adelante!/Steps to Wellness! project is to address diabetes, obesity and the role stress play in our rural residents' ability to make healthy choices for themselves and their families with particular emphasis on low-income and medically underserved English-speaking and Spanish-speaking residents of our four-county rural community. Diabetes is one of the most urgent problems facing the farm worker community. Mexican-Americans medically diagnosed with diabetes: lack knowledge about the importance of controlling their disease; deny or ignore their condition or inadequately treat their disease with ineffective lay or "natural" remedies. It is therefore essential that culturally appropriate classes, support groups and peer educators are available to this population. Mental health and stress issues are also intertwined with chronic disease and obesity self-management.

Program Services

Focus Areas

Access: Primary Care
Behavioral/Mental Health
Chronic Disease Management: Diabetes
Community Health Workers/Promotoras
Health Education and Promotion
Migrant/Farm Worker Health
Physical Fitness and Nutrition

Target Population

Pre-school children
School aged children - elementary
School aged children - teens
Adults
Elderly
Caucasians
Latinos
Uninsured
Underinsured
Low income

Description:

La Clínica Del Cariño (LCDC) coordinated and implemented grant services and activities along with support by project partners, Providence Hood River Memorial Hospital (PHRMH) and Nuestra Comunidad Sana (NCS). The following five activities were implemented through the Outreach grant:

1. Expanded a diabetes case management program to Wasco County to improve the self-management and health outcomes of patients diagnosed with diabetes. Staff was identified hired and trained with first patient enrolled in case management program in year one. A total of 188 patients were enrolled in the program and case managed by a part time Registered Nurse and a Clinical-Community Health Worker over the three year grant period.
2. Expanded a group program (course consisting of 15 weekly classes) addressing behavior change to Wasco County for community members who want to manage their diabetes and/or weight. A total of five series were held in Wasco County and six series were continued in Hood River County in the three year grant period.
3. Initiated a group-based Family Wellness program for parents interested in improving the health of their children composed of three classes. Topics included physical activity, nutrition, and parental modeling. A total of seven series were offered, four in Hood River County, and three in Wasco County during the grant period.
4. Conducted outreach activities regarding obesity and diabetes awareness and prevention to those community members most at risk: seniors and migrant farmworkers. CHW outreach teams organized and conducted outreach during three cherry harvest seasons for three weeks of harvest three nights per week. Presentations were done and blood glucose screenings were performed on individuals which met the screening criteria. All participants with abnormal results were referred for follow up with a medical provider.
5. Integration into existing consortiums to address chronic disease and other community health needs of in Hood River and Wasco Counties. Bi-monthly and quarterly meetings were held in each respective consortium to discuss community needs and how to address them.

Role of Consortium Partners:

The project consortium was quite involved in the early stages of the grant, but was challenging to keep whole consortium involved through the entire grant period.

- LCDC was the project grantee and provided the Project Director who worked in collaboration with Consortium partners to meet program goals. LCDC was responsible for the overall administration and management of project, including reporting and budget. LCDC also: 1) Provided and trained RN Case Manager and coordinated the development and implementation of a diabetes case management program in their clinic in The Dalles, Oregon; 2) Coordinated and supervised adult groups for individuals with diabetes and/or obesity; 3) Coordinated and supervised parent-child groups for families whose children are obese or at risk of obesity; 4) Provided 60 hours of health promoter and staff hours each year of the project as in-kind; 5) Co-facilitated 11 adult group programs; 6) Coordinated outreach activities during cherry harvest season; 7) Coordinated program evaluation with evaluator; and 8) Ensured required reports were submitted to grantor.
- PHRMH provided a grant writer for preparation of the grant. PHRMH also provided consortium partners with in-kind professional staff to train consortium staff on the following:
 - Mental health professional Stress Management
 - Certified Diabetes Educator – 4 hours (per grant year) – Diabetes Education
 - Exercise Physiologist- 4 hours (per grant year) – Weigh-loss and wellness

PHRMH also provided guest presenters for adult groups in the following capacity:

- Certified Diabetes Educator for diabetes
- Exercise Physiologist
- Mental Health Professional for stress management

PHRMH diabetes outreach staff conducted diabetes outreach to underserved English-speaking patients and used their Mobile Health Unit as a setting to hold diabetes management meetings with Cascade Locks patients.

- NCS provided a Site Coordinator to supervise staff employed by NCS to work on grant project and coordinate consortium activities. NCS assisted with facilitation of education and support classes for individuals with diabetes and/or obesity

Outcomes

Evaluation data was collected in two different areas: Clinical measures and participant satisfaction. Selected data points are summarized as follows:

Diabetes case management program:

Of 188 patients in case management registry, 119 (63.3%) have been enrolled for at least one year. Only 98 (52%) are considered case managed and are being reported on. Ninety-two (94%) of 98 case managed patients enrolled in program for at least one year, had an initial A1c lab test and an average A1c result of 8.6%. Fifty-seven of 98(58.2%) had an A1c value at end of year one and average A1c decreased to 7.3%, over a percentage point decrease. Of 98 case managed patients, 28 (29%) had an initial A1c >9% at start of program and 46% (n=13) of those patients' A1c, dropped at least one percentage point after one year of case management. All 98 patients had blood pressure recorded at time of enrollment with an average blood pressure of 131/79. 61 (62%) of 98 pts had blood pressures >130/80 and 42 (69%) decreased their blood pressure by at least 1% or blood pressure <130/80 after one year. Forty-four of 98 (45%) case managed patients had an LDL lab test done at start of and after one year in case management program. The average LDL result was 108.1 at time of enrollment, and by end of year one in case management program, average LDL dropped to 94.7, over a 12% decrease in LDL levels. Of 44 patients with LDL lab test at enrollment and a year after enrollment in program, 20 (45%) had LDL >100 at start of program and 14 (70%) of those patients dropped their LDL by 10% or LDL <100 after one year of enrollment. Database system for reporting and tracking of baseline and interval measures of self-management goals and self-blood sugar monitoring was used to analyze data. A scale of 0-4 was used to score percent success rate by patient self-report. The scale was used as follows: 0 = 0%, 1=25%, 2=50%, 3=75% and 4=100% success rate. Data for patients enrolled in program for at least six months shows on average each patient had set 2.1 (n=80) exercise goals with an average success rate of almost 50%. Similarly the average nutrition goals set per patient were also 2.1 (n=85) with about 50% success rate. Average stress management goals set per patient were 1.7 (n=14) also with a success rate of about 50%. Data for stress management goals was often hard to tease out and track by the case management staff, which could contribute to the low number of goals set in this category. Average medical self-management goals set were 6.9 (n=146), by far the largest number of patients set this type of goal in more frequency than other goals. On average there was a 50% success rate with the medical self-management goal. Of 98 case managed patients enrolled in case management program for at least a year, 53% had 3 or more diabetes follow up visits with their medical provider within the same year.

Diabetes and weight management groups:

Combined data for groups in Hood River and Wasco Counties was analyzed and are summarized as follows. One-hundred-twenty-six out of 180 participants came to 9 or more of 15 classes for a completion rate of 70%. Data shows 24% (n=111) of overweight participants lost at least 5-10% of their weight after program ended. Data after end of groups shows 110 out of 114 (96%) measured participants improved on at least one biometric measure such as weight, waist measure, LDL or A1c if diabetic, far exceeding our goal of 50%. Along with nutrition, participants had an opportunity to exercise as part of each class, which helped develop exercise goals. Data for both groups shows, 114 of 121 (94%) participants who filled out a post group evaluation have a nutrition and/or exercise self-management goal. Combined data shows 102 of 121 (84%) participants from both groups reported use of new stress reduction strategy. Sixty out of 121 (50%) of group participants were non-exercisers at start of groups. Fifty of those 60 (83%) participants had a basic exercise program of at least 90 minutes of exercise a week at end of program. Of 61 (50%) participants who were prior exercisers in Hood River groups, 27 (44%) now exercise at least 200 minutes per week. Average weekly time spent on exercise was 1.4 hours per week at start of program, and 2.8 hours per week at end of program. Combined data shows, 69 of 122 (57%) participants improved vegetable intake and average vegetable intake went from 5 times per week to 7 times per week over a 46% increase in vegetable consumption. Long term data was collected at the six, nine or twelve month interval depending on participant response. Data collected on 18 of 111 (16%) participants who lost 5-10% of their weight at end of groups shows that two (11%) of 18 have been able to maintain their weight 6-9 months after group ended.

Parent child groups:

A total of 57 family wellness program evaluations were received from adults. All 57 (100%) planned to continue or to make a change (56 nutrition, 20 parenting, 38 exercise/activity). Fifty-six (98%) had already made one or more changes (49 nutrition, 7 parenting behavior, 17 increased physical activity). In Bodyworks series 31 participants including teens and their caretakers attended series in year two of grant. With 7% increase in belief that it is important to eat well and exercise regularly.

Outreach:

Outreach provided on 28 different evenings by 7 staff and 13 volunteers during cherry harvest season in The Dalles. Presentations given in 58 different camps, 9 of them new camps including 5 in Mosier (Wasco County) which we had not visited before. 3,078 people attended presentations (2,404 adults, 51 teens, 623 children). Blood sugar (BS) screening done on 1,177 people with 31 (2%) people with blood sugars >200, potentially indicating diabetes. 19 of patients with previously diagnosed diabetes had blood sugars >200. Thirty-three people who were screened with blood sugars >200 and not previously diagnosed with diabetes were referred to clinic for follow up. Referral form was created and provided to patient to facilitate communication between the field work and clinic.

Return on investment:

Diabetes case management program in Wasco County yielded the following return on investment based on calculations of two years of expenses and data points. When medical care cost savings are combined with the increases in economic productivity that are derived from the treatment and prevention of diabetes, Salud program will yield a 5-year total return on investment of \$6.47 for every dollar spend.

Pasos Adelante! / Steps to Wellness! also yielded the following return on investment based on calculations of two years of expenses and data points. When medical care cost savings are combined with the increases in economic productivity that come with people living healthier lifestyles, the Pasos Program will yield a 5-year total return on investment of \$2.34 for every dollar spent.

Challenges & Innovative Solutions

A challenge faced by our program was how to gather stress management goals set by patients enrolled in diabetes case management program. A number system was established and put in place, but staff still had difficulties tracking their progress. The challenge was discussed in diabetes case management team meetings and training was provided on documentation of goals.

Not all of The Dalles group participants were willing and/or able to get follow up lab work done after the end of their group classes. This issue was discussed at the evaluation meetings with group facilitators and a solution was identified. Participants were scheduled to be seen in clinic prior to the end of group series and participants were more willing to get labs drawn and measurements done for post group data. It was also difficult for participants to follow up in clinic for weigh in after groups ended. The solution was to collect self-reported data via telephone when participants were unable to go to clinic.

Due to a clinic decision to see migrant workers on a walk-in basis, it was difficult to track if referred patients were actually being seen during harvest outreach season. A protocol was developed for tracking referrals. A referral form with carbon copy was created for CHWs to be able to track missed appointments and to follow up with patients with no shows at the clinic.

Sustainability

On-going Services and Activities:

There has been some verbal commitment by LCDC and consortium partner PHRMH to sustain part of our program services. . PHRMH has requested we submit a proposal for funding for continuing the Pasos group series in Hood River County. LCDC is focusing on keeping the diabetes case management program at a decreased capacity, and would also like to continue with the 15 weeks wellness groups. LCDC has also established a foundation which will focus on fund raising for LCDC CHW programs including the diabetes case management programs and the 15 weeks wellness course. Additionally, LCDC will continue to seek additional grant funds, private foundations, and in-kind donations of professional time and support to continue with services. Consortium partners have also committed to continue supporting the 15 week wellness course.

Sustained Impact:

This project increased our capacity to effectively deal with the chronic problems of obesity and diabetes by engaging the community in more physical activity and by increasing awareness of the role of mental health in these conditions. Much of this program focused on training staff, including employees of LCDC and NCS thus, the impact will be sustained long after the funding ends. Building mental health awareness and physical activity into our programming has become part of the culture of how we approach the problems of obesity and diabetes. Both LCDC and NCS are long-term programs in the community that have ongoing funding and support on many levels, and this program will serve to expand their role and capabilities long into the future with support of consortium partner PHRMH.

Implications for Other Communities

Each of the strategies in this project was designed for implementation in a rural setting. A major reason that participant recruitment was relatively easy was related to its existence in a rural community environment where news travels informally and quickly; and staff assigned to the project are well known throughout the community. Although the project could easily be successful in another rural setting it will, as ours did, require time and thoughtfulness to tailor it to that community and ensure it meets that community's needs. The use of the Popular Education teaching model and Community Health Workers as facilitators was an effective way to implement this project.

OREGON

Three Rivers Community Hospital

Organizational Information

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|-------------------------------------|--|
| Grant Number | D04RH12753 |
| Grantee Organization | Three Rivers Community Hospital |
| Organization Type | Hospital (non-profit) |
| Address | 500 SW Ramsey Ave., Grants Pass, OR 97527 |
| Grantee organization website | www.asante.org |
| Primary Contact Information | Debra Flickinger Program Director Phone number: 541-789-4528 dflickinger@asante.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,675 May 2010 to April 2011: \$124,996 May 2011 to April 2012: \$99,952 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|----------------------------------|-----------------|----------------------------|
| Curry County Home Health/Hospice | Gold Beach, OR | Home Health Agency |
| Three Rivers Home Care | Grants Pass, OR | Home Health Agency |
| Siskiyou Home Health | Yreka, CA | Home Health Agency |

Community Characteristics

Area:
The coverage area for the Outreach grant is a three-county area in Southern Oregon and Northern California. Curry, rural Jackson, and Josephine Counties in Oregon and Siskiyou County in California.

Community description:
The project service area is rural, low-income and underserved. Brookings and Port Orford (Curry County); Rogue River in Jackson County; and the communities of Cave Junction and Grants Pass in Josephine County, and almost all of Siskiyou County communities have been designated as Health Professional Shortage Areas. Brookings, Gold Beach, and Port Orford (Curry County); and Cave Junction, Grants Pass, and Williams (Josephine County); Butte Valley, Hornbrook-Hilt, Etna/Fort Jones, Dunsmuir, Tule Lake, Mccloud-Medicine (Siskiyou County) are federally-designated as Medically Under-served Areas or as containing Medically-Under-served populations.

Collectively, the four-county area proposed for this outreach project supports a population base of 346,208 persons. Of all persons in Curry County, 26.6% are over the age of 65, representing a doubling of the statewide average. Persons over the age of 65 comprise 20.1% of Josephine County's population, and 16% of Jackson County's population.

Need:
This program was designed to meet the need to improve the care and management of elderly persons with heart and lung disease (a dramatically growing population in this region) whose acuity level puts them at significantly heightened risk; whose daily condition (and health behaviors) put them in imminent risk of needing emergent care or hospital readmissions; and whose independent living is threatened unless close medical supervision can be guaranteed. With the majority of health care consumers in the growing elderly population with chronic illness, it will place an unprecedented burden on the health care system as a whole. By sharing the technology concept across the delivery of care, this program will model cost effective benefits for all. This form of collaboration will help rural providers be more fiscally viable and help keep services available in the remote communities where it is drastically needed.

Program Services

Focus Areas

Chronic Disease Management: Cardiovascular (CHF)
Chronic Disease Management: Cardiopulmonary (COPD)

Target Population

Adults
Elderly

Description:

The program provides telemonitoring for patients who require assistance with chronic illness management through collaboration with the home care agency, patient, and central monitoring. During the course of three years approximately 362 patients have been served, and 16 registered nurses and 8 cardiac physicians have participated in the program. The technology provided the means to facilitate managed care remotely, provide education for patients and family members related to the disease, and physician engagement through telecommunications, with a clinic or emergent care visit only when required. The home care agencies have taken the lead to identify patients that meet the target population, then set up the equipment, and teach the patient how to monitor themselves each day. The central monitoring nurse manages the patient care, monitoring vital signs, medications, and a significant amount of education related to disease management. Ongoing monitoring occurs until the patient is discharged from home care. Activities include:

- Educating homecare nurses from partnering agencies in the use of telemonitoring technology as well as establishing protocols and practices for implementing telemonitoring and exchange of data across points of care
- Developing a new service model to reduce the average number of in-home nursing visits, miles traveled, and nursing visit time.
- Educating hospital and physician providers in review and use of the technology.
- Comparing and evaluating hospital readmissions and emergent care visits.
- Establishing an evaluation protocol and obtaining IRB approval.
- Completing chart audits to determine frequency and cost of observation, emergent care, and hospitalization visits.
- Developing reports and disseminating findings to partners and the greater health care community.

Role of Consortium Partners:

Three Rivers Community Hospital was the grantee and fiscal agent for the grant. The hospital provided telemonitoring equipment, and staffed the program with a Project Director, Central Monitoring Registered Nurse, and a Data Administrator. The director facilitated oversight of the program and the evaluation plan. The registered nurse facilitated partner training, patient admission entry, patient monitoring and education, and equipment inventory.

The consortium partners have served a very significant role in the planning and implementation of the telemonitoring program. Each **home care agency** received education in the evaluation design and the IRB approved procedures for patient recruitment and consents. Data collection and management of data was developed and telemonitoring protocols and procedures were established. Implementation of the admission process for homecare monitoring of rural patients who have consented to be in the study was within a 60-day episode of home care.

As a consortium we met quarterly to review and revise telemonitoring protocols as needed in order to resolve any barriers to the telemonitoring component of the project. This included technical issues, centralized monitoring issues, communication across the points of care (hospital, physicians, and homecare), secure data transfers, seamless patient handoffs, recruitment of patients into the project evaluation, data collection and management, and other issues as they may emerge. The group assisted in the assessment of the impact of the homecare telemonitoring systems on quality care, frequency of emergent care visits and hospital readmissions, provider communications across points of care, and patient and provider satisfaction with the telemonitoring technology.

Outcomes

We collected evaluation data in three main areas: patient satisfaction with the program, provider satisfaction with the program, and the decrease in charges and number of observation, emergent care, and hospitalizations visits to the health care delivery system.

Patient satisfaction surveys showed that 92% of participants reported a positive patient care experience using telemonitoring. The patients identified increased confidence in participation with healthcare decisions, independence at home, learning more about disease management related to their CHF or COPD, and reducing their anxiety about managing their medical/health condition at home.

While the majority (10-13) providers are satisfied with using telemonitoring for patients, there were several barriers identified. There is an ongoing need to provide continuing education related to patient care, such as: process and technology for new staff members and those less technically savvy; consistent practice with work flows to assist with process challenges on admission and discharge; and protocol models that add value to assist patients with monitoring their medications and managing their chronic illness.

The medical care costs of people with chronic diseases in rural Oregon are extremely high. In this grant study of 172 in-home patients over a 240-day study period, participants experienced a decrease in observation, emergency room, and inpatient visits.

- Reduction in hospital charges from \$5,607,962 (pre) to charges of \$1,201,257 (post), a 21% reduction.
- Reduction in hospital visits from 130 (pre) to 37 (post), a 28% reduction.
- Increase in efficiency to the health care system resources as well as patient's quality of care.

The technology demonstrates that pre- and during- the continuum of care patients are empowered to change behaviors and manage their illness post- more effectively. In addition, the reduction in number of visits and reduced cost of care is a long-term benefit creating and enhancing wellness in our community.

Challenges & Innovative Solutions

The primary barriers experienced during program implementation are cultural resistance, lack of clinical and financial outcomes due to no information technology infrastructure, and legal and licensure barriers. The cultural barriers rest in nursing and physician practice. Using technology to facilitate care remotely challenges current workflows and clinical activities. We found very little patient resistance to the technology. This challenge was addressed with targeted education, training, and coaching that included scripting for the nurse in the approach to the patient, monitoring appropriateness for nurse visits, and a road map (calendar) specific to telemedicine patients. This new model of providing a continuum of care more efficiently challenges the current hospital systems for reimbursement. In preparation for health care reform, the reduction in hospital and home care visits and cost savings are a positive outcome; however, under the current reimbursement structure, this can be viewed as a negative impact.

The collaboration between a hospital and home care agencies posed challenges with data mining of clinical and financial outcomes. There is no electronic medical record in place. The mitigation of this barrier was to develop the tools for each consortium partner with definitions for collection of data. There was a legal and licensure barrier identified in our work with the Siskiyou partners in California. Their use of the technology while the actual daily monitoring was occurring in Oregon by a licensed registered nurse raised the issue of practice across state lines without a licensure for both states. Fortunately, the solution was in the technology. Providing Siskiyou with the ability to access their patient census for monitoring via the web-based program permitted them to continue with the grant study.

Sustainability

On-going Services and Activities:

The main components of the grant-funded program will continue after the grant period ends, though they may change in scope to include other diagnosis.

- Of the three consortium partners, only one will continue the telehealth program. Curry County Home Health/Hospice and Siskiyou Home Health are planning to develop a program for their counties and to purchase their own equipment.
- **Three Rivers Home Care** is committed to continue the telemonitoring program as a stand-alone agency in Josephine County as a part of overall patient care. Louisiana Home Care has agreed to support the program as a corporate sponsor. In addition, the director of nursing is seeking out additional grant funding to enhance the program. Three Rivers Home Care will facilitate the central monitoring, installation and removal of equipment, and patient education.
- Continued collaboration between Three Rivers Home Care and Three Rivers Community Hospital will continue with quarterly meetings with administration and ongoing coordination with discharge and physician coordination. They will collaborate on community and health care provider education to achieve increased efficiency of quality care and work to facilitate an improved discharge process to include physician referral for telemonitoring as part of the discharge plan.

Sustained Impact:

The community impact is significant for many stakeholders as a result of the grant funding. The professional community, from health care providers to the small business owners involved in this program, has realized the opportunity to better understand the ways and means to improve how we model quality of care. This program has created an environment for patients with chronic illness to learn and develop the skills to properly manage their health which can be sustained for their lifetime and promote wellness for future generations.

This program has provided the equipment and the capacity for home care agencies to improve their business and service model to provide customer satisfaction, financial sustainability, and improve clinical outcomes.

Implications for Other Communities

The telehealth program represents a new model in strengthening the coordination of services between home care agencies, discharge planners, and physicians. The grant program birthed an opportunity to provide consistent and efficient patient care without the expense of transportation or other lack of resources in rural communities. The consortium partners are located across many counties facilitating health care that benefits well over 30 rural communities. The learning and sharing of knowledge during the program has given communities the opportunity to see how effective technology can assist in meeting the community demands of providing quality care in a timely, efficient, and caring manner. The increased level of engagement and awareness, stronger relationships, and empowered patients will affect community wellness for the future. These attributes have significant implications moving forward.

PENNSYLVANIA

Carbon Schuylkill Community Hospital St. Luke's Miners Memorial Hospital

Organizational Information

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|------------------------------|---|
| Grant Number | D04RH12697 |
| Grantee Organization | Carbon Schuylkill Community Hospital/St. Luke's Miners Memorial Hospital |
| Organization Type | Non-profit hospital |
| Address | 360 W Ruddle St., Coaldale, PA 18218 |
| Grantee organization website | N/A |
| Primary Contact Information | Hollie Gibbons Manager Phone number: 484-526-2301 Fax number: 484-526-2039 gibbonh@slhn.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|------------------------------------|-------------|-------------------------|
| Lehigh Carbon Community College | Tamaqua, PA | School |
| Tamaqua Area Community Partnership | Tamaqua, PA | Non-profit Organization |

Community Characteristics

Area:

The coverage area for the Outreach grant is the Medically Underserved Area of Schuylkill and Carbon Counties in Pennsylvania, with a primary focus on the Tamaqua area.

Community description:

Schuylkill County and Carbon County are situated in the northeastern portion of Pennsylvania, nestled in the Appalachian Mountains and the foothills of the Poconos. The downfall of the coal and garment industries that once helped this region thrive has led to a rural economy dominated by smaller employers, paying low wages and offering no health benefits; or self-employed individuals who are required to pay for their own health care. In addition, other common barriers to accessing care include transportation, lack of providers, minimal hours of operation with providers, minimal health prevention programs and limited knowledge of what health care programs are available to the community. With almost half of the residents in this Medically Underserved Area classified as low-income, this population faces difficulties in accessing health care services primarily due to inability to pay. In general, both counties have older populations as compared to the state. Because of the high percentage of residents aged 65 and older, this community also experiences a high percentage of residents who have chronic diseases.

Need:

The focus of the outreach grant programs was to provide intensive community outreach and case management services to under/uninsured adults addressing three health priorities:

1. Diabetes – awareness, education and management
2. Obesity – prevention and treatment
3. Education, Wellness and Disease Prevention

A recent Health Needs Assessment surveyed 381 community members in Tamaqua Borough, part of this rural community and the defined service area (MUA #07546). The results indicate that 42% of the survey respondents were more likely to have physical, mental or emotional limitations as compared to respondents to the 2009 state (19%) and national (19%) Behavioral Risk Factor Surveillance Survey (BRFSS). The five most prevalent conditions reported by survey respondents were hypertension (43%), diabetes (23%), migraines (23%), asthma (21%) and mental health problems (17%). Potential health behaviors which may directly impact the above chronic conditions include physical activity, alcohol consumption, tobacco use, obesity and stress. Data for each of these health behaviors as reported in the Health Needs Assessment are as follows:

- 63% of respondents reported participating in physical activity in the past six months and 44% reported exercising 2-3 times per week.
- 41% of respondents reported having consumed at least one alcoholic beverage within the past month with 61% of these respondents reporting having 3 or fewer alcohol beverages per week, and 26% having 4 or more per week.
- 34% of respondents smoke cigarettes, which is higher compared to the state (20%) and national (18%) 2009 BRFSS data.
- 47% of respondents have a BMI indicating obesity. This rate is much higher than state (28%) and national (27%) 2009 BRFSS data.
- 40% of respondents reported that most days their life is a bit stressful.

Program Services

Focus Areas

Chronic Disease Management: Diabetes
 Health Education and Promotion
 Physical Fitness and Nutrition

Target Population

Adults
 Elderly
 Caucasians
 Uninsured
 Underinsured

Description:

The grant activities were coordinated, implemented and staffed through St. Luke's Hospital, with support for coordination by the consortium partners. The grant supported the following activities:

Community health screenings were organized through collaboration between St. Luke's Hospital, the Tamaqua Area Community Partnership and Lehigh Carbon Community College. The screenings were held to identify diabetics and pre-diabetics, as well as provide education on diabetes, nutrition and physical activity. A total of 16 screening events were held over the course of three years in a variety of locations including, senior centers, Lehigh Carbon Community College, senior housing, The Salvation Army, local Lions Club meetings and senior expos.

Support groups were conducted for community/social support for diabetics to learn and practice successful control of their blood glucose by following a healthy meal plan and exercise program. The support group was facilitated by a registered dietitian throughout the grant period. The group meets once per month through the year. A total of thirty-two individuals participated in the support group throughout the grant period. The support group was held at St. Luke's Miners Hospital.

A diabetes clinic was implemented during the third year of the grant, held once per month, for one-on-one consultation for patients to receive formal diabetic training and develop personal treatment plan. This clinic is held at the Nesquehoning Rural Health Center. A total of forty-eight patients have been seen as part of this clinic thus far. Self-management education or training is a key step in improving health outcomes and quality of life. Education and treatment focused on self-care behaviors, such as healthy eating, being active, and monitoring blood sugar. Additionally, while patients are waiting to see the provider, a registered nurse educator conducts a group education session focusing on diabetes related topics.

A chart audit was completed for 166 of the 218 diabetic patients enrolled in care at the three St. Luke's rural health centers within the grant service area. The chart audit was completed to monitor patient clinical outcomes over the three year grant period. St. Luke's staff completed the chart audit which monitored urinary micro albumin levels, foot examinations, eye examinations, glycosylated hemoglobin levels, lipid profile levels, tobacco use, diabetes education, blood pressure, body mass index and influenza vaccines. Data for glycosylated hemoglobin, triglycerides, cholesterol, LDL cholesterol, HDL cholesterol, BMI, and Blood Pressure Classifications was reviewed by Jill Stoltzfus, Ph.D., Research Institute Director for St. Luke's Hospital. Of the documented measurements, only the

triglyceride measurements were found to be statistically significant. Triglyceride measurements became significantly lower from year one through year three. The chart audit results are now being reviewed by the rural health center staff and changes will be implemented to improve documentation, such as implementation of a clinical flow-sheet.

An application to become an American Association of Diabetes Educators (AADE) certified diabetes teaching program is being submitted in April 2012. The third year of the grant period focused on partnering with the St. Luke's Hospital Center for Diabetes and Endocrinology, to become an extension of their accredited program. St. Luke's Miners Hospital will be utilizing the Living Well with Diabetes curriculum, a diabetes self-management education program. Group classes will be offered monthly at nine community locations throughout Carbon and Schuylkill counties. Curriculum content includes nutrition, medications, monitoring, lab work and exercise. The AADE certified program will help sustain diabetes education within this MUA, also allowing for a case management approach to helping managing diabetes.

A nurse practitioner from the St. Luke's rural health centers worked closely with Lehigh Carbon County Community College to create a wellness program which included health eating, weight management, substance abuse prevention, and physical activity planning. LCCC has implemented this program through the student center incorporating the use of the gym equipment. The program has given the student nurses enrolled in the LCCC nursing program an opportunity to participate in a service learning experience.

Throughout the grant period, telemedicine was conducted at the St. Luke's Miners Hospital. The Center for Diabetes and Endocrinology, located seventy miles from the Miners campus, participated in the telemedicine program, giving patients an opportunity to see specialists without having to arrange for transportation. This program expanded quickly, demonstrating a need for on-site telemedicine equipment at the rural health centers. During the third year of the grant, telemedicine equipment has been ordered for two of the three rural health centers.

Role of Consortium Partners:

The grant program provided an opportunity for consortium partners to closely collaborate to coordinate outreach events. The consortium partners contributed to the grant program in the following ways:

- The Tamaqua Area Community Partnership (TACP) provided the services of Kathy Kunkel, the South Ward Manager/Community Organizer to assist with Community Outreach scheduling, recruitment, advisory of program implementation and promotion of community based activities.
- LCCC provided the use of facilities and equipment at the Morgan Center, assisted with scheduling, recruitment and promotion of student and community based activities. They worked closely with a St. Luke's nurse practitioner to develop and implement a wellness curriculum within the student center of the college.
- Both consortium partners attended grant meetings, with St. Luke's Hospital staff, to discuss, organize, schedule and promote grant related activities.

Outcomes

Evaluation data was collected for the following grant related activities: patient clinical outcomes, health care access and patient satisfaction.

Patient Clinical Outcomes:

- A total of 166 St. Luke's rural health center unduplicated diabetic patient charts were audited comparing year one of the grant through year three.
- Triglyceride measurements were found to be statistically significant. Triglyceride measurements of patients became significantly lower from year one through year three of the grant period.
- There was a 3% decrease in the number of patients whose BMI was classified as obese or extremely obese over the grant period.
- There was an 18% decrease in the number of patients whose blood pressure was classified as Stage 1 or 2 over the grant period.
- The number of patients who received an annual flu vaccine tripled.
- There was a 2% improvement in HgbA1C levels for patients who participated in the telemedicine program over the grant period.

Health Care Access:

- A total of 125 patients from the grant service area participated in the telemedicine program.
- The 125 patients accounted for 105 new office visits/office consults and 142 established office visits.

Patient Satisfaction:

- 97% of patients participating in the telemedicine program would recommend the program to others.
- 86% of the patients felt that the telemedicine experience was very good or excellent.

Challenges & Innovative Solutions

The main challenge encountered during the grant period was establishing a sustainability plan for the diabetes outreach program. In part, this was due to St. Luke's Miners administrative changes, which impacted decision making and staffing patterns for the rural health centers. By year three of the grant period, administrative changes within the hospital were finalized and a sustainability plan which included applying for the AADE certification went into effect. Approaching the sustainability plan in the third year of the grant unfortunately left little time for planning. St. Luke's Miners Hospital has made the decision to apply as an extension of an existing AADE certification program through St. Luke's Physician Group. Applying as an extension to an existing program allows St. Luke's Miners Hospital to adopt existing policies, procedures, forms, etc. Additionally, the existing program is through the St. Luke's Diabetes and Endocrinology Center, which conducts telemedicine at St. Luke's Miners Hospital. This partnership is a strong one, which has led to the implementation of billable Diabetes Self- Management classes beginning in April 2012.

Another staffing change that occurred was in the management of the grant program. Due to the administrative changes mentioned above, community health became a priority area for the hospital. With the creation of a community health department, modeled after the Bethlehem Partnership at the St. Luke's Bethlehem campus, a community health manager began administering this grant.

Sustainability

On-going Services and Activities:

The main components of the grant-funded program which will continue after the grant period ends include:

- Community Diabetes Education – The AADE certified diabetes program allows St. Luke's Miners Hospital to continue to provide diabetes education within the community. Nine sites, all within the MUA, have been chosen to conduct the diabetes self- management classes. This program will be a billable service and will generate revenue to cover program expenses and staffing.
- Community Outreach – Staffing changes at the St. Luke's Rural Health Centers are allowing for the Nurse Practitioners to continue providing community outreach programs throughout the year as part of their job responsibilities. Additionally, grant funding from the National Children's Healthcare Quality Initiative will help to fund continued community outreach focusing on healthy eating and physical activity to families and children in the MUA.
- Telemedicine – The telemedicine program will continue at St. Luke's Miners Hospital and will be implemented at two of the St. Luke's rural health centers. The telemedicine visits are a billable service and will generate revenue to cover expenses.
- Community Health – As previously mentioned, St. Luke's Miners Hospital now has a community health department, which this grant program helped to build. Community health staff is continuing to build programs based from this outreach grant, as well as apply for additional grant funding to sustain initiatives started within this grant period.

Sustained Impact:

Since the beginning of the grant, our community has a better understanding of the unhealthy lifestyle behaviors present in the community and chronic disease rates. This program has increased collaboration between consortium partners, as well as healthcare providers, community organizations, and community health staff, allowing chronic disease and prevention education to become a priority area within the community. Healthcare providers and community organizations are working together to ensure targeted health messages are disseminated within the community. We are starting to see an increase in patient participation in community outreach events and appointment compliance. Community members are now contacting community leaders and healthcare providers inquiring about educational opportunities/community outreach to learn how to manage their chronic diseases. Additionally, telemedicine has been welcomed by the community, giving them an opportunity to partake in specialty appointments they may not have otherwise had.

The lessons we learned about managing diabetes through a case management approach in a MUA can be applicable in other communities. If rural health patients are empowered to learn how to manage their diabetes, improved patient outcomes will follow. By organizing a diabetes clinic at a rural health center, which included a multidisciplinary team of medical providers, registered dietitian and a nurse educator, patients were willing to comply with appointments to gain a better understanding of diabetes management. They were grateful that the all services were provided within one clinic versus having to travel to separate appointments, thereby increase appointment compliance. Additionally, group patient education while patients waited to see their medical provider, allowed an opportunity for patients to form an informal support group. Also utilizing staff from the local community helped garner patient trust.

PENNSYLVANIA

Clearfield-Jefferson Drug and Alcohol Commission

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12695 |
| Grantee Organization | Clearfield-Jefferson Drug and Alcohol Commission |
| Organization Type | County Authority for Substance Abuse for Clearfield and Jefferson counties |
| Address | 104 Main Street, Falls Creek, PA 15840 |
| Grantee organization website | CJDAC.org |
| Primary Contact Information | Susan Ford Executive Director Phone number: 814-371-9002 Fax number: 814-371-9055 sford@cjdac.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|---|--|
| DuBois Regional Medical Center | DuBois/Clearfield/PA | Hospital |
| Saint Francis University | Loretto/Cambria/PA | University |
| Clearfield Co. Career and Technology Center | Clearfield/Clearfield/PA | Vocational/Technical School |
| Jefferson Co. Vocational Technical School | Reynoldsville/Jefferson/ PA | Vocational/Technical School |
| Clearfield Jefferson Heroin Task Force | Falls Creek/Clearfield and Jefferson/PA | Non-profit task force |
| Glendale Area Medical Center | Coalport/Clearfield/PA | FQHC |
| Northwest PA Rural Aids Alliance | Clarion/Clarion/PA | AIDS Alliance |
| Community Care Behavioral Health | DuBois/Clearfield/PA | Managed Care |
| Clearfield-Jefferson MH/MR/EI Programs | DuBois/Clearfield/PA | Quasi-governmental programs |
| Clearfield-Jefferson Drug and Alcohol Commission | Falls Creeks/Jefferson/PA | Single county authority for SA in two counties, Jefferson & Clearfield |

Community Characteristics

Area:

The coverage area for the *Hepatitis C and Substance Abuse Expansion Project* is a two county area in central Pennsylvania: Clearfield and Jefferson Counties.

Community description:

Clearfield County is located in the center of Pennsylvania. It is made up of 1,150 square miles which includes the Appalachian Mountain Range. Clearfield County is made up of 30 townships, 20 boroughs and 1 city. The mountains divide the city of DuBois from the rest of the county both geographically and sometimes politically. Interstate 80 runs directly through Clearfield County and contributes to potential economic development opportunities. Unfortunately the I-80 corridor also contributes to drug trafficking from other regions of the state. The average annual wage in Clearfield County in 2009 was \$29,809. Clearfield County is made up of 8 rural public school districts. Blue collar and service jobs make up over 50% of the workforce. Jefferson County is located to the west of Clearfield County in Northwestern Pennsylvania. It is made up of 655 square miles. Jefferson County is made up of 24 townships and 10 boroughs. Interstate 80 crosses the middle of Jefferson County for 36 miles from east to west. Like Clearfield County, the I-80 corridor also contributes to drug trafficking from other regions of the state. The average annual wage in Jefferson County in 2009 was

\$30,825. Jefferson County is made up of 3 rural public school districts. Blue collar and service jobs make up just fewer than 60 % of the workforce.

Need:

One of the needs this outreach program was designed to address was to reduce the stigma towards substance abusers and hepatitis C services. In the drug and alcohol community, stigma has always been a huge issue with individuals that identify the need for services. Recovering substance abusers find that stigma in the communities prevents them from perceived equal employment opportunities and are given the impression that regardless of their time in recovery, they will always be viewed as a person in active addiction. Add to this, the concern over identifying oneself as having viral hepatitis C, which is primarily contracted through intravenous drug use (IDU), and the stigma compounds. A lack of education in the community regarding substance abuse, recovery and services available for both substance abuse and viral hepatitis contributes to this stigma.

A second need that this outreach program was designed to address was to increase access to services for the substance abuser and person who is high risk for Hepatitis C, as transportation is one of the major issues that face Clearfield and Jefferson Counties. The current funding provided by the Bureau of Drug and Alcohol Programs and the DuBois Regional Medical Center has allowed for the Clearfield-Jefferson Drug and Alcohol Commission to provide Hepatitis C screening services, which include education, case management and outreach. The funding has also provided for the administration of the program, a half-time case manager and the availability of education and outreach materials. However, these services do not reach those at risk in the more rural parts of Clearfield and Jefferson counties. The barrier of lack of transportation has been addressed by making the services available to people in their own communities.

A third need that this outreach program was designed to address was to increase community awareness of the risks associated with substance use and the impact on the individual as well as the community. The Program Coordinator increased community awareness about this project by meeting with and discussing the available services with social service organizations, medical professionals, allied health professionals, media outlets and community groups. Increasing the number of contacts made on a community level has increased community awareness of the services available.

Finally, a fourth need this outreach program was designed to address was to increase education to patient and allied health professionals in the more remote and rural areas regarding substance abuse and Hepatitis C. Providing training and education to the medical community and allied health professionals can be difficult in rural areas that are sometimes covered by one or two people per shift with huge amounts of square miles to cover. Leaving jurisdictions to attend education courses can sometimes be a hardship for many municipalities. To achieve this goal and find a solution to this barrier, telecommunication equipment was purchased and installed for the outlying regions of the counties. This technology will allow medical professionals, allied health professionals and community agencies to receive training and education related to substance abuse and viral hepatitis.

Program Services

Focus Areas

Behavioral/Mental Health
Chronic Disease Management
Coordination of Care Services
Health Education and Promotion

Target Population

Adults
Elderly
Pregnant Women
Caucasians
African Americans
Latinos
Uninsured
Underinsured

Description:

The *Hepatitis C and Substance Abuse Expansion Project* activities were coordinated and implemented through the Clearfield-Jefferson Drug and Alcohol Commission with support from the consortium partners. This Outreach grant supported four main activities, which included:

Additional screening locations were added in various parts of the bi-county region. Since the beginning of the project, 4 new screening locations have been developed to improve access to screening services. As stated earlier, transportation is one of the major issues that

face Clearfield and Jefferson Counties. The transit services that are available are either fixed route in the more urban areas of the counties or are sparse in the more rural areas. The Area Transportation Authority does provide arranged pick-ups for the medical assistance population, however many of the people that need the services funded by this grant project are ineligible for medical assistance in the early stages of the process. Lack of funds then becomes an issue for individuals to pay the ATA to transport them, sometimes 25-30 miles or so, by bus and back, to their nearest local service area. These additional hcv screening locations have allowed us to bring the services to the people residing in the more rural locations of our bi-county region.

Tele-video technology was installed at 6 locations across Clearfield-Jefferson County to enhance communication and training for consortium members, screening providers, health providers, and clients. These units have been used for medical trainings, meetings and various other purposes. Furthermore, these units have allowed for a decrease in the funds used for travel purposes and has allowed for staff and medical personnel to remain in their current jurisdictions.

Trainings offered include:

- Screening, Brief Intervention, Referral and Treatment (SBIRT), an evidence-based approach to identifying patients who abuse alcohol and other drugs to help reduce and prevent related health consequences, disease, accidents and injuries.
- HCV Training, an introductory training on HCV testing, options, and procedures for health care professionals. This training took place, on average 5 times per year, during this grant period. Many of these trainings were conducted via the tele-video units. Additionally, these trainings were used to reduce the stigma towards the substance abuser and hepatitis c services as stated in our needs assessment.

Educational materials developed and distributed to community agencies, allied medical professionals, and to the general population include:

- Neonatal Abstinence Syndrome Video for opiate addicted pregnant mothers
- Hepatitis C Book for those with risk factors for hepatitis
- Brochures covering information on hepatitis, screening, and vaccination as well as risks to pregnant women and IV drug users.
- Hepatitis C video for those with risk factors for hepatitis.

Role of Consortium Partners:

Each of the consortium partners was responsible for sharing ideas to resolve any barriers we were facing.

Our partners were also responsible for advertising via information dissemination. DuBois Regional Medical Center, Clearfield County Career and Technology Center, Jefferson County Vocational Technical School, Heroin Task Force, Glendale Area Medical Center, The Northwest Rural Aids Alliance, Community Care Behavioral Health, Clearfield-Jefferson MH/MR/EI Programs and Clearfield- Jefferson Drug and Alcohol Commission all contributed to this important responsibility.

Referrals for hcv testing were made by DuBois Regional Medical Center, Clearfield County Career and Technology Center, Jefferson County Vocational Technical School, Heroin Task Force, Glendale Area Medical Center, The Northwest Rural Aids Alliance, and Clearfield Jefferson Drug and Alcohol Commission. The Clearfield County Career and Technology Center and the Jefferson County Vocational Technical School assisted in hcv testing.

Saint Francis University was instrumental in the installation and ongoing support of the tele-video equipment.

Outcomes

Health Consortium Development and Implementation

- Membership increased from 6 member agencies to 10 member agencies during the project period.
- On average 67% of members attended bi-monthly meetings (including in-person and tele-video). 80% of members attended meetings regularly.
- Member survey:
 - 85.7% agreed that partners made decisions together; shared leadership
 - 85.7% agreed that community stakeholders were actively engaged and provided guidance.

Access to Services

- Access to screening services increased by 57% with the addition of four new screening locations.

- Approximately 497 Hepatitis C screening were performed, 25% positive
- Based on patient satisfaction surveys, 90% of patients were satisfied with the screening services they were provided.

Community Awareness

- Educational materials developed include:
 - Neonatal Abstinence Syndrome Video for opiate addicted pregnant mothers
 - Hepatitis C Book for those with risk factors for hepatitis
 - Brochures covering information on hepatitis, screening, and vaccination as well as risks to pregnant, IV drug users.
- Six tele-video sites were developed for distance learning and member participation in Consortium meetings.
- Screening, Brief Intervention, Referral and Treatment (SBIRT) training was offer to 47 doctors. At 6 month follow up:
 - 100% of participants were satisfied with the training.
 - 100% felt the information was useful when dealing with substance abuse
 - 89% felt the training enabled them to serve their clients better.
 - 89% felt that they acquired the skills required to deal with substance abuse

Challenges & Innovative Solutions

One of the challenges we faced was removing the perceived stigma towards substances abusers and Hepatitis C services. We addressed this challenge in the following ways:

- Distributing newly developed materials on a continual basis.
- Using a Dove symbol to signify a screening location as opposed to identifying the screening by name.
- Providing the aforementioned trainings on a regular basis.
- Radio, newspaper and community fair advertising.

These solutions also addressed the challenge of reducing the lack of awareness of service availability and benefits of the services, as well as providing education for patients and allied health professionals on Hepatitis C and substance abuse.

As stated earlier, transportation is one of the major issues that face Clearfield and Jefferson Counties. Adding additional screening locations proved to be a bit more difficult due to the lack of available space and/or funds to pay for the space beyond the grant period. Our solution to this challenge was to open as many screening locations at our local outpatient mental health and drug and alcohol clinics as possible. This has proved to be invaluable as many of the clients accessing these services also have the risk factors associated with hepatitis c.

Another challenged we faced during the implementation of the grant activities was consortium meeting attendance. This was solved by sending email reminders and by identifying how each consortium member agency was important not only for the current grant activities but also the good of our community as a whole. Many consortium members realized that by working together and building stronger community ties, our community as a whole would benefit. The use of the tele-video units was also very beneficial in overcoming this challenge. The units were used on a regular basis for consortium meetings.

Sustainability

On-going Services and Activities:

Our consortium has decided to continue to meet at least quarterly if not more often. Since tele-video equipment can be utilized to decrease travel expenses, no further funding will be needed to cover this expense. Many of our consortium partners have also offered to continue to disseminate our hepatitis c testing information as a means to absorb all advertising costs.

All of the Hepatitis C testing will continue at all of the current locations. Most of these activities will be sustained thru Pennsylvania state grant funds. The local vocational schools will continue to allow their nursing staff to assist with the actual hcv testing.

Tele-video IT support will be the responsibility of the agencies where these units are located. We hope to continue to use these units to meet during the winter months for our consortium meetings. These units will also be used to continue to offer hcv and other related trainings.

Sustained Impact:

The long-term effect of the *Hepatitis C and Substance Abuse Expansion Project* can be felt in the community in several ways. The impact that this program has had and will continue to have in the rural communities of Clearfield and Jefferson Counties are financial, social, human capital and health related.

Financially, identifying people with an active viral load earlier in the process, not only saves money in terms of support services and referrals, but also in terms of Hepatitis C treatment. Dr. Tuesdae Stainbrook, Infectious Disease, at DuBois Regional Medical Center has determined in her practice, that the earlier people are identified, the better the treatment results which includes less medication over a shorter amount of time. In addition, this also translates into drug and alcohol treatment services. The earlier people are identified, the lower the level of care they will need which equates to less money being spent per individual. With the screening program's continued sustainability, the financial impact will be great for years to come, which will allow much need funds to be utilized in other areas of the program.

On a social level, addressing the problem now reduces the impact of stigma and bias that addicts feel when it comes to addiction. This stigma is compounded when an individual has a blood borne virus that is primarily contracted by using drugs intravenously. Providing appropriate treatment and education services affords opportunities, to the individuals that go through this program that may not have been available to them otherwise. This includes applications for housing, jobs and transportation to name a few. The more the community is educated, the less bias and stigma and the sooner these individuals can begin to be productive members of society.

Human capital has been a huge impact in Clearfield and Jefferson Counties. The work that the Consortium partners have completed together has created other partnerships in other topics and areas. Without this project, these individuals may never have had the opportunity to sit at the same table. However, the project has helped to form new partnerships within the rural communities.

Finally the health impact is great. The Clearfield-Jefferson Drug and Alcohol Commission is one of forty-seven Single County Authorities that contract directly with the Bureau of Drug and Alcohol Programs for additional Hepatitis C funding. Findings and project results are shared with this association which in turn is then shared on a statewide and national level. Community involvement increases the likelihood of greater participation in preventative health care.

Implications for Other Communities

This project could be easily replicated in other rural communities with similar needs. Creating the Consortium in a rural community is not difficult because most of the people and agencies with similar goals already work together. This then allows for more time to be spent on recruiting partners that are non-traditional, but bring much to the consortium table. For those that the consortium works with, buy-in becomes easier when you are on a first name basis with individuals from other projects as well. This is essential in rural communities. The other components of this program, outreach, case management and health services can also be replicated in most communities by combining resources and partnering with non-traditional as well as traditional organizations and key stakeholders.

PENNSYLVANIA

Cornerstone Care

Organizational Information

| | |
|-------------------------------------|---|
| Grant Number | D04RH12694 |
| Grantee Organization | Cornerstone Care |
| Organization Type | Federally Qualified Health Center |
| Address | 7 Glassworks Road, Greensboro, PA 15338 |
| Grantee organization website | www.cornerstonecare.com |
| Primary Contact Information | Donna Simpson Rural Outreach Coordinator Phone number: 724-852-1001 Fax number: 714-627-0726 dsimpson@cornerstonecare.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|-----------------|----------------------------|
| Community Action Southwest: Head Start, WIC, Family Economic Success | Waynesburg PA | Social Services |
| PA Department of Health | Waynesburg PA | State organization |
| Southwest Regional Medical Center | Waynesburg PA | Hospital |
| Greene ARC | Ruff Creek PA | Social Services |
| Waynesburg University | Waynesburg PA | Education |
| Greene County Career & Technology Center | Waynesburg PA | Education |
| Greene County Early Intervention | Waynesburg PA | Social Services |
| Adagio Health | Uniontown PA | Health Facility |
| Fayette County Head Start | Uniontown PA | School |
| United Healthcare | Pittsburgh PA | Health |
| Penn State Fayette | Uniontown PA | University |
| Cornerstone Care | Greensboro PA | FQHC |
| Washington Hospital School of Nursing | Washington, PA | Education |

Community Characteristics

Area:

The coverage area for the Outreach grant is Greene County in southwestern Pennsylvania

Community description:

Our target area comprises Greene County in the Appalachian region of southwestern Pennsylvania. The area is predominantly rural with small towns, and agriculture, natural gas, coal mining and services as the primary economy. The region's history is characterized by boom and bust cycles. The devastation of the late 1900's contraction of the regional steel and coal industries is evident as major portions of whole towns are still shuttered. Our target population is the 39,509 Greene County residents; of which 45% are low-income residents. The current poverty rate is 17.1% (25.7% for children). According the Bureau of Labor Statistics, in a September 2011 study, the unemployment rate is 6.5%. Greene County has the second lowest per capita income (\$28,422) in the entire state.

Need:

According to the Pennsylvania Department of Health, in Greene County, 22.3% of the population is actually eligible for medical assistance. However, only 1% of the medical assistance participant eligible for dental care actually access care in a given year. These are the underserved that should be getting regular preventative dental care, education and treatment for oral health problems. Because oral health issues are not addressed in a timely manner, their overall physical health suffers. Preventable costs eventually compound down the road with expensive remedial care, emergency room visits and hospitalization

According to the Pennsylvania Department of Health's 2002 Behavioral Health Risk Assessment of Pennsylvania, adults show significant oral health disparities in the lower income population. For example, fewer low-income adults visit the dentist. Only 51% of low-income persons (income less than \$15,000) visited the dentist as compared to approximately 86% in the higher income brackets. For 20% of the low-income population all permanent teeth have been removed compared with only 1% - 2% for the middle- and upper-income populations. The low-income are more prone to develop chronic oral health conditions. Many patients without access to consistent primary care end up in emergency room, and inefficient use of resources that increases the costs to our health care system.

Preventative dental care (regular exams and cleaning) is not a high priority for many low-income families. Our providers frequently encounter parents, for example, who believe that there is little point to getting preventative dental care for their children because the children are going to lose their "baby teeth" anyway (and their permanent teeth for that matter). Many times the parents will simply request to "pull the teeth out." This and similar behaviors lead to a high incidence of caries in pediatric patients, a high incidence of caries and tobacco use among adolescents, little or no care for adults, and high rates of missing teeth or no prosthesis replacements in the geriatric patients.

Several Health Professional Shortage Areas (HPSA), Dental Health Professional Shortage Areas (DHPSA), Medically Underserved Populations (MUP) and Medically Underserved Areas (MUA) attest to an insufficient number of providers in the region.

Program Services

Focus Areas

Children's Health
Health Education and Promotion
Maternal/Women's Health
Oral Health

Target Population

Infants
Pre-school children
School aged children - elementary
School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
African Americans
Latinos
Uninsured
Underinsured
Bi-racial & unknown

Description:

As many of our consortium members serve the needs of the underserved, uninsured and low-income populations, a variety of questionnaires/surveys were distributed amongst their clients to determine current and future needs. In response, the *Smile for Life* program was created to educate our target population and promote dental homes. Components of the *Smile for Life* program focused on recruiting dentists to support the program and provide free services, creating incentive programs for new/expecting mothers and children to encourage completion of dental treatment plans, and delivering oral health education to a continuum of targeted age groups. More specifically, the program included:

- 1.) Champions Luncheons/Dinners - to recruit local dentists and other professionals for the purpose of promoting dental homes and working toward the elimination of oral health disparities. The events recognize and appreciate the work of Champions.
- 2.) Dentist's Club – A free program for dentists who agree to provide 24 hours of free "pay it forward" services annually aimed at eliminating oral health disparities. The dentists also agree to make referrals to medical providers as necessary, and to accept

referrals from medical providers for dental care. In return, member dentists receive free educational and promotional materials, and can offer the treatment incentive programs below.

- 3.) Kid's Club – A free club for kids 1-17 that provides incentives for the completion of a dental treatment plan. The children continue to see dentist of choice. Upon completion of their dental treatment plan, a form is signed by the dentist and mailed back to Cornerstone Care that enters the child into quarterly drawing for incentives. The children are also invited to occasional Kid's Club events.
- 4.) Mom's Club – A free club for pregnant women and new mothers with children ages 1-3 that provides incentives for completion of a dental treatment plan. Upon completion of the dental treatment plan, a form is signed by the dentist and mailed back to Cornerstone Care that entitles the women to be entered into quarterly drawing for incentives.
- 5.) Pregnant women and new parents – in partnership with local pediatric, WIC and obstetric offices to reach out to pregnant women and new mothers through the provision of oral health education and training sessions. We have provided over 1,000 toothbrushes to children through the WIC program. Oral health education videos were produced and distributed to one aimed at educating women about the importance of their oral health during pregnancy and the second aimed at educating parents about the caring for their young child's oral health.
- 6.) Head Start and elementary school children – through school-based oral health education using the "Kid's Smiles" curriculum and education kits. In partnership with local nursing programs, free oral health education is provided to children in Head Start and elementary schools in Greene County. Student nurses distribute spin toothbrushes and/or light-up toothbrushes, toothpaste and dental floss to children and instruct them in proper use. Additional oral health education items (oral health game boards, educational DVDs, etc.) are distributed to teachers as funding permits.
- 7.) Middle and high school children -- poster contests about oral health for middle school students in Greene County to compete for prizes and the chance to see their posters printed and distributed, and Power Point design and presentation contests for high school students.
- 8.) Senior Citizens – oral health education programs in partnership with local nursing programs to provide free oral health education at senior centers in Greene County.

The grant-funded *Smile for Life* program activities listed above have been complemented by the introduction of Cornerstone Care's mobile medical/dental unit. We have used the unit to provide dental exams, cleaning and fluoride treatments to children in Head Start programs in Greene, Washington and Fayette Counties. We will be expanding our mobile services to provide dental services to area schools.

Likewise, the opening of Cornerstone Care's new dental clinic in Waynesburg (Greene County) has helped the *Smile for Life* program by improving access to dental care in the region. The clinic has also benefitted from the *Smile for Life* program in return through the program's promotion of oral health awareness and referrals from the Dentist's Club.

Role of Consortium Partners:

The grant program had a very active consortium. This three year program provided an important opportunity for the consortium partners to develop stronger working relationships and jointly plan and implement multiple activities. Each consortium partner played an active role in the program. The consortium meets on a monthly basis and all members have an equal voice in the planning and implementation of the project. Cornerstone Care as the lead applicant managed the fiscal accounting and project leadership aspects of the consortium. Consortium members were engaged in the decisions and activities of the consortium.

Outcomes

The outreach project enjoyed great success in community acceptance, from school districts, the local AHEC, county government, community organizations, parents and local media. Through this broad network of community leaders and our consortium partners we were able to grow the outreach well beyond initial expectations, providing services in all five of our area school districts and all of the Head Start programs. We have also been a constant presence at Mom's Showers, community fairs and events and other public and community venues.

During the three years since we began the outreach, the *Smile for Life* Kid's Club has registered more than 650 members and continues to grow. Of that number approximately 25% have completed their dental treatment plans and report a dental home.

The mobile unit has provided dental services to 202 children. Of that number, 42% were identified as having caries, and 50% of those had 4 or more caries. The average age of these 202 children was 4-5 years.

Seventeen local dentists have registered for the *Smile for Life* program and pledged a minimum of 408 hours of pay it forward services aimed at eliminating oral health disparities in our community.

Analysis has shown that our school-based program has made a significant increase in children's oral health knowledge. We have provided nearly 4,000 community youth with oral health education and distributed spin brushes to children in elementary schools and light-up toothbrushes to younger children. Formal analyses of the end results are not yet complete.

Challenges & Innovative Solutions

One common problem we share with many other rural areas is ongoing difficulty with dental provider recruitment and retention. Finding and keeping dental providers for our mobile unit is complicated by additional credentialing and/or scheduling issues which creates difficulty maintaining a routine schedule. We were able to solve the problem in the short-term by "borrowing" a provider from our dental clinic, but this led to a new problem of reduced productivity at the clinic. The mobile unit faces a "chicken and egg" problem: full-time staffing isn't productive until the unit achieves a sufficient patient load, but patient load can't be increased without enough provider-time to deliver services. We continue to struggle with this dynamic tension between our need for productivity and capacity.

Another common problem is that many of our consortium partners face down-sizing in their organizations due to state and federal budget cuts. This limits the amount of time and personnel they can continue to dedicate to the project, thus increasing the workload on grantee staff. While the project continued to expand and grow the dedicated personnel remained the same. As a result, project staff are trying to "do more with less", while some consortium partners have had pull back their participation in the project. We strive to keep all the partners in-the-loop despite reduced level of involvement in hopes they will re-engage as resources permit.

A more specific, unanticipated challenge involved our school based oral health education. The education is made possible by local nursing students who volunteer their time to deliver the education in area elementary schools. We use the "Kids Smiles" curriculum, a proven oral health education tool, but found that some of the nursing students had difficulty keeping to the curriculum and properly delivery the pre- and post-tests used to ensure program fidelity and effectiveness. In some instances they failed to properly deliver or record the data for analysis, resulting in some tests being discarded or being uninterpretable in final analysis. We determined the problem was with inadequate training and guidance for the nursing students. To simplify matters, we produced a very specific, written, step-by-step protocol with clear examples to guide the nursing students in their delivery of the education and the tests. This has helped nursing students be more consistent.

Sustainability

On-going Services and Activities:

The Smile for Life Clubs and the school-based programs will also continue. Through our existing partnerships we will be able to continue to provide the school-based oral health education program to all elementary and Head Start programs in Greene County. We will also expand our school-based program to include programs in Washington County thanks to a grant from the United Way of Washington County. We plan to continue the Smile for Life Clubs and the incentive program through corporate sponsorships and donations. We plan to also continue the Smile for Life mascot program through sponsorships and volunteer assistance.

The project will continue to be supplemented by the mobile medical/dental unit. The mobile unit will continue providing dental exams to Head Start children and expanding in the spring of 2012 to begin provision of dental services to area school districts. The mobile unit will also be expanded to provide clinical breast exams, various screenings and occupational medicine services in the coming months.

Our consortium will continue to meet and direct the school-based and Smile for Life projects. Several members are working together to form a Health Advisory Committee for a local school district. The partnerships formed by the consortium are solid and will continue in

tact as we continue the current outreach project, expand health education into different areas, and work together to build a healthier Greene County.

Sustained Impact:

The outreach program has increased awareness of the importance of good oral health particularly among the underserved population. We have created a vehicle that is focusing attention and resources on oral health and is actively engaged in defeating oral health disparities through education and prevention. Our efforts will result in a reduction in health disparities and reduce future health care costs.

Through outreach, we continue to promote oral health and assist people in the establishment of dental homes. The development of new dental centers in Waynesburg and Mt Morris and the mobile unit have improved access to care resulting in a reduction in oral health disparities in Greene and surrounding counties. The project clearly contributed to success of the new dental centers by helping to raise awareness and drive additional demand for dental services. Likewise, this impact was also felt by community dentists.

The Waynesburg Dental Center has experienced large demand for services generating more than 6,700 encounters since opening in March 2010 and providing significant income from dental services between March 2010 and March 2012. Since opening we have added a second full-time dentist, a second full-time dental assistant, one new full-time dental receptionist, a full-time dental practice manager and a part-time orthodontist. This is in addition to our original staff of one FTE receptionist, one FTE dental hygienist, one FTE dental assistant and one FTE dentist.

We have increased access to care available to local school districts by utilizing the mobile unit to provide on-site dentals and medical services as appropriate. We will continue to provide school based oral health education and are working to expand this service to include other health education topics such as nutrition, exercise, healthy living, etc.

The outreach has resulted in the development of a consensus paper calling for dental care for young children to begin by age one. This will have a direct impact on Cornerstone Care's policies whose dentists will begin to treat children at age one rather than age three. The consensus paper, entitled "Prediction, Prevention, Management and Treatment of Dental Disease in Children," will be broadly disseminated in hopes of having a similar impact on the practices of other dentists in the region.

Implications for Other Communities

We have created a model for oral health education, outreach and awareness called *Smile for Life* that can be expanded to other areas and is reproducible. Innovative components of the *Smile For Life* program, such as the Kid's Club, can be replicated by other communities. We have already received calls from dentists in neighboring counties that would like to offer the program to their patients.

Similarly, our in-school oral health education program is easily replicable using the Kid Smiles curriculum. Schools in surrounding counties have requested expansion of the program, and we plan to introduce the program into schools in Washington County in the fall.

PENNSYLVANIA

Dickinson Mental Health Center, Inc.

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12693 |
| Grantee Organization | Dickinson Center, Incorporated (granted as Dickinson Mental Health Center) |
| Organization Type | Non-profit 501 (C) 3 Behavioral Health, Intellectual Disabilities & Children's Prevention Provider |
| Address | 110 Lincoln Street, Ridgway, PA 15853 |
| Grantee organization website | www.dickinsoncenter.org |
| Primary Contact Information | Tricia Brendel Project Coordinator Phone Number: 814-776-2151 Fax Number: 814-834-1173 Tricia.brendel@dickinsoncenter.org |
| Project Period | 2009-2012 |
| Funding Levels | May 2009 to April 2010: \$150,000.00 May 2010 to April 2011: \$125,000.00 May 2011 to April 2012: \$100,000.00 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|----------------------------------|----------------------|---------------------|
| Elk Regional Health System | St. Marys, /Elk / PA | Hospital |
| St. Marys Area School District | St. Marys/ Elk/ PA | School |
| Ridgway Area School District | Ridgway/ELK/PA | School |
| Johnsonburg Area School District | Johnsonburg/Elk/PA | School |
| St. Marys Catholic School System | St. Marys/Elk/PA | School |

Community Characteristics

Area:

The coverage area for the program is Elk County, Pennsylvania. Elk County consists of the City of St. Marys, Two Boroughs (Johnsonburg and Ridgway) and Nine Townships (Benezette, Fox, Highland, Horton, Jay, Jones, Millstone, Ridgway and Spring Creek).

Community description:

The population of Elk County is 31,946 in a total area of 832 square miles. The racial makeup of the county is 98.5% white. There is a 27.5% adult obesity rate and 6.7 % low-income preschool obesity rate. Although the employment positions that dominate Elk County are blue collar with only limited white collar positions, there is a stronger economic base developing, especially with Marcellus Shale's presence. Our county has poor temporary housing options especially with the influx of people moving to the region to work for Marcellus Shale. Younger families are moving out of the region to seek better economic prospects and choose not to live in a rural community. Inadequate transportation infrastructure continues to plague our rural community.

Need:

The Elk Regional Community Assessment reports that overall well-being and preventive health care are among the top 5 concerns of community members. The report reveals that there is an overall access issue among the underserved and low-income population. Chronic diseases such as cancer, high blood pressure, cholesterol, and diabetes are growing concerns, and obesity is affecting all age groups. Residents lack adequate health education and understanding of the implications of life style choices. Many residents from youth to older age face depression, anxiety, and other mental issues.

Therefore, the focus of the Wellness Program's Rural Outreach grant has three primary goals:

1. Decrease obesity levels in children by implementing nutrition and physical activity awareness.
2. Reduce the number of expectant mothers who gain more weight than recommended during pregnancy.
3. Improve health care access for children.

Program Services

Focus Areas

Children's Health
Chronic Disease Management: Diabetes
Health Education and Promotion
Maternal/Women's Health
Physical Fitness and Nutrition
Obesity

Target Population

Infants
Pre-school children
School aged children - elementary
School aged children - teens
Adults
Pregnant Women
Caucasians
Uninsured
Underinsured

Description:

The Wellness Program was implemented to provide a new and innovative method for supporting wellness needs in Elk County by targeting childhood obesity through school, community and in-home education and intervention. The opportunity to integrate these specialized services with the programs under a behavioral health facility has provided a unique mechanism to reach some of the most at-risk families unlike any other domain in the community.

The Wellness Program implemented nutrition and physical activity awareness throughout the Elk County area with the support of a Registered Nurse as well as a Wellness Educator. This program provides services in the home, in the community, and in the school systems from birth to 18 years of age.

1. In Home Services: We conduct three main visits with our families which provide a comprehensive wellness assessment, nutrition education with pre-and post-tests, and individualized care plans for each child's needs.
2. Community Services: Our program participates in collaboration with seven local day cares and other organizations and agencies to initiate techniques to keep the children and their families involved and interested in different activities. Our education involves visuals, hands-on education, handouts, recipes, exercise, and fun activities. Pre- and post-tests are completed to measure progress.
3. Schools Services: In collaboration with the local preschools, elementary schools, middle schools, and high schools, we initiate education opportunities across all age levels on nutrition and physical activity awareness using presentations, lectures, participation, and competition-based activities. Pre- and post-tests are completed to measure progress.

Role of Consortium Partners:

Each consortium partner played an important role in jointly implementing the multiple activities.

- **Dickinson Center, Inc.** served as the program administrator, employing the full time staff for coordinating and conducting the Wellness Program activities. DCI compiled the required grant documentation and follow-up information as well as overseeing reimbursement to the providers.
- **Elk Regional Health Center** provided an in-kind donation of office space for the Wellness Program as well as providing a partnership with their dietitians. The dietitians were recruited to provide their services through In-Home visits as well as School services. They also committed the time of their Women's Certified Registered Nurse Practitioner (CRNP).
- **Cameron Elk Mental Health Mental Retardation** helped in our sustainability plan. The Wellness Nurse is the Independent Evaluator for Early Intervention. They also provided referrals through their program.
- **St. Mary's Area Public Schools** allowed the Wellness Program to educate in their school system as well as provided referrals. The Family Day event has been held on the grounds of the St. Mary's Area School District for a number of years.

- **St. Mary's Catholic School System, Johnsonburg Area School District, and Ridgway Area School District** all allowed the Wellness Program to participate and educate in their school systems as well as provided referrals.

Outcomes

Due to HIPAA, many agencies are unable to coordinate or exchange information about the needs of the individuals they serve. Therefore, having a nurse providing these wellness services under the jurisdiction of the Dickinson Center, Inc. has removed this HIPAA barrier, allowing coordinated wellness education and intervention. Through the Wellness Express (all three years) a total of 160 families received screening, educational programming, and follow-up monitoring. Information gathered included demographic information and parental reports of: nutritional status; activity level; feeding methods; fruit and vegetable intake; ability to identify fruits and vegetables; family activities; screen time use; utilization of community/healthcare resources; and knowledge of nutrition and exercise. The data collected supports an improvement in knowledge and behavioral reports of the parents following the educational programming.

During year 2, nutritional education was provided to 516 children in elementary schools, middle schools, and community clubs. Data was collected associated with healthy eating choices, identifying healthy food choices, and knowledge of healthy activities. In all areas assessed, the children showed improved knowledge on pre-post testing. During year 3, the program was expanded to include preschools and high schools. 1210 total children received the nutritional education [286 Preschool; 600 Elementary School; 232 Middle School; & 92 High School]. Outcome data for the third year is currently being analyzed.

Pre-natal cooking classes during all three years of the grant involved a total of 55 expectant parents. Pre- and post-surveys assessed knowledge of health issues associated with diet for children and adults; knowledge of healthy food choices; and knowledge related to understanding food labels. Parents demonstrated an improvement of nutrition/health knowledge following the prenatal cooking class.

Challenges & Innovative Solutions

- The schools of Elk County have the interest and support in the Wellness Program; however, they cannot provide staff for a full time program. They are lacking in funding to support full time staff to address the wellness concerns of the population.
- Elk County has been experiencing a shortage of nurses, therefore many times the individuals are not available to provide the education and perform the number of screenings that would be required within a school setting. In addition, there have been several staff changes among the dietitians which made it difficult for the Wellness nurse to complete the dietary visits; however, dietitians are once again fully staffed.
- As with all rural areas, a major barrier to improving the health status of the residents is the lack of adequate funds and transportation.
- One of the most challenging aspects is keeping up with the program. The demand for preventive education is great, thus we must keep very flexible. Our schedule changes on a daily basis from pep assemblies, classroom teaching, in-home visits coupled with Early Intervention evaluations. Our program initially involved two RNs, and we currently have only one RN and one Wellness Educator at 15 hours per week. This downsizing causes challenges in keeping up with the demands from the schools, community, and in-home services.
- Also, it has been a challenge to find reimbursement/billable rates from Highmark. We are currently working with the Highmark Foundation for future resources as well as service options.

Sustainability

On-going Services and Activities:

The project's activities will continue as defined within the grant pending on-going funding. We did find that targeting the birth to age five is the most effective due to the children's enthusiasm as well as not being set in their daily activities or eating habits. Starting at this age, we can be the advocate as well as the avenue to make an impact on their daily lives. They begin to understand the importance of eating healthy as well as performing physical activity on a daily basis. Hence, this will increase the children's lifespan and decrease the obesity, cardiovascular disease, diabetes, strokes, and so forth.

The activities of the Wellness Program will proceed through a combined funding process involving contract fees, in-kind resources and staff support. The Wellness Nurse is contracting with Cameron Elk Mental Health Mental as their independent evaluator at a fee of \$109.76 per billable hour. The Wellness Program will continue to pursue a workable fee-for-service process. We have met with Highmark leadership in January, and they are formally entertaining a proposal for a partnership through the Highmark Foundation. The Dickinson Center, Inc., Elk Regional, and the school systems will continue to work in collaboration for planning, support and in-kind resources.

Sustained Impact:

This pilot project has shown very promising results and the significant impact of early education using a prevention-based curriculum. The impact to the county will be healthier, more vibrant residents, a well-educated population, an eventual reduction in health care premiums to employers, less work time lost to care for sick children and an overall improved quality of life.

The program has enhanced the partners' ability to interact with other appropriate agencies. Our collaborative and successful efforts with Elk Regional Health Center have begun a movement toward the integration of physical and behavioral health efforts in this community.

We are the first behavioral health facility in Elk County to implement such a program that integrated physical health into its service line. This project has heightened awareness of families and community partners for the value of holistic health care. As a result of this project, we have been able to reach some of the most at-risk families for obesity, where previously our hospital or other health agencies have been unsuccessful.

This program is making baby steps every time we encounter these children's lives. We see them in home, community, and school. We are keeping the same repetitive message promoting this message in different environments, which in turn will make a difference in their lives. We are their preventative care. This is a wonderful place to begin.

Implications for Other Communities

Our Wellness Program is structured to be replicable in all areas of the country. Obesity is a problem that affects rural and urban areas alike. Within a rural setting the project could remain exactly the same. In an urban setting the number of staff would have to be increased. Otherwise the program component would remain applicable.

In order to replicate this model, the Wellness Program has created several components that are essential:

- A dedicated team of nurses and educators who are enthusiastic to teach children and adults new ways to live healthy lifestyles.
- Staff who can multitask and "go-with-the-flow" in various situations.
- A team who can work closely with other organizations within their community.

Overall, The Wellness Program has educated 22,862 children and adults within one county in Pennsylvania. In the 2010 census, Elk County had nearly 32,000 residents. Looking at these two numbers, we feel this is an excellent indicator that a Wellness Program such as ours would have much success in other counties of our state as well as other areas of the country.

PUERTO RICO

Migrant Health Center

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12690 |
| Grantee Organization | Migrant Health Center |
| Organization Type | FQHC (Health Center) |
| Address | 392 Sur Calle Dr. Ramon E. Betances, Mayaguez, PR 00680 |
| Grantee organization website | http://www.mhcnon-profit.com |
| Primary Contact Information | Reynaldo Serrano Executive Director Phone number: 787-833-1868 Fax number: 787-832-0740 mhc@migrantspr.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$124,842 May 2010 to April 2011: \$99,944 May 2011 to April 2012: \$99,944 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|------------------------------|----------------------------|
| PathStone Corporation | Ponce, Puerto Rico | Training and Employment |
| Coordinadora Paz para la Mujer | Rio Piedras, Puerto Rico | Service and Education |
| Community Counseling Group, Inc. (CCGI) | Westlake Village, California | Counseling |
| Salud Integral en La Montaña | Naranjito, Puerto Rico | Health Center |
| Centro Salud Lares | Lares, Puerto Rico | Health Center |

Community Characteristics

The communities served during the Grant were Maricao, Las Marías, San Sebastian, Sabana Grande, Lajas, Utuado, Adjuntas, Jayuya, Orocovis, Morovis, Lares, Moca, hormigueros, Yauco, Barranquitas, San Lorenzo, Las Piedras, Cidra, Maunabo, Cayey, Quebradillas, Añasco, San German, Guanica, Guayanilla, Florida, Villalba, Coamo and Corozal.

Our initial goal for the three (3) year project period was to serve 1,350 farmworkers. We surpassed expectations and served a total of 11,237 farm workers and their families throughout Puerto Rico. During these years we identified the factors that cause disparities and unattended health problems in Puerto Rico. The most prominent are poverty conditions and lack of proper education. In terms of specific health conditions HIV/AIDS, diabetes and domestic violence are among the areas of greatest concern, especially among the rural population. Geographical isolation, poor nutritional habits, lack of diabetes awareness, and deficiency in preventive measures, increase the challenges faced.

The needs of farm workers in Puerto Rico are defined in terms of health education such as diabetes, HIV/AIDS and domestic violence in order to help prevent risky behavior as well as to promote good nutrition and mental stability.

All of the municipalities attended have high poverty levels, the most notable being Maricao (65.7%). The second most affected municipality being Las Piedras at 47.8%. Every other municipality in the targeted area currently falls under top 49 highest poverty levels of the nation.

Program Services

Focus Areas

Children's Health
Chronic Disease Management: Diabetes
Community Health Workers/Promotoras
Health Education and Promotion
Migrant/Farm Worker Health
Domestic Violence Prevention Education
Access to testing

Target Population

Adults
Elderly
Pregnant Women
Latinos
Uninsured
Underinsured

Description:

Outreach: During these years our Project Staff Increased knowledge of farm workers, their families and communities regarding healthy nutrition and lifestyles for the prevention of diabetes, HIV/AIDS and related diseases, and leading a healthy life, including treatment, following a diagnosis. Staff contact gatekeepers, community leaders, churches, and other helpful sources in order to access rural communities, coordinate health fairs and educate clients.

Education: Workshops for HIV/AIDS, Domestic Violence and Diabetes were provided to the target population. We also offer pre and post test counseling. Distribution of brochures and educational material complemented and reinforced our educational efforts.

Recruiting of Volunteers: People from our target communities that expressed desired to be volunteers and demonstrated to be responsible, enthusiastic and were willing to commit several hours a week to serving others were recruited in each of our target barrios.

Activities: Diabetes and HIV/AIDS Prevention Clinics were opened to the community, as well as other activities such as; promotion, outreach and community education.

Health fairs: Provided HIV and Glucose testing, referrals and health education.

Role of Consortium Partners:

Migrant Health Center, Inc. was the Project grantee and co-author of the proposal. Among the many responsibilities of MHC, Inc. the most notable are: validating the training manual, providing educational manuals, oversight, performed train of trainers in HIV/AIDS, guidance and evaluation of the program as well as feedback, providing a mobile unit, providing HIV and glucose testing materials, provided in-kind staff to perform testing at each community health fairs, coordinating consortium meetings, fiscal management and identifying additional needs. The PathStone Corporation was co-author of the proposal as well as responsible for identifying volunteers, training and retaining them, providing monthly reports and provide fiscal report. PathStone was also in charge of coordinating outreach activities, distribution of educational material and coordinating community educational activities. "Coordinadora Paz para la Mujer" also collaborated in the proposal development, validated the training manual, provided information on Domestic Violence, distributed educational material, provided material and trainings updates along with feedback, performed train of trainers in Domestic Violence training, identified additional needs and offered advice and guidance in participant needs.

Outcomes

As mentioned above, our initial goal for the three (3) years Project period was to serve 1,350 farmworkers; we surpassed expectations and served a total of 11,237 farm workers and their families throughout Puerto Rico. Sixty-eight (68) volunteers received training on issues related to the prevention of HIV/AIDS, domestic violence and diabetes. 15,130 brochures were distributed which exceeded our goal of 8,000. From the twenty one (21) health fairs, participants whose tests results required further treatment and counseling were served by Migrant Health Center clinic sites and other partners. In terms of workshops and educational material, pre and post testing (overall) reflected an increased in short term knowledge of 88%. Two hundred seventy five (275) workshops were performed. Another outcome was the increased level of interest from the surrounding community with individuals who wanted to become volunteers for the program. The output data that was used is a successful demonstration that the model has worked and we have been able to deliver services as planned. The program was able to access or impact remote places and improved access to health care services. Through use of this data to identify need in these rural communities, funding was given to Migrant Health Center for a new project in Maricao.

Challenges & Innovative Solutions

The major challenge presented was volunteer retention. The majority registered as volunteers because they had free time, but as they found jobs or had problems with transportation, they were less available. Another challenge was gathering the volunteers to be trained as a group. We have been able to provide the Train the Trainer individually and/or in very small groups. We are constantly training volunteers to replace those who are less available. We have incorporated storyboards and other visual materials which have helped the participants understand the illnesses, how to prevent them and how to treat them.

Sustainability

Proposals applications have been submitted for other health funding that would sustain the impact of this program. We continue working in the recruitment and retention of volunteers. We continue providing educational and prevention materials along with workshops to clients from municipalities near the program targeted areas including other counties that could benefit from these services. Migrant Health Center Clinic sites will continue to accept health referrals and provide service for patients linked by our Project volunteers. New partners are offering HIV and glucose tests free of charge for individuals referred by the volunteers and staff members. PathStone will continue to train volunteers. Funding for a Community Health Center in Maricao was provided through a proposal submitted to HRSA utilizing data obtained from this project. The overall Project staff and volunteers are now knowledgeable of HIV/AIDS, Diabetes and domestic violence topics and are capable to continue to provide these training in the future.

Implications for Other Communities

As it has been our experience during these past years, people in rural areas do not have access to health information. This project has become a successful design to impact rural areas, providing the necessary education for people to understand, treat and prevent health disparities and violence. For many citizens, HIV, Domestic Violence and Diabetes are topics that are not easy to understand and there is much lack of knowledge towards these social and health issues. The workshops, the outreach, the promotion, the health fairs, and the way the materials were delivered, made it easier for our target clients to understand the materials distributed and these were very well accepted. We have begun to expand the services we offer to other municipalities in the surrounding areas. Volunteers are as effective in delivering education and materials to the communities, as are health professionals. This educational program was of interest not only to adults but also to young students who were very enthusiastic about learning the effecting health issues in the communities and spread the information to their families. Through educational information provided at school workshops for parents, teachers and other school personnel, these persons were able to obtain and receive proper information regarding the management of HIV/AIDS, Diabetes and Domestic Violence.

SOUTH CAROLINA

Beaufort Jasper Hampton Comprehensive Health Services, Inc.

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12731 |
| Grantee Organization | Beaufort Jasper Hampton Comprehensive Health Services, Inc. |
| Organization Type | Federally Qualified Health Center |
| Address | 721 Okatie, Highway 170, Ridgeland, SC 29936 |
| Grantee organization website | www.bjhchs.org |
| Primary Contact Information | Roland J. Gardner Chief Executive Officer Phone Number: 843-987-7400 Fax Number: 843-987-3104 rgardner@bjhchs.org |
| Project Period | May 1, 2009 – April 30, 2012 |
| Funding Levels | May 1, 2009 – April 30, 2010: \$150,00 May 1, 2010 – April 30, 2011: \$125,000 May 1, 2011 – April 30, 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|--------------------------------|---|
| Department of Health & Environmental Control – Region 8 (DHEC) | Varnville, SC (Hampton County) | State agency, Health Education and Services |
| Coastal Empire Community Mental Health Center (CECMHC) | Varnville, SC (Hampton County) | State Mental Health Services |

Community Characteristics

Area:
Hampton County

Community Description:

Hampton County is a rural medically underserved area (MUA) in the Low-country region in South Carolina. It has a population of 21,090 with 44% White, 56% African-American and 3% Hispanic (2010 Census). The top 10 leading causes of death are cancer, heart disease, strokes, respiratory disease, kidney disease, accidents, hypertension, diabetes, pneumonia and Alzheimer's disease. 13.7% of the adults have diabetes and 38.9% are obese. The county lacks specialists to treat most of these conditions. Beaufort Jasper Hampton Comprehensive Health Services, Inc. (BJHCHS) is the only safety net provider in the county. The other providers are for-profit or have private practices. There is one hospital and it does not have an obstetric unit. There are 3.31 grocery stores per 10,000 residents and 2 farmers markets that are seasonally operable. This provides limited resources for fresh food. Most of the small towns do not have safe places for their residents to walk or engage in organized, physical activities. Unemployment rates have escalated to 12.9% as of February 2012 according to the County's Administration Office.

Need:

Hampton County is the most rural among three Low-country counties served by the consortium and has the highest rate of poverty and unemployment and the least public health system infrastructure. The citizens must travel as far away as 74 miles for health care, especially if they are uninsured. One of the most striking of the racial disparities is the death rate for diabetes in Hampton County. The diabetes death rate African-Americans is nearly five times the rate among whites. In 2009, the rate of obesity was 51% among African-Americans, significantly higher than the county average of 38.9% and the state average of 30.3%. In Hampton County, 54.2% of adults did not meet physical activity recommendations and 83.1% did not meet fruit and vegetable recommendation (DHEC, 2009).

Program Services

Focus Areas

Behavioral/Mental Health
Chronic Disease Management: Diabetes
Health Education and Promotion
Physical Fitness and Nutrition

Target Population

School aged children - elementary
School aged children - teens
Adults
Elderly
Caucasians
African Americans
Uninsured
Underinsured
Insured

Description:

1. The Consortium hired a resident of Hampton County as the healthcare Coordinator who resided in the BJHCHS Estill Medical Center. Each partner assigned a staff to function as an In-Agency Coordinator. Patient Advocacy was designed as a service. The Coordinator and the In-Agency Coordinators met monthly to implement the expectations of the grant.
2. **Community Outreach, Activities and Coordinated Projects:**
 - A **Community Advisory Council** was formed from a list compiled by the Healthcare Coordinator and the In-Agency Coordinators. It was used as the starting point to develop an advisory council composed of stakeholders from a cross section of residents in the county. The committee was asked to support any special programs and provide advice regarding the community's needs and barriers to diabetes care. The Council provided an opportunity to gather and disseminate information from the community and assist other member agencies. In addition, the members and other community residents were invited to form the Eat Smart Move More Hampton County (ESMMHC) Coalition. The coalition addresses obesity/overweight in the county by encouraging healthy eating and active living.
 - DHEC-Region 8 received funding to contribute to the development of a walking trail in the town of Estill. An outcome of the walking trail was the "**Biggest Loser**" program. It was initially suggested to promote the trail; however, it developed into a program that focused on a healthy lifestyle change through education, healthy eating and physical activity. The program included pre/post diagnostic tests and educational and supportive sessions.
 - Provided outreach through local and county **Health Fairs** to disseminate information about diabetes and other health related conditions, encouraged local churches to establish health ministries, and educated residents to seek services at the FQHC.
 - Developed **relationships** in the county and surrounding areas that would support the Consortiums' efforts to provide healthcare/health services to the residents of the county (Medical University of South Carolina [MUSC] - Hollings Cancer Center, Beaufort Memorial Hospital CHIPS Program, etc.)
 - Sponsored and provided transportation for up to 15 community residents, who had diabetes or who were "at risk" for diabetes, to attend the **Annual Diabetes Conference** in Columbia, SC for 3 years, a total of 45 participants.
3. **Education and Counseling:**
 - SCDHEC- Region 8 managed the certification of an additional site to offer **Diabetes Self-Management Education (DSME)** classes, expanding access to services at 2 sites in Hampton County.
 - Diabetes education in ongoing **Diabetes 101 Workshops** and presentations in various venues and professional meetings (seniors, civic groups, government, educational, faith-based).
 - BJHCHS introduced **Nutrition Counseling** in the **Middle School** in two school districts.
 - **Nutrition Counseling** in BJHCHS Hampton County Medical Centers.
 - **Mental Health Counseling** offered at Hampton Medical Center for easier access for patients who wanted/needed/referred for the service.
4. **Screenings and Clinical Services:**
 - **Depression Screenings:** CECMHC provided depression screenings. A mental health counselor was available at the BJHCHS office at the Hampton Medical Center to encourage referrals and follow through.

- **Body Mass Index (BMI) and Blood Pressure (BP) Screenings:** BJHCHS dietitian (In-Agency Coordinator) and nutrition staff administered BMIs in the Hampton County School Districts I & II for grades 3rd, 5th and 8th graders for the first time during school year 2010-11.
- **Other Screening Events:** Sponsored 4 mobile units screening events (MUSC-Hollings Cancer Center, Beaufort Memorial Hospital CHIPs) for various **clinical testing** (BP, A1C, Cholesterol, mammograms, cervical, Pap-smear, PSA) in both ends of the county.

Role of Consortium Partners:

A consortium of the three major healthcare providers (BJHCHS, DHEC-Region 8 and CECMHS) serving Hampton County partnered to address one of the county's major health issues, diabetes, and develop a model that will be used to address additional health issues. The key component of the model defined by the consortium is the Hampton County Healthcare Coordinator who reported to the Consortium Executive Committee and is supported by representatives in each of the three agencies, In-Agency Coordinators, and a Community Advisory Committee composed of Hampton County residents with a stake in the community's health and wellbeing.

- BJHCHS provides comprehensive primary care services and participates in the Bureau of Primary Health Care Diabetes Health Disparities Collaborative.
- DHEC provides Diabetes Self-Management Education and Diabetes 101 Community Education in support of diabetes prevention and control.
- CECMHC provides outpatient mental health services including treatment for depression and behavioral modification counseling.

Outcomes

Screenings BMI/Blood Pressure for 3rd, 5th, 8th Grades: 778 were measured and blood pressure taken. Based on the preliminary data 41% 3rd graders, 55.6% of 5th graders and 50.8% of 8th graders were overweight or obese.

Depression Screenings: 388 citizens were screened for depression at various health fairs and gatherings. As a result, 28 referrals were received, 16 patients kept their appointments and 8 returned for services. The no show or follow-up rate remained the same at approximately 44% as was the case at the Mental Health office.

Biggest Loser:

- Three cycles have been completed, a total of 205 participants registered, 75 completed the program with a total loss of 430.8 lbs., losing an average of 5.7 lbs. each. The results of the 1st cycle were presented at the SC Diabetes Symposium in September 2011 and won first a 1st prize.
- While weight was lost, over 50% of the group was "at risk" for diabetes with their A1C ranging between 5.6 – 6.00.

Nutritional Counseling:

- Increased to 3 days per month with a patient count of 15 – 19 patients per schedule.

Referrals for diabetes patients through the web-based portal: DHEC made 288 referrals to BJHCHS, BJHCHS made 1 to DHEC, 1 to CECMHC and 595 to other providers. CECMHS made 1 to DHEC.

Hospitalizations or emergency room visits for diabetes care: There were 15 hospitalizations and emergency room visits for diabetes among Consortium patients with a total hospital charge of \$196,457 in January – June 2011, slightly reduced from the number (16) in the first 6 months in 2009. The number among African-American patients reduced from 14 to 10 in 2011.

Annual Patient Surveys: 85.4% of patients reported that the medical services were very helpful or helpful; 66.7% said that providers said that providers assisted them with making appointments; and 93.8% reported the waiting time for an appointment was 1 – 3 days in 2012, significantly increased from 30.0% in 2010.

Community Health Needs Surveys: Among 294 respondents, 25% have diabetes, 52% have hypertension. Lack of health insurance (12.6%), wait too long in waiting room (25.1%) and no transportation or have to travel too far (11.2%) are the main barriers to care.

Challenges & Innovative Solutions

Transportation: The grant originally proposed that a core of volunteers via the community and/or faith-based organizations would provide transportation assistance to those who struggled to make scheduled doctor's appointments. The challenge was to gain cooperation from community members/churches; however, because of liability insurance and uncertainty of cost benefit, an insufficient amount of resources designated for this activity was not available. This was addressed by offering clinical testing via mobile units to two sites.

The Consortium: The three Consortium members earned recognition for their commitment to Hampton County residents through the relationships established by the Hampton County Healthcare Coordinator and the In-Agency Coordinators representing each of the three agencies. Policy level changes of the two state agency consortium partners caused changes in two of the In-Agency Coordinators. Currently, one In-Agency Coordinator is active along with the Coordinator. As staff changes were made, the strong vision of the consortium's mission enabled the remaining Coordinators to keep their "Eyes on the Prize", persevere and be persistent. Implementation of the programs remained consistent.

Low Country Healthy Start (LCHS): LCHS was written in as a secondary partner to provide advocacy services. LCHS was unable to adapt to the consortium's mission. Consequently, a request was made to terminate the contract and shift the funds to hire a Consortium Assistant who could assist with outreach, coordination of services, organization of meetings, etc.

The Portal and Website: The Portal and the Website were designed to develop an electronic communication portal to facilitate the work of the Consortium and an online information portal for community access. Challenges included having signed agreements after 18 months for staff utilization, navigation of the portal, underdeveloped capacity to successfully launch the website. If included in future grant applications, it is strongly recommended that staff with website development skills oversees the process.

Sustainability

On-going Services and Activities:

Healthcare Consortium: The Consortium will continue to coordinate healthcare services.

Diabetes Self-Management Education Certified Site – Estill Medical Center: Diabetes Support Groups compliment this program. It will be sustained through re-certification, which is monitored by DHEC-Region 8.

Diabetes Prevention Program (DPP): DPP curriculum sponsored by CDC is an expanded service. Staff is trained and BJHCHS has applied to become a recognized CDC/DPP agency pending CDC's requirements.

The Hampton County Advisory Council: The Council elected to remain as a group and meets once a month.

Eat Smart Move More Hampton County (ESMMHC): This coalition has put us in position to apply to the Community Transformation Grant (CTG) for funds to continue/support activities that were initiated under ESMMHC and will expand to benefit the entire community. This initiative is under SC DHEC.

Annual Body Mass Index (BMIs): BJHCHS staff provides the service and intends to continue with the hope of eventually putting a school-based program in the Middle Schools. DHEC provides the analytic report.

Nutrition Counseling: BJHCHS will continue nutrition counseling to Hampton and Estill Middle Schools.

Nutrition Counseling: Nutrition Counseling will continue 3 days a month in both BJHCHS Centers in Hampton County.

Estill Walking Trail: The trail is being maintained by the town and promoted by the "The Healthy Lifestyle Challenge" aka "The Biggest Loser Contest, A Healthy Lifestyle Challenge."

The Biggest Loser Contest: Recently awarded small amounts of funds to begin the program, however, continuing to explore for full support funding.

Sustained Impact:

As a result of the Outreach grant program, the long term effect on Hampton County is more people are aware of healthcare concerns and willing to engage in discussions about healthcare. The Consortium enabled partnerships and relationships that otherwise would not have been formed. Health education and services have spread throughout the community, some that were not available before, which has made residents more aware of the importance of changing their lifestyle. In addition, more services are in the planning stages, such as, CDC Diabetes Prevention, With Every Heartbeat There is Life, The Healthy Lifestyle Challenge, etc. Groups and coalitions have formed, sharing information and/or partnering to provide services from community to direct care, such as, ESMMHC (promotion of physical activity and healthy eating), the Healthy SC Initiative (policy focused), classes for residents who suffer from or at risk chronic diseases (diabetes, diabetes prevention, heart disease prevention, etc.) and the initiation of a relationship with the local hospital (now they have a community liaison person). Additionally, RHO provided the opportunity to apply for additional funds to continue efforts to help make the community healthier through ESMM South Carolina - \$3,500 for capacity building, \$1,500 – Town of Estill for Healthy Challenge Program, \$1,000 – Rural Health Foundation for Healthy Challenge Program, \$500.00 – PEARLS (women's and philanthropic group in the county) for the Healthy Challenge Program, \$90,000 – Healthy South Carolina Initiative (CTG), a total of \$96,500.

Implications for Other Communities

The grant program has been an exciting experience which taught that being persistent, focused and caring about the place where you live, work, and play and pray is the key to providing effective programs. As indicated under the sustainability section, there are a number of programs that can be implemented in other communities, but there are three that opened the most doors for education/communication and spreading the "good health" word throughout the county: the Biggest Loser Program, the Advisory Council and the nutrition counseling in the schools. In the 3 Biggest Loser cycles, the 200 registered participants were a vehicle to advertise various healthcare programs, health screenings, monthly health awareness through their churches and among family and friends. The Advisory Council opened doors to other healthcare entities where services can be enhanced to address the needs of the community. The preliminary results of the BMIs prompted the Chief Medical Director of BJHCHS to support Nutrition Counseling in the middle schools and committed to annual BMIs.

SOUTH CAROLINA

CareSouth Carolina, Inc.

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12725 |
| Grantee Organization | CareSouth Carolina, Inc. |
| Organization Type | FQHC |
| Address | 201 N. Page Street, Chesterfield, SC 29709 |
| Grantee organization website | www.caresouth-carolina.com |
| Primary Contact Information | Lisa Greene-Williams Director, Northeastern Rural Health Network Phone number: 843-623-3448 Fax number: 843-623-5603 lisawilliams@nrhnonline.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|------------------------------|---------------------------------|
| Chesterfield General Hospital | Cheraw/Chesterfield/SC | Hospital |
| Marlboro Park Hospital | Bennettsville/Marlboro/SC | Hospital |
| Tri County Mental Health Center | Bennettsville/Marlboro/SC | Mental Health |
| Northeastern Technical College | Cheraw/Chesterfield/SC | School |
| University of South Carolina | Columbia/Richland/SC | School |
| The ALPHA Center | Chesterfield/Chesterfield/SC | Substance Use/Behavioral Health |
| Trinity Behavioral Care | Bennettsville/Marlboro/SC | Substance Use/Behavioral Health |
| Chesterfield County Coordinating Council | Chesterfield/Chesterfield/SC | Human Services |
| Marlboro Interagency Council | Bennettsville/Marlboro/SC | Human Services |
| SC Office of Rural Health | Columbia/Richland/SC | State Office of Rural Health |
| DHEC-Department of Health & Environmental Control, Region 4 | Sumter/Sumter County, SC | Health Care Regulatory Agency |

Community Characteristics

Area:

Chesterfield and Marlboro counties in South Carolina

Community description:

The region's economy depends largely on state employment, farming, and a handful of international industries. Recent downturns in the economy have resulted in significant budget cuts in state funding as well as lay-offs at some of the local plants. South Carolina Employment Securities Commission figures, from August 2008, indicate unemployment rates of 10.3% in Chesterfield and 13.3% in Marlboro Counties, compared to a state rate of 7.6%. Marlboro County qualifies for federal recognition as a Champion Community because of its high poverty and unemployment rates. Both counties are designated by the Office of Rural Health Policy as Medically Underserved Areas, Primary Care Health Professional Shortage Areas (by geography and low income), and Mental Health Professional Shortage Areas (by geography). Approximately 13.2% of Chesterfield County residents and 14.6% of Marlboro County residents, age 25 and older, and have less than a 9th grade education (compared to 8.3% in SC and 7.5% nationally). Between 2003 and 2005, Marlboro County ranked first in South Carolina for heart disease mortality and 34th for stroke mortality; Chesterfield ranked 10th for heart disease and 25th for stroke (out of a total of 46 counties).

Need:

The project promotes monitoring of health conditions and increased access to care contributing towards achievement of HP 2010's main goals. Prevention of cardiovascular disease, especially in individuals suffering from behavioral health conditions, is the overarching goal of the project. In an area so devastated by cardiovascular disease, prevention must begin at an early age and must promote more than just knowledge of risk factors. Young adults must learn how to make lifestyle changes and incorporate healthy behaviors into everyday living. As such, CATCH HOPE targets populations at risk for cardiovascular disease by delivering a comprehensive education and support class, similar to the one used in the *Steps to Wellness/Pasos a Salud* project in Oregon. For the purposes of CATCH HOPE, these are called "wellness classes" and include education, exercise, and support group session – all geared to controlling cardiovascular disease risk factors, including related behavioral health conditions

Program Services

Focus Areas

Access: Primary Care
Behavioral/Mental Health
Chronic Disease Management: Cardiovascular
Chronic Disease Management: Diabetes
Health Education and Promotion
Physical Fitness and Nutrition

Target Population

Adults
Elderly
Caucasians
African Americans
Latinos
Uninsured
Underinsured

Description:

Community health screenings to test blood pressure, cholesterol, and blood sugar; administration of PHQ-9 depression screening was also completed as a part of the community health screening; primary and behavioral health care referrals made where appropriate; health and wellness classes to educate individuals on a variety of topics including stress management, healthy eating, and mental health issues. The wellness classes are designed to encourage positive lifestyle changes through knowledge gained and skills acquired. Along with this, the focus of the classes is to make lifestyle changes that are both approved and acknowledged by each individual's physician and family members. Family members are included, as they often influence decisions made by loved ones in meal planning and exercise habits.

PHQ-9 screenings were administered to individuals at Marlboro Park Hospital in Marlboro County who presented in the emergency room with cardiovascular problems. A part-time licensed social worker was hired at Marlboro Park Hospital in January 2011 to complete the PHQ-9 screenings and make referrals to both behavioral and primary care physicians where appropriate. Prior to hiring the social worker, a nurse and case manager were responsible for completing the screener and making referrals.

Finally, as a sustainable result of the Catch Hope Outreach Grant, the first Mental Health First Aid course was held in February 2012 in Florence, SC to educate community members about mental illness, teach individuals how to support individuals who have mental illness, and reduce stigma.

Role of Consortium Partners:

CareSouth Carolina, Inc. serves as the fiscal agent and lead applicant for the Northeastern Rural Health Network for the CATCH HOPE project, and manages the Network's activities.

Since 1993, the mission of the Chesterfield County Coordinating Council is to strengthen the systems that provide services through improved communication, adequate linkage and collaboration. Specific contributions to CATCH HOPE were knowledge of and connections to local health and human service systems, the provision of resource directories for cardiovascular disease, behavioral health, and life needs, and the housing of staff for the project. Further, the CCCC Health Subcommittee essentially served as an advisory committee providing feedback to the Network and disseminating any information from the Network to the 55 agency members for their staff and clients.

Northeastern Technical College contributes volunteer clinical staff in the form of nursing students and their supervisors, meeting space if needed, and development of a business plan to ensure sustainability.

The South Carolina Office of Rural Health provides resources and time necessary to build the Network, and continues to provide technical and financial resources from both within and outside the region, which offers ongoing opportunities to learn about models that work. SCORH's Executive Director, Dr. Graham Adams, and Network liaison Ms. Tiffany Simpson-Crumpley regularly attend and provide feedback for NRHN Board meetings.

Marlboro Park Hospital in Bennettsville, SC employed a part time social worker to administer PHQ-9 screenings in the emergency room department for the CATCH HOPE program. Initially, the screenings were to be administered in the Cardiac Rehab unit, but the unit was closed there shortly after the program began. However, Marlboro Park worked closely with other Network members to provide the support and feedback necessary to meet this grant deliverable.

Other Network Consortium members, including Tri County Community Mental Health Center, the Marlboro Inter-Agency Council, the ALPHA Center, Trinity Behavioral Care, DHEC Region 4 and the University of South Carolina, also contributed feedback and insight into program developments.

Outcomes

CATCH HOPE data is currently being evaluated. As of March 2012, both community screenings and classes were still underway. Preliminary findings suggest that as a result of CATCH HOPE Wellness Classes, participants have experienced a shift in knowledge and attitudes regarding nutrition, diet, and appropriate physical activity. Small goals were encouraged for class participants and throughout the four week class sessions and most participants reported that they were able to make small changes and stick to those changes.

To date, CATCH HOPE has completed 12 Wellness Classes within the community. This is significant given the fact that the new Outreach Coordinator and Project Director completed this number of classes in about a year, averaging one class each month. In addition to classes, approximately 950 individuals were screened for blood pressure, cholesterol, blood glucose, and depression through Chesterfield and Marlboro counties. Traditionally, Western Chesterfield County was severely under-represented for health screenings but CATCH HOPE staff worked to enhance representation from that area. Of these 950 individuals, approximately 10% come from the Pageland and Jefferson area—which shows marked improvement for providing services to individuals in that area.

When all community screenings are completed, the data will be evaluated for (including but not limited to) number of individuals with high blood pressure, cholesterol, blood sugar; number of individuals who have a primary care doctor; number of individuals who have insurance; type of insurance; percentage of individuals who have a primary care doctor who still have high blood pressure, high cholesterol, or high blood sugar levels; percentage of individuals who have a doctor, but who have not visited that doctor in 6 months etc.

At Marlboro Park Hospital, 102 behavioral health screenings were completed in the hospital emergency room. Currently, the data is being analyzed to determine how many of those cases resulted in primary care referrals, mental health referrals, and the mean PHQ-9 scores. However, we are certain that mental health related issues remain a problem in our service area.

Finally, as stated earlier, CATCH HOPE has provided the opportunity to receive training, and begin teaching, Mental Health First Aid Classes, which are billable trainings. Since receiving the certifications and designing a fee schedule, the collaborative has trained 32 individuals and has generated enough income to cover 86% of the cost to cover two certifications (for both the Project Director and Outreach Director). The next class will begin yielding a return on investment. The next Mental Health First Aid class is scheduled for April 2012.

Challenges & Innovative Solutions

1. Hiring and retaining a Licensed Master's Level Social Worker: there is a tremendous level of difficulty associated with hiring and then retaining a part time Master's Level Social Worker in a rural area. Part time positions keep the individual from full time employment and might often require a commute. In addition, salaries for a person with this type of advanced degree are typically lower in rural areas. Therefore, we had to find innovative solutions to carry out the screening and referral piece at Marlboro Park Hospital until the social worker was retained, Case Management utilized a Registered Nurse to administer the PHQ-9 screening in the hospital emergency room. Marlboro Park Hospital allowed CATCH HOPE to utilize this individual for these services from November 2010 to approximately February/March 2011.

2. Attaining commitments for participation in the Cardiac Rehab Units: after the CATCH HOPE was funded, in the early implementation stages, the Marlboro Park Hospital Cardiac Rehab Unit was dismantled. The Network approached Chesterfield General Hospital Cardiac Rehab Unit but to leadership and administrative changes at that time, administering the screener in that facility was not a possibility. Re-evaluating the situation, the group decided to administer the PHQ-9 screening in the emergency room department, for individuals presenting with Cardiac problems, at Marlboro Park Hospital.

3. Lack of commitment for a 6 week long wellness class; due to travel difficulties and geographic distances, it became very difficult to enroll individuals in wellness classes that lasted for 6 consecutive weeks. After facilitating some discussions with possible enrollees, the Project Director and Outreach Coordinator determined that a 4 week wellness class would yield the greatest level of participation. The wellness curriculum was redesigned to combine classes into 4 segments instead of 6. This was not difficult to do as there were natural opportunities to combine information. This seemed to work well for participants and overall, it most likely increased the number of individuals who enrolled in wellness classes.

4. Lack of clarity and difficulty answering the Health Risk Assessment Form: as a part of the CATCH HOPE community health screenings, participants were asked to complete a Health Risk Assessment. The questionnaire, though evidence based, was very unclear and difficult for the participants to accurately answer. Questions including “during the past month, how many days did you eat 2 servings of fruit” were difficult to conceptualize—most answers associated with these questions appeared to be guesses. Other questions, which assessed depression and anxiety symptoms, were easier to conceptualize, but the Likert scale used was difficult for participant. There wasn’t clarity surrounding the differences between “a good bit of the time” and “some of the time.” In order to address this issue, the Outreach Coordinator had to work more closely with participants on an individual basis to assist them with answer the questionnaire. However, this potentially decreased the number of individuals that could have otherwise been screened.

5. Difficulty getting groups to recommit after 6 months for post measure; difficulty getting the same individuals back at that same location for post measure.

6. Follow-ups post referral not adequate; as a result of community health screenings, we were able to gather a significant amount of information regarding health screeners. Depending on the outcomes of that information, individuals were encouraged to make primary health visits. However, it was difficult to ensure that individuals actually attended the follow up appointments. While the purpose of the screenings was to provide the participant information, it would have made a greater impact if there was more follow through.

7. Resignation of the Northeastern Rural Health Network Director/CATCH HOPE Project Director (May 2010) and resignation of Outreach Coordinator (June 2010): the original Outreach Coordinator resigned from the program shortly after the resignation of the previous Project Director. When the Outreach Coordinator resigned from the Network, a very limited number of community screenings had been conducted and no wellness classes. In order to keep the program moving forward, in November 2010, shortly after the hiring of the new NRHN Network Director and Project Director, CareSouth Carolina allowed CATCH HOPE to utilize one of their current Outreach Coordinators. Under the direction of the new Project Director and new Outreach Coordinator, the first wellness class was held in Bennettsville, SC in December 2010. However, not having these two key positions filled created some setbacks that the team struggled to overcome.

8. CATCH HOPE contracted with the SC and Budget and Control Board to provide evaluation services. However, these services only included SCBCB provide information on state and county data. Evaluation services were under budgeted and the services that were provided assisted very little with actually conducting the truest of evaluations. Fortunately, the NRHN Director has entered screening data into an advanced statistical software package and analyzed the client data to provide measures for PIMS. Ultimately, when all screenings are completed, the Director will utilize this information to do a more comprehensive program evaluation to measure CATCH HOPE’s success.

9. Community Health screenings inadequately reflect patient panels: community health screenings are wonderful tools to quickly give feedback to an individual on cholesterol, blood pressure and blood sugar. However, in order to include as many individuals as possible in community health screenings, we must be flexible in regards to the time of day we administer the screenings. Many of these screenings are held at community events and participants do not “prep” for the screening. While we do ask a question in regards to whether or not a person has eaten or drank before the screening, having that information does not adequately reflect how the numbers might be affected. Often times, we may do a screening while employees are on a lunch break. This makes the feedback difficult to interpret both for the individual and the Outreach Coordinator. Ideally, it would be nice to have everyone fast for two hours before administering a screening. Unfortunately, doing so is not conducive to community health screenings in communal locations.

On-going Services and Activities:

Mental Health First Aid certification was obtained as a component of the Catch Hope program. The Mental Health First Aid program is an interactive session which runs 12 hours. It can be conducted as a two-day seminar or as four 3-hour sessions. Mental Health First Aid certification must be renewed every three years, and introduces participants to risk factors and warning signs of mental health problems, and builds understanding of their impact and overviews common treatments. These classes are being scheduled and taught within the community. Specific audiences for each training vary, but include hospitals and federally qualified health centers, state policymakers, employers and chambers of commerce, faith communities, school personnel, state police and corrections staff, nursing home staff, mental health authorities' support staff, young people, families and the general public. A course fee is assessed to gain certification for this course. Consortium partners have engaged in strategic planning processes to determine a fee structure for this course, which will sustain the program.

The National Council envisions that Mental Health First Aid will become as common as CPR and First Aid training during the next decade. The National Council certifies community providers to implement Mental Health First Aid in communities throughout the United States. Each Mental Health First Aid site develops individualized plans to reach their communities, but all deliver the core 12-hour program and each participating site undergoes tight credentialing to guarantee fidelity to the original, tested model, while also maintaining the flexibility necessary to reach its unique citizens' needs and demographics.

Sustained Impact:

CATCH HOPE has provided a marketable Mental Health First Aid training program that will reach community members and agency directors. Disseminating this information throughout the community will hopefully result in reduced hospital admissions for mental health related issues. Furthermore, it will reduce the need for police involvement in cases of mental illness, allowing a greater focus on improving community safety. In addition, this program has required key NRHN members to review their screening and referral protocols within their organizations. The program has allowed consortium members to find more effective ways of sharing staff and resources to improve community health and wellness. As a result of this program, the consortium began to realize how utilizing various positions (both healthcare and human services positions) can positively influence the ability to bill for services. There is more desire to share key professional level staff such as Master's Level Social Workers or Nurse Practitioners. This program has opened new doors for the consortium within in the community. CATCH HOPE delivered Wellness Classes to various organizations both inside and outside the consortium which has assisted with creating a "brand" for NRHN and opening doors for new collaborations. Along that same note, doing community health screenings and being the only instructors for Mental Health First Aid training in the state (at this time) has allowed the Network to become well recognized.

Implications for Other Communities

The CATCH HOPE team sincerely feels that a strong community impact was made as a result of this program. This opportunity will be taken to discuss lessons learned and give some feedback regarding perceived methods for improvement when implementing a program such as this in other communities.

If interested in developing a program such as CATCH HOPE, it can be very effective to look for other partnerships or collaboratives to work on the community screening piece, but only if it doesn't become repetitive locations/clients. For example, the Northeastern Rural Health Network partnered with a local organization on community health screenings early in the CATCH HOPE process, the partner organizations nurses provided the screenings and NRHN provided the Health Risk Assessment screener. However, over a short period of time, the screenings resulted in repeat clients, diminishing the overall impact of the outreach efforts. Partnering can be very effective, but consider that the overall number of people screened (overall encounters) and new encounters should be taken into consideration.

A program such as CATCH HOPE can be a very effective tool in small communities; however, it is likely that if an organization serves a small community, the organization itself will most likely be small and have few staff members. Taking some time on the front end to train community volunteers to administer a PHQ-9 screener, Health Risk Assessment, or teach an evidence based curriculum can greatly increase the number of individuals you are able to reach. It is difficult to schedule multiple wellness classes if only one Outreach Coordinator is able to provide those classes or perform those screenings.

It is vital to closely examine how best to carry out the community health screenings so that they result in accurate readings for participants. Community health screenings are just that, community based. Often, individuals were screened in the drug stores,

auction barns, grocery store parking lots, and community centers. There was no way to advise individuals to fast before being screened. While the screening questionnaire included a question as to whether or not the client had eaten or drank before a screening, that was not sufficient to accurately interpret what a high blood sugar number could really represent.

Along these same lines, if screening numbers were elevated, the Outreach Coordinator made referrals to a primary care doctor and provided the individual with a community resource list to help them decide which services would most likely benefit them. However, there should be some methods in place to follow through with referrals to ensure that these individuals actually make it to their appointment. Please note screenings are great to provide individuals with a snapshot of current health status. As a result of these health screenings, some individuals were shocked to find that they had elevated cholesterol or high blood pressure. It was a way to inform that could potentially save a life. However, when the numbers are of concern, it is good to have procedures in place to take the program one step further to assist these individuals in actually getting the care that is needed.

One final program consideration; when performing either health screenings or health classes, it is important to have several staff members, with different cultural backgrounds, who are capable of assisting with the screenings. For example, if doing a screening in a predominately Hispanic or African American neighborhood, participation will be extremely limited when two Caucasian females are performing these services. Having assistance from staff with a similar cultural background can broaden an audience increasing the likelihood that all races and ethnicities are equally represented. While this program did have a translator available, the translator was not utilized unless there was an anticipated large Hispanic population. The translator was not available to attend every screening.

SOUTH CAROLINA

Clarendon Memorial Hospital

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12727 |
| Grantee Organization | Clarendon Memorial Hospital |
| Organization Type | Hospital |
| Address | PO Box 550, Manning, SC 29102 |
| Grantee organization website | www.clarendonhealth.com |
| Primary Contact Information | Scherrie Cogdill Executive Director Phone number: 803-435-5246 Fax number: 803-435-5274 scogdill@clarendonhealth.com |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------------|---|---|
| Clarendon Memorial Hospital | Manning, Clarendon, SC | Hospital (non-profit) |
| Williamsburg Hospital | Kingstree, Williamsburg, SC | Hospital (non-profit, critical access) |
| Marion Regional Medical Center | Marion, Marion, SC | Hospital (for profit) |
| Lake City Community Hospital | Lake City, Florence, SC | Hospital (non-profit) |
| Black River Healthcare | Florence, Williamsburg & Clarendon Counties, SC | Federally Qualified Health Centers (FQHC) |
| DHEC Regions 4 & 6 | Florence, Marion, Williamsburg & Clarendon Counties, SC | Public Health Agency |
| Pee Dee Mental Health Center | Florence, Florence, SC | Public Health Agency |
| Williamsburg Technical College | Kingstree, Williamsburg, SC | Community College |
| Marion Healthcare Foundation | Marion, Marion, SC | Free Clinic |
| SC Office of Rural Health | Columbia, SC | State Rural Health Agency |

Community Characteristics

Area:

The Outreach project served five counties in the Coastal Plain region of South Carolina: Dillon, Marion, Florence, Williamsburg and Clarendon Counties.

Community description:

The Coastal Plain of South Carolina stretches from the sandy beaches of the Coastal Zone to the Sandhills. Traditionally known for large expanses of flat land, the area also features swamps, man-made lakes, savannah and expansive flood plains. People are traditionally friendly, although sometimes reluctant to welcome newcomers. Unemployment and poverty rates in the area are higher than state and national averages. The main sources of employment for the area are closely tied to the land as seen in agriculture, industry and tourism.

Chronic disease has had a strong impact on the general health of the region. Hypertension, heart disease, stroke, and diabetes are very prevalent. Thirty or more percent of the population has high cholesterol that is a major risk factor for heart disease. This region is

a strong tobacco growing area resulting in a significant percentage of the population that smokes another risk factor for chronic disease.

Need:

The focus of the grant was to provide access to maternal/child health care throughout a five-county area in the Coastal Plain region of South Carolina. The target population of the program was un- and under insured Limited English Proficiency (LEP) Hispanic/Latinas in their childbearing years.

The Hispanic/Latino population in the Coastal Plain region of South Carolina is a largely low-income, minimally educated, younger population under the age of 40. Most of the population has very little understanding of the English language, with high illiteracy rates even in their native language. Most do not have health insurance. The entry point into the health care system for most Hispanic families in the area begins with the pregnant woman seeking OB services. Language, economic barriers and cultural differences between the health care system in their country of origin and that of the United States were the greatest reasons given for this population not accessing health care. Preventative education, advocacy and navigation of the health care system became the revised initial focus of the *Healthy Families/Familias Saludables* program

Program Services

Focus Areas

Access: Specialty Care
Community Health Workers/Promotoras
Health Education and Promotion
Maternal/Women's Health

Target Population

Infants
Adults
Pregnant Women
Latinos
Uninsured
Underinsured

Description:

Grant activities were coordinated and implemented through the Coastal Plain Rural Health Network (CPRHN), with some staffing support provided by the consortium partners. The Outreach grant supported the implementation of the following activities:

1. Partnership with local organizations to improve access to care for Hispanic women in their childbearing years. A local advisory council met on a regular basis to discuss the health and social needs of the Hispanic community, as well as program activities. Many local organizations worked alongside the program to market program services. Five clinics throughout the 5-county area accepted Hispanic patients and they delivered at four local partner hospitals.
2. Patient Care Navigation services at partnering OB clinics. The grant funds paid for the Patient Care Specialist to provide services throughout the area. This included interpretation/translation, health education, navigation, eligibility and referral services, as well as cultural competency training for office and medical staff. Over 350 women were enrolled in these services during the grant period.
3. Detailed evaluation efforts. Since the Hispanic population in the Coastal Plain of South Carolina is relatively new, there is very little data available. Early into the grant cycle, program staff conducted a needs assessment of the target population. This helped to reinforce the program direction and efforts throughout the remainder of the grant. The Program Director worked closely with an outside Evaluator to gather detailed evaluation of the program, including Patient and Provider Satisfaction Surveys, program services and return on investment data.

Role of Consortium Partners:

The Coastal Plain Rural Health Network served as the consortium to actively support grant activities.

- Clarendon Memorial Hospital acted as the grantee and fiscal agent. They provided numerous in-kind donations, including the time of the Administration Assistant and Executive Director, office space and supplies. The hospital CEO served as the Network Chairman during the course of the grant. They also cared for 2/5 of program participants at the time of delivery.
- Marion Regional Hospital partnered alongside the program as the OB clinic for Marion County. About 1/5 of program participants delivered at this hospital.
- Black River Healthcare partnered alongside the program as the OB clinic for Williamsburg County. This FQHC enrolled over 180 patients into the program during the grant cycle.

- DHEC Regions 4&6 helped to connect DHEC offices and staff to the program throughout the 5-county area. This partnership helped to place Hispanic women into the grant program, as well referrals back into DHEC maternal/child health programs.
- The South Carolina Office of Rural Health provided support and assistance to the Board of Directors and well as contributions that allowed the program staff to attend relevant conferences of interest.

Outcomes

Provider Satisfaction

- Surveys with providers participating in the program showed that 100% of providers would recommend the program to others. They agreed that it helped facilitate the delivery of care, improved the quality of care provided, improved communication and increased patient satisfaction and retention/compliance.
- Of the 5 clinics partnering with the program, all clinics remained active in the program through the end of the grant period.

Patient Satisfaction

- Surveys with program participants demonstrated that 97% of participants experienced increased understanding. 100% of participants said that the program facilitated the delivery of services and that they would recommend the program to others.

Health Care Access

- Over 350 Hispanic women were enrolled in the program across the 5-county area.
- Increase in patients delivering with coverage: Of the paid deliveries reimbursed to the hospitals, only 2% were insured at the time of program enrollment. Through patient navigation services, the program participants were able to change their insurance status from uninsured to insured. This provided a direct financial benefit to the hospitals of at least \$350,000 during the grant cycle. This money would have been lost without program efforts.
- Interpreting services provided by the program were provided free of charge to partnering OB clinics at an estimated value of \$135,000. This was an added benefit provided to our partners.
- Return on Investment is estimated to be 2:1.

Challenges & Innovative Solutions

At the beginning of the grant, a needs assessment was conducted throughout Clarendon County. Based on the results of these findings, program staff anticipated providing health education, navigation and support services to Hispanic adults in the area, particularly those working in industry. Shortly after this decision was made, the economic downturn caused many of these workers to lose their jobs. In fact, most local mills and factories closed within a handful of months. The decision was made halfway through the first grant year to reassess the target population and change focus completely.

Upon second look, pregnant women were the number one Hispanic group accessing care in the area. The OB clinic office seemed to be the entry point, not only for medical care for the woman, but also for the immediate and extended family. OB clinics were invited to participate in the program, restructuring their patient schedule to provide specialized care to their Hispanic patients on a designated day of the week. This allowed us to serve 5-counties over the course of the five-day week. This new program focus was introduced in the OB clinic setting beginning April 2010 and continued successfully throughout the end of the grant cycle.

Sustainability

On-going Services and Activities:

Certain aspects of program services will continue after the grant-funding ends, although it is uncertain to what extent. Patient education, resource navigation and advocacy will continue in Williamsburg and Clarendon Counties through PASOs, a partner program of the Coastal Plain Rural Health Network. In addition, multiple sources of funding are being sought after and if granted, program services will continue as originally designed.

Sustained Impact:

- Increased understanding by providers of specialized needs of this population and desire to meet those needs
- Increased quality of care by providers

- Improved relationship between the health care system and the Hispanic patient population through strengthened infrastructure
- Increased reimbursements as hospital administration is educated regarding cultural competency

Implications for Other Communities

The role of the Patient Care Navigator in the clinical setting has provided added benefit to the patient and provider alike. We believe that this is only accentuated when serving patient populations that experience significant barriers accessing and navigating the health care system. By decreasing barriers and increasing access, the patient has the same potential for receiving quality health care. This benefit translates to the patient, provider, clinic and hospital system, providing value at every level.

SOUTH CAROLINA

Clemson University

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12726 |
| Grantee Organization | Clemson University |
| Organization Type | Public/State Controlled Land Grant University |
| Address | 300 Brackett Hall, Box 345702, Clemson, SC 29634-5702 |
| Grantee organization website | www.clemson.edu |
| Primary Contact Information | Dr. Cheryl Dye Project Director and Professor Phone number: 864-656-4442 Fax number: 864-656-6227 tcheryl@clemson.edu |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,984 May 2010 to April 2011: \$124,965 May 2011 to April 2012: \$99,978 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--------------------|--------------------------|
| Oconee Medical Center | Seneca, Oconee, SC | Hospital |
| SC Dept of Health and Environmental Control | Seneca, Oconee, SC | Local health department |
| Oconee Physician Practices | Seneca, Oconee, SC | Physician practice group |

Community Characteristics

Area:
Oconee County, South Carolina

Community description:

Oconee County is located in the upstate region of South Carolina, part of the Appalachian Region, where residents generally experience more health disparities than those residing in non-Appalachian U.S. South Carolina ranks as 13th in the nation for highest percentage of population living in rural areas. All of Oconee County was designated as a medically underserved area (MUA) and a Health Professional Shortage Area (HPSA) in 2003 by the US Public Health Service and is considered rural by the Rural Health Clinics Program (RHCP) designation. There is no Federally Qualified Health Center within the county. This project provides the only hypertension management classes available to Oconee residents, so the project fills a definite gap in healthcare.

Need:

The project seeks to improve the self-management of hypertension which affects a higher percentage of South Carolinians than the national average and affects a higher percentage of residents in the targeted county than the state average. Hypertension (HTN) is a major cause of stroke and heart attacks, which are leading causes of death for South Carolinians and residents of Oconee County. Residents have higher rates of HTN risk factors (lack of physical activity, poor diet (especially one high in salt), overweight and obesity, excessive alcohol consumption, stress and smoking) than their national counterparts: they smoke more, drink more, are more obese and more often report having "poor or fair health." The Health Coaches for Hypertension Control (HCHC) program addresses all of these risk factors through its application of best practices.

Focus Areas

Chronic Disease Management: Cardiovascular
 Health Education and Promotion
 Physical Fitness and Nutrition

Target Population

Adults
 Elderly
 Caucasians
 African Americans
 Latinos

Description:

This project uses lay health workers called Health Coaches (HCs), who are trained volunteers from the local communities. The health coaches provide education and opportunities for class participants over the age of 60 years to develop skills required for hypertension management as well as information about how to access community resources. This project uses the Chronic Care Model as a framework to build a partnership between the patient, healthcare system, and community with the Health Coach as the connector between these components.

In our program offerings, we follow recommendations by the Robert Wood Johnson (RWJ) Foundation for essential elements of chronic disease self-management programs by combining Stanford Chronic Disease Self-management program strategies, such as Individualized Action Plans and motivational strategies from wellness coaching approaches. We also developed a Personal Health Diary customized to hypertension control behaviors which participants use to record their daily behaviors and blood pressure. Additionally, we integrated materials from the CDC Community Health Worker sourcebook: A Training Manual for Preventing Heart Disease and Stroke, the NIH "Your Heart, Your Life: A Lay Health Educator's Manual, and several materials from the National Heart, Lung and Blood Institute.

Each person in the HCHC program is offered education and skills training, along with 2 health assessments, which include survey questions regarding health behaviors along with a fasting blood draw to measure glucose and lipid levels and biometric tests to assess height, weight, blood pressure, and waist circumference. The participants attend a weekly class for 8 weeks covering topics such as basics of hypertension, nutrition, physical activity, tobacco use cessation, stress management, medication management and how to create an action plan. They can then choose to receive two additional classes in physical activity and 6 additional classes in nutrition during the next 8 weeks. At the beginning and end of the 16 week intervention period, a Health Risk Appraisal by Wellsource which provides a Personal Wellness Profile, is used to measure beliefs, behaviors and biometrics.

Role of Consortium Partners:

Clemson University serves as the grantee and fiscal agent for the Health Coaches for Hypertension program. All program staff is employed by Clemson University and includes the Program Director, Program Evaluator, PT nutrition educator, and a Community Coordinator. Additional assistance was provided by unpaid student interns in the Department of Public Health Sciences, and departmental Federal Work-Study students. Clemson personnel were responsible for health coach recruitment, training, and retention; program implementation, monitoring and evaluation; and consortium communication.

Oconee Medical Center (OMC) provides clinical testing for program participants, meeting space for educational classes, storage space for class supplies, and an additional point of contact with local physicians. OMC undergirds the work of the program through its Wellness Center and through the efforts of the Vice President for Quality and Physician Collaboration. The Director of OMC Wellness serves on the Advisory Board has provided input and expertise for coordinating blood draws for lab testing and biometric measures for program participants. Frequent contact between the Wellness Center's office manager and the HCHC program's community coordinator has created streamlined procedures for billing and scheduling, and allowed for the storage of class materials at OMC. This simple item represents a cost savings to the program and a reduced burden for volunteer leaders. OMC's VP and the HCHC Program Director maintain open communication in support of program goals, and the VP promotes the program within hospital and physician channels.

SC Department of Health and Environmental Control (DHEC) provide materials for use in program activities and provide collaboration and input regarding participant recruitment and program sustainability. DHEC connects the program to local and state public health efforts in the area of hypertension management, and stroke reduction. Our point of contact at the local DHEC office assisted in curriculum development for the tobacco cessation module and provided related materials which are distributed to program participants to help link them to local resources. Local, regional and state DHEC representatives serve on the HCHC Advisory Board, and together, they have leveraged additional funds for program sustainability. DHEC also assisted in program outreach and recruitment

among African Americans through their health ministry group. They have also worked to maintain and increase connections among local stakeholders.

Oconee Physician Practices refer hypertensive patients to the program.

Outcomes

The use of trained indigenous volunteers to deliver hypertension self-management programming is a promising community-based approach for reaching the Healthy People 2020 goal of increasing by 40% the proportion of people diagnosed with hypertension who are successfully controlling blood pressure.

At the 16-week follow-up, there was an increase in those who had recently started being physically active, as well as an increase in those reporting doing this regularly. There was a 10% increase in those who reported practicing good eating habits and a 16% increase in those doing this regularly. Other promising changes include dramatic increases in those recently starting to lose or maintain weight as well as those who report doing this regularly, an almost 12% increase in those recently beginning to handle stress well, and a remarkable 18% increase in those who now report regularly living an overall healthy lifestyle. We see promising trends in many of the assessment categories from baseline to the 16-week follow-up. A higher percentage of participants are also reporting better stress management, and we see an increase of 12% more participants who engage in exercise more than four days a week. Clinical outcomes also show positive trends, particularly average decreases in systolic BP, weight/BMI/waist circumference, and fasting triglycerides and glucose.

As part of our process evaluation, Health Coaches reported needing more time to cover all material for some sessions. To resolve this issue, Health Coaches suggested changes in class times, module reordering, and visual aids used to reinforce specific topics. Health Coaches have demonstrated flexibility and attentiveness by addressing specific questions unique to a group or participant. Health Coaches have also allowed spouses, family members, or friends to attend sessions with participants on a case-by-case basis, especially when it was determined that the social support was critical to participant attendance or success in the program. Participants are reporting high levels of satisfaction with average high ratings of Health Coaches and the program materials and handouts.

Challenges & Innovative Solutions

The greatest challenge was patient recruitment. The original recruitment protocol identified one physician who served the greatest number of hypertension patients in the target county and relied upon referrals from that individual practice. This protocol did not produce the number of referrals desired to keep individual classes filled and rolling out on a consistent basis. Therefore, we worked with project staff, consortium partners, and the target audience to refine recruitment plans. We developed marketing strategies and materials for self-referral, such as program fliers, presentations to local civic and church groups, and we continued to work to increase physician referrals by making individual presentations to physician practice staff and sending messages through hospital communication channels with physicians.

Oconee Physician Practices (OPP) volunteered to send letters to all their patients diagnosed with hypertension recommending that they participate in our program.

In addition to seeking input from consortium partners, we also garnered input through conversations with the target audience - community residents aged 60 and over with hypertension. When we learned that one barrier to participation was transportation, the Health Coaches agreed to travel to other sites to offer classes if 8-10 people were enrolled and committed to attend. This willingness to relocate classes has resulted in greater participation by residents of more distant communities. In the final grant year of the HCHC project, we now have a waiting list to participate in classes and are training additional health coaches to meet this increased demand.

Other challenges include the lack of an FQHC in the county, inadequate health literacy, limited transportation options, and the difficulty of achieving behavior change. In addition, the healthcare community in this rural area is plagued by high physician turnover and an ongoing nursing shortage which creates major barriers to providing consistent, quality care to patients. Patients will often not reveal important information about their health until they have developed a trusting relationship with a provider, which is becoming increasingly difficult to do with the frequency of being referred to new providers. One way to overcome such challenges is to utilize assistance from indigenous members of the community who are dedicated to helping other community members through a well-developed, trusting

relationship. In our work, we have utilized Health Coaches in an integrated the role of a Community Health Worker with that of a Wellness Coach in order to provide the education, mentorship and motivation required for chronic disease management.

Sustainability

On-going Services and Activities:

The project team has generated considerable support for sustaining the Health Coaches for Hypertension Control (HCHC). The Department of Health and Environmental Control (DHEC) is purchasing supplies to offer additional classes beyond the project period, and is working to include a line item in the state budget to sustain hypertension self-management classes in Oconee County. Our current hospital partner is exploring ways to incorporate HCHC as part of their new Access Health initiative in which they are seeking ways to better serve the uninsured. Health coaching has been institutionalized into the Oconee Medical Center wellness system for hospital employees. Lastly, our program has promise for sustainability because of its low-cost use of community volunteers as trained Health Coaches.

Sustained Impact:

The HCHC program offers lasting benefits to Oconee County by improving hypertension self-management skills among the health coaches, program participants and their families. Training health coaches has increased the capacity for health promotion activities within this rural county, and has provided assistance to the local public health system's stroke prevention efforts. Additionally, this program continues to solidify collaboration among the consortium members who are also collaborating to assist the numerous uninsured in the county through the new Access Health program.

The HCHC program has spurred the interest of health leaders throughout the state. The SC Hospital Association (SCHA) has twice invited the Project Director to speak to their collaborative about the use of Health Coaches to reduce unnecessary hospital admissions due to ineffective chronic disease self-management. The SCHA also sees the role of Health Coaches as vital in the care transition of patients from hospital to home and community. The Project Director also has been invited by three hospitals other than the current hospital partner to explore replication of health coach projects. We have discussed with them how they can incorporate the hypertension control classes into their wellness programming and have detailed resource requirements to sustain the program.

Implications for Other Communities

We have developed specific plans for replicating the program in a nearby county. We have identified the local hospital wellness center, local health departments, and programs providing services to the uninsured as key collaborators. The Project Director has been approached by other hospitals interested in replicating the project after hearing about it in presentations hosted by the South Carolina Hospital Association. Our plans for replicating the project in other counties includes sharing Health Coach training curricula, participant educational materials, recruitment protocol, HRA and other evaluation measures, and lessons learned through a contractual arrangement between the interested agency and the project director and community coordinator.

SOUTH DAKOTA

Avera St. Benedict Health Center

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH16386 |
| Grantee Organization | Avera St. Benedict Health Center |
| Organization Type | Critical Access Hospital and Certified Rural Health Clinic |
| Address | 401 W. Glynn Dr., Parkston, SD 57366 |
| Grantee organization website | www.averastbenedict.org |
| Primary Contact Information | Melissa Gale Behavioral Health Specialist Phone number: 605- 928-3311 Fax number: 605-928-4417 Melissa.Gale@avera.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$98,240 May 2010 to April 2011: \$98,268 May 2011 to April 2012: \$88,571 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------------|---------------------------------|---|
| Avera Behavioral Health Center | Sioux Falls, Lincoln County, SD | Non-Profit Faith Based Inpatient Psychiatric Hospital |
| Our Home, Inc. | Parkston, Hutchinson County, SD | Adolescent Residential Psychiatric Treatment Center |

Community Characteristics

Area:

The project targeted three rural counties in southeastern South Dakota, spanning 2,342 square miles. These counties included: Hutchinson, Douglas, and Charles Mix.

Community description:

The service area for project is primarily White (87.4%), with American Indians making up the second largest demographic (11.1%). Charles Mix County has an American Indian population of 31.1% compared to 8.5% for South Dakota. Further, 22.4% of the residents of Charles Mix County are living below the poverty level, which is almost double the national average of 12.7%. The largest barrier to accessing health care services overall, and mental health services specifically, is geographic. Because of the rural or frontier geography of the area, there are very few healthcare providers, significant travel is necessary for most residents of the service area. There are no community mental health facilities based in these three counties. The economy of the service area is largely agricultural. By and large, aging farm/ranch families are resistant to seeking medical treatment, unless there is an urgent or emergent need. This includes foregoing preventive care and overlooking symptoms that may point to more serious medical problems, such as suicide as it relates to depression. This reluctance to seek care is related to financial difficulty, a stoic ethnicity, and a need for more specialized care provided in local facilities.

Need:

The program was initially developed to improve continuity of care for patients and to help fill the gap in physician/provider referrals for behavioral health needs that had to be outsourced with little or no follow up/collaboration. To ensure that patients no longer "fall through the cracks" embedding a counselor in the clinics was prioritized. The original community needs assessment stated a need for a behavioral health counselor, having a local counselor, and decreasing mental health stigma.

Program Services

Focus Areas

Access: Specialty Care
Behavioral/Mental Health
Coordination of Care Services

Target Population

Pre-school children
School aged children - elementary
School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
Latinos
Native Americans
Uninsured
Underinsured
Military personnel
Crime Victims

Description:

The mental health counselor sees patients for outpatient counseling 4 days per week at the Avera St. Benedict Parkston Clinic; 1 day per week at the Avera St. Benedict Lake Andes Clinic; and on an as needed basis at the Avera St. Benedict Tripp Clinic. Telehealth appointments for counseling are available to the Lake Andes Clinic daily. The counselor also does patient consultations in the critical access hospital in Parkston and local nursing homes when ordered by a physician. Family consultations are provided to help family member cope with a mental health or substance abuse issue of a family member when that person is unwilling to seek services. Services are open to children through geriatrics. Drug and alcohol prevention classes for teens are offered with referrals being open to court ordered or voluntary clients. Telehealth equipment has been installed at Our Home, Inc. in Parkston, a residential psychiatric facility for adolescents, to gain access to adolescent psychiatry directly at their facility vs. driving long distances for psychiatry appointments.

The outreach portion includes the mental health counselor providing educational presentations and in-services on mental health topics to a variety of different facilities, including nursing homes, assisted living facilities, schools, daycare, etc. Mental health counseling has also been included in multiple health fairs and gala events in the service area to decrease stigma by making services part of the local culture of healthcare. Continuing medical education is provided via telehealth to primary care providers in the local area.

Role of Consortium Partners:

Our Consortium partners are Avera Behavioral Health Center, a 110 bed inpatient psychiatric hospital for children-geriatrics, and Our Home, Incorporated, a residential facility serving adolescents aged 12-17 with mental health and substance abuse diagnoses.

Avera Behavioral Health Center was involved in implementing the original community needs assessment prior to our grant award. Their primary role was to participate in the development of the telepsychiatry component of this project. This included providing access via telehealth for psychiatric consultation and mental health continuing education. Throughout the project they continued their support by promoting the project, allowing Avera St. Benedict access to their provider network, provided technical consultation, supported placement for a telehealth psychiatrist at Our Home, Inc., and supported advocacy and policy change efforts at the state level that were supportive of behavioral health in South Dakota. They worked collaboratively with the Avera St. Benedict project team in creating a job description and recruiting a mental health counselor for the project. After a mental health counselor was hired, they provided EAP referrals to the project.

Our Home, Incorporated's primary role was to participate in the development of the telepsychiatry component of this project. They worked collaboratively with the Avera St. Benedict project team in creating a job description, recruiting, and interviewing a mental health counselor for the project. Throughout the project, they were actively involved in the project as a stakeholder and promoted the program in the community. They utilized staff training opportunities available via telehealth and by the project's mental health counselor.

There have been many elements of our program that have worked well. Integrating mental health counseling services in the primary care setting has facilitated a "paradigm shift" in the way that the community is aware and perceives mental health issues and treatment. There is a greater level of comfort and acceptance. Uniform protocols with any other clinic patient from scheduling, check-in, to being escorted to see the provider by nursing or clinic staff are all crucial. Due to our set up in the clinic, patients can feel comfortable knowing that others do not know why they are in the clinic and it starts to normalize mental health counseling as an important aspect to overall healthcare. Using brief, solution focused counseling interventions helps clients to change their views of what they "think therapy will be like" verses the reality of it. Provider collaboration and mutual respect between primary care providers and the behavioral health counselor shows the patients that this model is accepted and validated by their doctor. Because our provider buy-in has been strong, this has started to be the case with other providers at other clinics, hospitals, and long term care facilities. Behavioral Health is seen at our facility as part of the regular medical team.

Community buy in has also been seen as successful. The following are some ways that the community has utilized our project:

- The behavioral health counselor has provided educational in-services at the Parkston School and they have referred students for clinical services
- The behavioral health counselor has provided individual and group counseling services at the Andes Central School District and they have referred students for clinical services
- Businesses in Parkston have used this project as a resource when struggling with employee issues
- The Avera St. Benedict Health Center included a new policy to provide employees with 3 counseling sessions for no out of pocket costs to employees or their families
- Five Good Samaritan Nursing Facilities have had the behavioral health counselor provide education to their staff on dementia and mental health commitments
- Avera Bormann Manor Nursing Home and Assisted Living have had the behavioral health counselor provide education to their staff on dementia, both in the form of group staff in-service and individual training to some individuals.
- The Avera St. Benedict Day Care Center utilizes behavioral health services for staff training

From June 2010-March 12, 2012, 246 individuals have receiving clinical mental health counseling or consultations. The 246 individuals receiving services have accounted for 1,055 separate encounters. The clinics started implementing depression screening for all new patients, yearly physicals, and "Welcome to Medicare appointments in June 2011. From that time through February 2012, 827 individuals have been formally screened as part of their routine medical care. Drug and alcohol prevention classes for teens are held on an as needed basis, starting May 2011. Since that time, 18 youth have completed the class.

The community outreach portion of the project included accessing mental health related training to primary care providers and community education/recognition of mental health services as part of overall healthcare. Since July 2010, primary care providers and local mental health/substance abuse providers have been awarded 75 hours of continuing medical education/continuing education units at no cost with no travel required, as telehealth was utilized for this. Health professions and community members that have attended behavioral health related in-services/seminars or been exposed to behavioral health services at local health fairs/galas from June 2010-March 2012 equals 861 people.

We have worked with the Human Services Center (South Dakota State Psychiatric Hospital) to decrease costly and inappropriate mental health commitments for geriatrics. Staff training on dementia and mental health was implemented in 7 long term care facility in our service area in November and December 2010. From January-December 2011, there were 5 geriatric mental health commitments out of nursing homes in our services area. This was a significant decrease from calendar year 2010, where there were 22 geriatric mental health commitments from our service area nursing homes.

82 patients (adults/adolescents/children) seen for outpatient mental health counseling reported suicidal thoughts or attempts within the last year. Of these patients, only 4 had to be placed on a mental health commitments for involuntary hospitalizations, 5 received voluntary hospitalizations, with all others being able to be safely served in the community at lower costs to patient and community. Zero patients completed suicide after initiation of mental health intervention at our facility.

The Global Assessment of Functioning (GAF) scale is used to measure overall psychological functioning, on a scale of 0-100, including psychological, social, and occupational functioning. The GAF score is assessed at every patient's first appointment and is reassessed at the following markers: 6 months, patient discharge, or last contact with patient. The largest increase was 30 points with the average increase in score of patients with > 3 appointments being 9.475. The Beck Depression Inventory was also utilized. "The mean pre-

treatment BDI score was 24.2 (s = 13.7) with a median score of 20.0. The mean post treatment BDI score was 7.0 (s = 10.0) with a median score of 2.5. There was a statistically significant change in the level of depression for these patients..." (Institute for Leadership and Evaluation, grant year 2 evaluation report).

The Return on Investment was calculated by taking the present value of future benefits and dividing them by the net present value of costs. For our behavioral health project, grant funds of approximately \$230,000 are used for this illustration. This was used over a three year period, with data below calculated over a five year period. When medical care cost savings are combined with the increases in economic productivity that come with the treatment of depression, Avera St. Benedict Behavioral Health Project will yield a total return on investment of \$38.89 for every dollar spent -- a real, measurable benefit enjoyed by local people and businesses.

Summary of Avera St. Benedict Behavioral Health Project's Benefits to the Community

| | |
|---|---------------------------------|
| Program Costs | <i>\$230,000.00</i> |
| 5-year Decrease in Medical Spending | \$2,399,860.74 |
| Medical Return on Investment | \$11.54 per dollar spent |
| 5-year Increase in Economic Productivity | \$5,685,823.91 |
| Economic Productivity Return on Investment | \$27.35 per dollar spent |
| TOTAL Return on Investment | \$38.89 per dollar spent |

Challenges & Innovative Solutions

The project faced some initial challenges with implementation. Early on, hiring a behavioral health counselor proved to be a difficult task and took the entire first year of the grant. Since the counselor came from another state, there were license reciprocity issues that needed to be addressed before services could be billed. The mental health counselor had to take an additional national board test and complete an additional master's level class online. She then had to re-apply to earn the higher level of licensure in the state, which was recognized by third party payers. Because having behavioral health in a medical environment is a new concept to South Dakota, some South Dakota laws and regulations have been a barrier to complete record integration. All of these issues have been remedied, with record integration being addressed. We have adapted a protocol for signing releases of information so the behavioral health counselor and the primary care providers can discuss cases openly and all patients have been in favor of this. Telepsychiatry has been a challenge, primarily because of lack of psychiatrists available for consultation. Collaboration and communication could have been improved in developing this component.

Sustainability

On-going Services and Activities:

The clinical and most outreach components of this grant will be retained. Priorities include maintaining outpatient counseling services in the clinics. The mental health counselor will continue to do patient consultations in the hospital and nursing home when requested by the attending physician. She will also continue to have drug and alcohol prevention classes in the clinic on an as needed basis, generally every 1-2 months. Outreach activities will continue to be provided to ensure the community and other facilities in our service area have accurate and practical mental health knowledge and education to be incorporated into their business operations or personal lives. Provider education will continue to be accessed through Avera Behavioral Health Center via telehealth to provide primary care providers with continuing education on mental health topics to better equip them to collaborate with mental health clients. All activities have had positive feedback from the community, providers, and consumers of services.

We will continue to be supportive in Our Home working with Avera Behavioral Health Center for telepsychiatry services. Because of the lack of Psychiatry providers, we are willing to look at exploring other ways to restructure telepsychiatry so it's more effective in our rural area with greater access. We are open to being included in Avera McKennan's future discussions regarding delivering these services.

Ultimately the majority of services provided under this grant will be continued using the following two approaches.

Sustaining through absorption:

- The Avera St. Benedict Board of Directors, administration, and primary care providers see value in having mental health counseling at the clinics and are willing to provide in-kind/absorption of the services. This includes office space, administrative support, travel reimbursement to clinics, and office/therapy supplies.

Sustaining through earned income and other funding sources:

- 3rd party reimbursement through private insurers: Wellmark Blue Cross Blue Shield, Avera Health Plans, Dakota Care, etc. We are now able to bill for 12 different codes.
- Public Health Care reimbursement: Tri-care, Medicaid,
- Self-pay patients
- Contract services: EAP subcontracts –we are paid a flat rate for seeing EAP patient referrals
- Fees: alcohol and drug class participants; educational staff trainings or in-services
- Accessibility to funds for providing services to crime victims
- Fundraising for the Avera St. Benedict Foundation, through community awareness events, to have resources available for individuals who need behavioral health services and cannot afford it.
- Applying for grant funding for program/scope of project expansion

Sustained Impact:

The following are some of the sustained impacts of our program, including how we plan continuing to ensure that the impacts continue into the future.

- More appropriate admissions to the Human Services Center through nursing home and hospital education: We will continue to collaborate and communicate with Human Services Center to monitor admission trends in our area and provide education/intervention to facilities or individuals who need additional care.
- Screening and assessing clinic patients for depression is now embedded in our facility culture and accepted by staff as “normal operations.” This will continue to have a positive impact on the way people are treated and cared for. Screening and earlier detection of depression in clinic patients leads to decreased mental health crisis, suicide attempts/completions, and openness about emotional health.
- The cultural shift in accessing behavioral health services will continue by promoting mental health as essential for overall patient care
- We were able to influence changes to billing and reimbursement policy in South Dakota such that we are now able to bill for 12 behavioral health codes. This supports other organizations and initiatives in South Dakota as they work to increase access to care through a “no wrong door” approach.
- Recognition by other clinics and mental health centers as a model that works in rural areas can help promote replication of this project across the state or in other rural communities.

Implications for Other Communities

Through our project experience, a strong alliance and collaboration between the primary care providers and the behavioral health professional in the medical setting increases potential for patients to follow through with appointments, decreases stigma, and gives the primary care providers additional support and resources for their patients. Because most rural areas have health clinics already established, putting behavioral health into the clinic can be accomplished and replicated. Community awareness and building a culture of mental health as an accepted part of the overall health care picture is essential. Hiring a behavioral health provider that is familiar with rural culture and way of life makes patients feel comfortable, breaking down stigma that they have about behavioral health services in general. Since behavioral health can be used throughout a facility, looking at sustainability from a big picture instead of just dollars is essential.

SOUTH DAKOTA

Delta Dental Plan of South Dakota

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12728 |
| Grantee Organization | Delta Dental Plan of South Dakota |
| Organization Type | Non-profit organization |
| Address | 720 North Euclid Avenue, Pierre, SD 57501 |
| Grantee organization website | www.deltadentalsd.com |
| Primary Contact Information | Connie Halverson Project Director Phone number: 605-494-2547 Fax number: 605-224-0909 connie.halverson@deltadentalsd.com |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------------|-----------------------------------|-------------------------------|
| Prairie Community Health, Inc. | Isabel, Dewey, South Dakota | Rural Community Health Center |
| Rural Health Care, Inc. | Ft. Pierre, Stanley, South Dakota | Rural Community Health Center |
| Horizon Health Care, Inc. | Howard, Miner, South Dakota | Rural Community Health Center |

Community Characteristics

Area:

The coverage area for the Outreach grant is broad, encompassing 10 counties in northwest, central and south central South Dakota including the counties of Perkins, Dewey, Corson, Ziebach, Stanley, Sully, Potter, Hyde, Mellette and Bennett.

Community description:

Many of the people who live in the areas to be served by this grant are hardworking farmers, ranchers, ranch hands and service/retail industry employees whose income is significantly lower than both state and national averages and who must currently travel long distances to access any form of dental services. Geographically, the landscape is primarily wide open plains marked infrequently with small, rural communities that are slowly declining in population. Medical care is available through the health center operations, but people often must travel two-to-three hours one way to access a dentist. Because those trips require taking a day off of work, oral health care is often not a priority.

Need:

Access to oral health care in rural South Dakota can be challenging. For instance, Prairie Community Health, Inc. is a rural community health center organization encompassing an area roughly the size of Massachusetts. But while Massachusetts has nearly 5,000 dentists in private practice, there is not one dentist in private practice in Prairie Community Health's entire territory. In fact, in the entire northwest quadrant of South Dakota there is only one dentist in private practice. Of the 10 counties served by the project only two have a dentist and there is only one dentist in each of those counties.

Aggregate community-wide data from the health centers indicates that nearly 27 percent of the population in their service area is covered by Medicaid, 42 percent have private insurance, 13 percent are covered by Medicare and 18 percent are uninsured (for medical). National statistics indicate that for every person without medical insurance, there are 2.5 times that number without dental insurance. The percent of people in the target service area that are without dental insurance is even higher.

The combined structural barriers of geographic isolation, low income, and lack of access to care have resulted in an oral disease burden that is significantly higher than many areas of the country.

Program Services

Focus Areas

Oral Health

Target Population

Pre-school children
School aged children - elementary
School aged children - teens
Adults
Caucasians
Native Americans
Uninsured
Underinsured
Medicaid

Description:

The grant activities were coordinated and implemented by Delta Dental of South Dakota (Delta Dental). Delta Dental staff worked with the other Consortium members including a representative of the South Dakota Community HealthCare Association and the CEOs and staff of the three health center organizations.

The primary goal of the project was to improve access to dental care and ultimately, the oral health of children and adults, located in three Consortium member service areas. To help reach that goal, the project used Delta Dental's Dakota Smiles Mobile Dental Program to support the initiation of oral health services to the targeted rural community health centers for 33 week-long site visits throughout the three year grant period. (Note that two weeks of service numbers are not included in this report because the weeks were scheduled after the deadline for this report). Included in the oral health services were exams, preventive treatments, restorative care, oral health education and tobacco cessation counseling.

In addition, a number of health center primary care medical staff were trained on oral health issues to increase their knowledge and to increase referrals to the mobile program from existing health center patients.

Role of Consortium Partners:

Delta Dental was the grantee and fiscal agent for the project. Delta Dental project staff included the project director, the mobile program manager, an administrative assistant and the clinical staff. Consortium partners included three rural community health centers with the state's primary care association as an informal partner. The project director and program manager worked with health center CEOs to schedule the mobile unit to the health center sites. The program manager trained health center staff for the week-long site visits. The administrative assistant collected all of the data, claims, etc. and produced reports for each week of service.

- The health center CEOs oversaw the site visits to their areas and their staffs were the local coordinators for each site visit. The local coordinators promoted the mobile program's site visits to their existing health center patients and to the public at large, if they needed to. A number of the health center medical staff also participated in oral health training.
- The representative from the Community HealthCare Association of the Dakotas acted in an unofficial role as a liaison and helped facilitative communication between and among Delta Dental and the health center CEOs and staffs.

Outcomes

During the 33 weeks of service, 1,346 patients were seen by the mobile program and the production value of the care provided was \$569,760. Of the patients served, 79 percent were children and 21 percent were adults; 66 percent were white and 26 percent were American Indian. For 13% of the patients, their mobile program visit was their first visit to the dentist.

Of all the patients, 35 percent had Medicaid coverage, 13 percent had dental insurance and 52 percent had no insurance. Forty-six percent of the patients reported their household income to be less than \$20,000 per year. Ten percent of the patients indicated that they were in pain at the time of their visit. Of the patients seen, 55 percent were diagnosed with decay. The breakdown of total care provided during the 33 weeks is as follows:

- 617 patients received restorative care
- 1,140 patients received preventive care
- 1,015 patients received oral health instruction
- 440 patients received tobacco counseling
- 24 patients were referred to the Tobacco Quitline

One reason that the preventive number is lower is because if the patient is referred outside the program, the mobile program does not provide care so that the dental office accepting the referral can bill for Medicaid.

True outcome evaluation is difficult for this project because of the variables in operating a mobile program. However, when examining data from patients who visited the program all three years, the restorative needs were reduced significantly, or in some cases, eliminated. In addition, the clinical staff agrees that the overall oral health literacy of the patients seen has improved.

Challenges & Innovative Solutions

1) *The learning curve for the health center staff:* Although we did initial training sessions for the health center staff, those who were hosting the mobile units for the first time had a more difficult time organizing the visit and ensuring that there were enough patients for the week. As a result, we saw fewer patients the first year than we had projected. The Delta Dental staff then worked more closely with the local site coordinators to train them. Once the staff had experienced a site visit, they understood how it worked and were much better prepared for subsequent visits.

2) *Balancing the child and adult patients:* Because the demand was high (once all of the sites were familiar with the project) from both adult and child patients, it was difficult for the staff to decide how to prioritize which patients needing to be seen. We learned that the adult patients' needs were quite a bit more extensive (and thus took much longer) than we had anticipated. Again, this resulted in slightly fewer patients seen overall than projected. However, many of the adult patients that were seen were extremely grateful as a majority of them had not been to the dentist in many years. One man came to us and reported that he'd had to pull some of his other teeth with pliers so was grateful for the care we provided.

Sustainability

On-going Services and Activities:

The mobile program will continue to serve two of the three health center operations, but at a reduced number of weeks. Both organizations have already booked weeks in the year following the grant. The remaining health center organization stated they did not have the budget to continue. All of the health center organizations are still hoping to apply for and receive expansion grant funding from HRSA to add dental services to their operations. Because the communities served by the health centers are in and of themselves too small to maintain a full-fledged dental program they would like to continue to use the mobile program (but at an increased level for more consistent services) for their dental services.

Also, we will likely limit the number of adults to be seen. The majority of the adults are uninsured so do not provide a source of reimbursement. Also, because many of their needs are extensive, they take longer to treat, therefore limiting the overall number of patients that can be seen. If additional sources of funding can be found and when Medicaid expansion occurs in 2014, that could change.

Sustained Impact:

As mentioned previously, all of the consortium partners agree that one of the sustained impacts of the grant has been an increase in oral health literacy. More people understand the importance of maintaining good oral health through prevention, more people understand the connections between oral and general health and more people understand specifically how to care for their oral health. These are evidenced by the fact that several of the parents are bringing their children for preventive visits, there has been an increased demand for the mobile program and the health center medical providers are referring more people for dental care.

With proper communication and coordination a mobile program can work well to provide dental care in rural and frontier areas. While not as good as a brick and mortar dental home because it's not available for emergency care, a mobile unit can become a dental home if it is scheduled and promoted on a routine basis. Families will plan their dental visits around the mobile unit schedule and utilize the program on a regular basis.

SOUTH DAKOTA

Sacred Heart Health Services

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12729 |
| Grantee Organization | Sacred Heart Health Services |
| Organization Type | Hospital |
| Address | 501 Summit Street, Yankton, SD 57078 |
| Grantee organization website | N/A |
| Primary Contact Information | Laurie McKee Dept. Director Intensive Care/Cardiopulmonary Phone number: 605-668-8140 Fax number: 605-668-8058 lmckee@avera.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$147,746 May 2010 to April 2011: \$116,553 May 2011 to April 2012: \$97,782 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|----------------------------|--------------------------|-------------------------------|
| American Heart Association | | |
| Wagner Community Hospital | Wagner/Charles Mix/SD | Hospital |
| St. Michael's Hospital | Tyndall/Bon Homme/ SD | Faith Based Hospital |
| Neurology Associates | Sioux Falls/Minnehaha/SD | Clinic |
| Avera McKennan Hospital | Sioux Falls/Minnehaha/SD | Faith Based Hospital |
| Avera Health | Sioux Falls/Minnehaha/SD | Faith Based Healthcare System |

Community Characteristics

Area:

The eStroke project serves 14 counties in rural South Dakota and Nebraska, including Bon Homme, Charles Mix, Clay, Davison, Douglas, Gregory, Hutchinson, Moody, Tripp, Turner, and Yankton Counties in South Dakota and Boyd, Cedar, and Knox Counties in Nebraska. These counties represent the service area of seven rural hospitals: Avera Sacred Heart Hospital in Yankton, Wagner Community Memorial Hospital in Wagner, St. Michael's Hospital in Tyndall, Avera Gregory Healthcare Center in Gregory, Flandreau Medical Center Avera in Flandreau, Platte Health Center/Avera in Platte, and Avera St. Benedict Health Center in Parkston.

Community description:

Persons age 65 or older account for 19% of the service area population and is expected to grow by 10% in the next 10 years. Six percent of the service area population is Native American. Ten of the thirteen counties in the service area had poverty rates above the national average in 2000. The average crude death rate for cerebrovascular disease in the service area counties between 2002 and 2006 was 103 per 100,000. This is more than twice the US rate in 2006. The high mortality rates are in large part related to geographic barriers to accessing care. All of the counties in the service area are designated in whole or in part as federally designated Health Professional Shortage Areas (HPSAs) or Medically Underserved Areas (MUAs). Because of the rural or frontier geography of the area, there are very few healthcare providers, significant travel is necessary for most residents of the service area. There is one neurologist in Yankton County but there are no neurologists in the other service area counties. The nearest stroke care center is located in Sioux Falls, SD, 80 miles from Yankton, the largest and closest end-user facility participating in this project.

Need:

Every year some 750,000 Americans suffer a stroke. In 2006, 137,000 died of this preventable and treatable disease. Those that survived often face long recoveries, rehabilitation, lasting disability, and decreased brain function. Stroke is the number one cause of disability among adults, and the third leading cause of death. The most common type of stroke, accounting for 85% of cases in the United States, is ischemic stroke caused by a clot blocking blood flow in the brain. The only approved treatment for patients experiencing an ischemic stroke is administering a tissue plasminogen activator, t-PA, or clot buster through an IV within 3 hours of symptom onset. Successful t-PA therapy restores blood flow and can stop or lessen damage to the brain. Unfortunately, as few as 1-3% of eligible patients received this lifesaving therapy, largely because of a lack of access to neurologist and inability to receive treatment within the 3 hour time limit. This reality is compounded in rural communities where stroke care does not commonly adhere to published practice guidelines and use of t-PA is not common. Rural facilities often lack stroke care expertise to allow them to effectively diagnose and treat a stroke. t-PA carries a risk of intracranial hemorrhage or bleeding; additionally, there several "stroke mimics" that may lead to misdiagnosis. One study found that nearly a fifth of patients diagnosed with ischemic stroke had their diagnosis changed after their CT scan was read. This lack of expertise in rural communities has led to a "rural penalty" for stroke care. For example, in South Dakota, stroke incidence (2.6%) is by and large consistent with national statistics (2.6%), according to the annual Behavioral Risk Factor Surveillance System. However, in 2006 the crude mortality rate is 64 persons per 100,000 compared to a national of 48 per 100,000.

Program Services

Focus Areas

Access: Specialty Care
Emergency Medical Services
Health Information Technology
Stroke Care

Target Population

Adults
Elderly
Caucasians
Native Americans
Uninsured
Underinsured

Description:

The eStroke program was designed to provide Neurologist-directed stroke care to rural South Dakotans via a telehealth network, clinician education, and community education. The Consortium was successful in developing the structure for an operational, 24-hour eStroke Network, linking 7 rural emergency rooms to neurologists through video and data interfaces. The eStroke Network provided access to quality acute and outpatient stroke care for all patients presenting to these 7 emergency rooms.

The Medical Director for eStroke provided a physician educational event at the original 3 sites. These sessions were well attended at each location. Over 100 end user staff received training and education conducted by staff from the Avera McKennan Stroke Center on the pathophysiology of a stroke, complications, and acute stroke care including the administration of thrombolytics. The education was provided through classroom presentations, online presentations, and mock scenarios conducted in the emergency rooms utilizing the telehealth equipment. CEs and CEUS were provided for staff attending. Each site was given a NIH Stroke Scale Training DVD to use for future educational needs.

The American Heart Association's Stroke Patient Education Tool Kit was purchased for each site to educate the community on the signs and symptoms of a stroke and what they should do in the event they begin experiencing any of these signs and symptoms.

Each location was provided a stroke kit which included items to conduct a thorough assessment of patients experiencing a stroke. The stroke kits included a tuning fork, reflex hammer, NIH Stroke Scale pocket reference, safety pin, pen light, and a container to house the supplies. Stretchers with a built in scale to obtain an accurate weight of the patient were purchased for the 3 pilot sites.

Telemedicine equipment including monitor and camera was installed in each of the emergency rooms designated for eStroke patients. Telemedicine equipment was provided through eEmergency grant funds and eEmergency was a prerequisite to eStroke.

A process for eStroke consultations was developed and implemented at 7 total sites. Participating hospitals consult eEmergency when a patient enters the emergency room with symptoms of an ischemic stroke. The nurse at the satellite site performs a neurological assessment under the guidance of the eEmergency physician and the patient is screened for a t-PA candidate. The Neurologist on call

from Neurology Associates is contacted by eEmergency and the Neurologist then dictates the care of the patient. If the patient is a t-PA candidate, the t-PA is started and the patient is then transferred to a facility with neuro surgery capability.

Role of Consortium Partners:

Avera Sacred Heart served as the applicant for the project, and used their staff's expertise to ensure completion of project goals and objectives. Avera Sacred Heart provided the Project Director who was responsible for leading the project.

Wagner Community Memorial served as a clinical pilot site for eStroke, and provided as in-kind the staff to coordinate eStroke and stroke community education efforts. This included building the eStroke program through implementation, staff training, and quality improvement efforts at the local level. Wagner also carried out a community education plan.

St. Michael's Hospital served as a clinical pilot site for eStroke, and provided as in-kind the staff to coordinate eStroke and stroke community education efforts. This included building the eStroke program through implementation, staff training, and quality improvement efforts at the local level. St. Michael's also carried out a community education plan.

Avera Health houses the administrative team for eEmergency and Telehealth and provided technical assistance on an in-kind basis. The staff lended experience and resources towards developing the eStroke model and laying the ground work for sustainability. The Vice President of Quality Initiatives assisted in the development of quality metrics and long term business and sustainability plans. The Telehealth director assisted in training on video equipment, development of telehealth policies, and in creating telehealth appropriate metrics. The eHealth Manager ensured the functionality of the service, troubleshot technical problems, and markeed the service to additional sites. Additionally, Avera acted as a large network for dissemination of findings and recruitment of additional sites.

Physicians in the **Neurology Associates** practice group provided telehealth stroke consults. Dr. Rossing of Neurology Associates serves as the eStroke program Medical Director, working with colleagues to organize care delivery. Dr. Rossing also worked with Avera McKennan staff to provide rural provider training/CMEs on stroke assessment, treatment, and transfer protocols.

Avera McKennan Hospital is one of only two hospitals in eastern South Dakota to have a Primary Stroke Center Certification from Joint Commission. The hospital has dedicated physician and nursing staff that focus on delivery of stroke care and have developed stroke assessment, treatment, and transfer protocols. Avera McKennan staff worked with the neurologists to further define the stroke care delivery model including telehealth protocols. Additionally, nursing staff developed and presented training information to the end-user staff on care protocols.

The Grassroots Advocacy Director of the **American Heart Association- Midwest Affiliate** (based in Sioux Falls, SD) has been active in planning the eStroke project. The American Heart Association assisted each community in developing a community education plan as well as provided access to existing stroke educational resources and materials.

Outcomes

During the grant period multiple forms of community stroke education were presented including Posters, newspaper articles, and brochures. Community events offering stroke information included health fairs, screenings, and presentations at various community groups, organizations and churches. Over 2000 community members at the 3 pilot sites attended community events where stroke information was presented. Educating community members that experience a stroke themselves or witness another individual experiencing a stroke will increase the likelihood of them seeking care in a timely manner to meet the treatment window for t-PA administration of only 3-4 hours from onset.

Staff at small, rural hospitals has the knowledge and tools to care for patients experiencing an acute stroke. Hospitals participating in eStroke have the tools to perform an accurate assessment of patients experiencing an acute stroke.

As previously stated, volume was much less than anticipated. With a total of only 13 eStroke consults, the project achieved only 6% of the goal for volume. However, it is a major accomplishment that 100% of patients eligible did receive t-PA for treatment of their ischemic stroke.

A new Project Director was named in June 2009 after the untimely death of the project director. Additional position changes have occurred at some of the partner facilities including the designation of a new *eStroke* Coordinator at St. Michael's hospital due a resignation and a newly assigned Educational Coordinator after the termination of the employee originally assigned to this role. These challenges lead to changes in the workplan in order to successfully meet year-end project goals. The changes included reasonably shortening educational requirements without compromising the quality of the education. Challenges and changes to the work plan lead to under spending in year one and a carryover request was submitted.

As we completed implementation of *eStroke* at the 3 pilot sites, we determined the need for additional equipment imperative to the success of the project. All three locations needed the ability to obtain accurate weights on patients presenting with symptoms of stroke. An accurate weight is essential to implement appropriate treatment of patients presenting with stroke symptoms especially with the administration of thrombolytics. In grant year one, a request was submitted to utilize remaining grant funds to purchase a stretcher that has a built in scale for each of the 3 pilot facilities. We also identified additional needs for Community Education and Community education toolkits were purchased for all 7 sites where *eStroke* has been implemented.

All categories of the Year 2 grant budget experienced under spend. The unobligated funds were the result of two key causes: lower than anticipated stroke volume at the three pilot sites and neurologist hesitation to expand. The neurologists were hesitant to move forward with expanding the network to include additional end-user hospitals until anticipated volumes could be defined. In addition, the resignation of the initial External Evaluator and career change by the replacement External Evaluator has resulted in Avera *eStroke*'s request to utilize internally available expertise to serve in the role previously designated for the External Evaluator. A carryover request was also submitted for year two with the plans to expand the initial project goal of 10 sites to up to as many as 26 end-user hospitals and the subsequent communities and rural constituents served by these end-user hospitals.

Throughout the course of the grant period, it was discovered that the volume of patients presenting to the emergency department experiencing an acute ischemic stroke was much lower than initially anticipated. While 100% of patients had access to care, there were fewer eligible patients than expected. This created difficulty in gaining the support of all consortium members to expand the network to ten or more sites. As of March 2012, only seven sites have gone through the implementation process to become participating *eStroke* Network sites.

In addition to challenges with expansion, the consortium found that the cost of educating rural staff was much less costly than initially anticipated. Given this, and with the intent to complete the year 3 goal of expanding beyond 10 sites and creating a sustainable network, the consortium decided to further modify the educational requirements and policies and procedures to make network participation affordable, sustainable, and appropriate given the volume of patients now anticipated. The consortium has modified the implementation process at each site, reducing the requirements for program participation and shortening the required staff education. With these changes, the consortium is prepared to expand the network to a total of 60 sites, and meet the goal of a sustainable network.

Sustainability

On-going Services and Activities:

Identify the services and programs that will be sustained beyond the Outreach grant period. Sustainability does not mean that the activities or services necessarily continue in the same form as originally conceived, funded or implemented. You may be continuing some but not your entire grant funded services and activities; you may be expanding your scope of services; you may be serving a smaller/larger geographic area or fewer/more target populations.

Also describe the strategies that you will utilize to sustain your services and activities, such as funding sources, in-kind support, absorption of services by consortium partners, etc.

The consortium is prepared to expand the network to a total of 60 sites, and meet the goal of a sustainable network. In order to achieve this goal, while vastly increasing the impact of the project by expanding the network to 60 rural hospitals, the consortium is requesting a no cost extension for 12 months. This plan will honor the purpose and structure of the original grant proposal, and make few modifications to the grant budget.

The 60 proposed network sites, have already agreed to participate in the project and have contracted with the consortium to participate in eStroke activities if the no cost extension is approved. These sites will receive 2 hours of stroke training for each of the nursing staff, and receive a stipend to cover staffing expenses related to the training. Basic stroke assessment kits and training will be provided to 60 rural hospitals within the eEmergency system. This is in line with the original grant scope, workplan, and budget. Educating front line staff will help build relationships between the end-user and eEmergency staff as well as build the foundation for collaborating on high quality stroke care.

The modified eStroke processes will continue to rely on eEmergency to screen stroke patients and determine potential eligibility for t-PA. The change is that eEmergency will begin contacting consulting neurologists throughout the multi-state region via phone and arrange transfer as needed. This proposal recognizes the shortage of neurologists to provide telestroke services in geographies with low to no annual volume, while also leverage the unique position of Avera eEmergency to link rural patients to needed support. While this is a small modification from the original grant activities which in listed only one neurology partner always available via video, it is in line with the scope of the project to expand access to neurology care, and will greatly increase the impact of the project.

The participating hospitals will also be provided community education materials, as written in the original grant proposal. Educating community members on the signs and symptoms of stroke and what to do if they experience signs and symptoms of a stroke will increase the likelihood of them seeking care in a timely manner. In order to ensure the longest possible treatment window, it is important that stroke patients get to the emergency room as quickly as possible. The treatment window for t-PA administration to treat an acute ischemic stroke is only 3-4 hours from symptom onset.

Finally, with the expansion of the network and increase in patient volume, the consortium will fulfill the grant objective "Develop an abstract with results of eStroke for dissemination in professional journals, conferences, and other public venues; disseminate work."

Most of the operational and capital costs of the program are also tied into the eEmergency program. Service agreements are in place with each site to maintain equipment and staffing needed for operation. Any equipment upgrades or maintenance will be funded through their internal budget processes. Because the consortium desires to maintain a free service, there is no methodology for building financial reserves within the program. However, the hub financial needs will roll into the larger Avera eCARE budget, and hub services will be maintained through this funding source.

Sustained Impact:

Discuss the long-term effect on your community as a result of your Outreach grant program. Focusing solely on sustained services and activities may understate the full impact of your program and does not describe the potential for lasting effects in the community. There are multiple ways that an initiative can impact a community long after services have been discontinued. These impacts could include changes in the way that consortium partners work together to serve your community, improved service models, changes in institutional practices, increased capacity, new skills developed by service providers, or policy changes.

As mentioned, the consortium is prepared to expand the network to a total of 60 sites vastly increasing the impact of the project potentially improving outcomes and mortality rates for stroke patients at these facilities. In the new model, any facility utilizing eEmergency will have the added benefit of eStroke services.

eStroke consultation could grow to include inpatient consultations and follow up care. Currently, all major public and private payors provide reimbursement for stroke telehealth consults to health professional shortage areas (HPSAs) or non-metropolitan statistical areas (MSAs). All of the end-user hospitals included in the project meet this definition.

As relationships are developed through the eStroke network, patients may be referred back to their local communities for rehab services and follow up care supporting and sustaining programs established in rural communities.

Implications for Other Communities

Many rural and frontier areas experience the same challenges with access to health care due to their geographic locations. Small, rural emergency rooms may not have physicians on duty 24 hours each day and often lack stroke care expertise to allow them to effectively diagnose and treat a stroke. Studies show that rural communities across the nation do not commonly adhere to published practice guidelines and use of t-PA is not common. Development of a telehealth network similar to the eStroke project would provide expert stroke care to patients in any rural area of the United States.

TENNESSEE

Community Health Network

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12700 |
| Grantee Organization | Community Health Network |
| Organization Type | Network of FQHCs |
| Address | 765 Florence Road Savannah, TN 38372 |
| Grantee organization website | www.communityhealth.net |
| Primary Contact Information | Hillary Newton Telehealth Specialist Phone number: 865-360-3586 Fax number: 866-381-1618 Hillary.newton@communityhealth.net |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$189,805 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------------|--------------------------------|---|
| Vanderbilt Children's Hospital | Nashville, Davidson, Tennessee | Hospital |
| Meharry Medical College | Nashville, Davidson, Tennessee | Hospital |
| Community Health Network | Savannah, Hardin, Tennessee | Non-profit organization (professional membership association) |
| Lifespan Clinics | Savannah, Hardin, Tennessee | FQHC |
| Perry County Medical Center | Linden, Perry, Tennessee | FQHC |

Community Characteristics

Area:

Perry County, Tennessee; Hickman County, Tennessee; Hardin County, Tennessee

Community description:

Our service area consists of very rural 95% white communities that have been hard hit by the economic downturn. There are over 1500 children on Medicaid in these communities. In Hardin County, there were 10,426 households out of which 29.70% had children under the age of 18 living with them, 57.30% were married couples living together and 10.10% had a female householder with no husband present. In the county, the population was spread out with 23.10% under the age of 18. The median income for a household in the county was \$27,819, and the median income for a family was \$34,157. The per capita income for the county was \$15,598. About 14.60% of families and 18.80% of the population were below the poverty line, including 25.80% of those under age 18. Perry County is notable for having the lowest population density in the state of Tennessee and 20.2% of its population living below the poverty line. In Hickman county, 8,081 households out of which 33.90% had children under the age of 18 living with them. The per capita income for the county was \$14,446. About 11.60% of families and 14.30% of the population were below the poverty line, including 15.90% of those under age 18. These communities have very limited access to pediatric specialty care. The closest access is more than 60 miles away in Jackson, TN, and most families do not have the time off work or money to make the trip.

Need:

Our program was initially developed to help the rural population of middle Tennessee fight the problem of childhood obesity and the lack of pediatric specialty care in these rural communities.

Program Services

Focus Areas

Access: Specialty Care
Behavioral/Mental Health
Chronic Disease Management: Diabetes
Pediatric Weigh Management

Target Population

Pre-school children
School aged children - elementary
School aged children - teens
Caucasians
Latinos
Medicaid

Description:

Our program was a 3-pronged approach: a diabetes program, a weight management program and pediatric behavioral health. While the demand for the diabetes program has not been at the level we expected, the weight management program has shown success in helping these patients slow or stop any further weight gain. By far the most successful aspect of the program has been the behavioral health. We have developed a multi-level approach and have utilized the services of both psychiatrists and psychologists to help fill the gaps in our communities' needs. We are planning on moving forward with behavioral health as well as expanding to more pediatric specialty care with our partners.

Role of Consortium Partners:

- Community Health Network was the fiscal agent and provided coordinating, management, and technology staff as well as the technology necessary.
- Vanderbilt was responsible for the Weight Management and Diabetes program services.
- Meharry Medical College was responsible for providing the Pediatric Psychiatry services.
- The participating clinics were responsible for identifying, referring and following up with patients.

Outcomes

Through this program we were able to put the technology in place to continue telemedicine even beyond the initial scope of this project. Wayne County, Tennessee was able to have t-1 lines built for the first time which had a broader impact beyond telehealth. We have made connections with partners that will ensure a continuity of care. We have increased the communications bandwidth and speed for rural communities. Although they will not be continuing their current programs, Vanderbilt has expressed a lot of interest in creating new specialties for future programs with CHN. We have begun the process of bringing up a top cardiology program and the state's first tele-stroke project. We created a streamlined process, improved our infrastructure and can now take a service from a specialist and have it up and running in 4-6 weeks. We are currently working on several projects to expand telemedicine across the state with the knowledge we learned in this project.

Challenges & Innovative Solutions

Identify challenges experienced during your program implementation and describe how these challenges were addressed.

- Psychiatric support through Vanderbilt remains unfulfilled. However, we had been successful in adding specialty care services through Meharry Medical Group in Nashville. Recently, their specialty provider had to leave due to illness. We are currently seeking other behavioral health providers and hope to have one in place by late spring or early summer. There is a real shortage of this pediatric specialty, and the academic partners have frequent turnover of specialists. In addition, the complexity of the academic medical centers and the multiple levels of administration requirements have caused some delay in implementation of services.
- Probably of most import to the project is that CHN has undergone some significant organizational changes and challenges. In January of 2010, the organization received the notice of resignation of its CEO and CFO. The Telehealth Project Director (and PI on this grant), was asked to assume the responsibilities of Interim CEO in addition to her regular responsibilities. She left the company in December of 2011, and the duties of PI have been given to the telehealth specialist. Accounting and administration of CHN have been contracted out by the board until we can determine next steps.

On-going Services and Activities:

- Pediatric Behavioral Health has become a HUGE part of our telehealth project. As we move forward, we will continue to provide these services, but until the Meharry Medical College can hire another pediatric psychiatrist, this program is at a standstill. We are currently seeking other partners and assisting Meharry in hiring for this position as soon as possible. This area of health care has a great demand and we will continue to increase our capacity.
- Pediatric Weight Management has proved successful with the patients who have been served. Those patients have slowed or stopped their weight gain and are "growing into" their size. The Pediatric Diabetes Clinic was hampered by the requirement by the physicians of one in-person visit before 6 visits of telehealth over the next few months. Many of our patients didn't have the time off work or suitable transportation to get to their clinic. Vanderbilt has decided to eliminate these programs and focus more on developing other specialties. In the process of this project other specialist and providers have seen the value of this service. They are currently in the planning stage of cardiology and look into other specialties.
- Meharry will continue to provide their services and absorb their costs. Any new specialty providers of telehealth will be brought in under new contracts. The providers will cover the costs of their connectivity and equipment which can be offset by patient services.
- The CHN costs will be addressed partially by income from a contract with United Healthcare. Also, we are rewriting our fee structure and contracting to help provide income from CHN membership and new programs. We also have a FCC 465 grant to help create the Tennessee Telehealth Network, which could provide up to \$95,000. We have also filed for a no-cost extension for this grant for the excess funds of \$92,500 and will probably have excess funds in our OAT grant to help continue our programs.

Sustained Impact:

This program has enabled us to put in place the technical infrastructure needed to deliver Telehealth services. It has provided the technical capacity necessary in order to expand Telehealth offerings beyond the initial group of participating communities to a broader group of rural communities. The program provided an opportunity for consortium partners to work together, learn about each other's service delivery models, and fine-tune ways to collaborate. The Academic Health Centers have gained experience in working with Federally Qualified Health Centers serving rural communities. The FQHCs have developed connections with specialists at the Academic Health Centers and learned more about the opportunities, and organizational barriers to implementing Telehealth services through these partnerships. Although Vanderbilt University will not be continuing their current programs, Vanderbilt has expressed great interest in creating new specialties for future programs with CHN. This demonstrates that the partnerships created through this project have the potential to open new opportunities in the future.

For at least one rural community, this project was the catalyst for a county-wide initiative to increase the communications bandwidth and speed for the community. In terms of the CHN team, the project developed its staff capacity to coordinate Telehealth services. This increased capacity is demonstrated by a streamlined process for scheduling and delivering Telehealth services, an improved infrastructure that has increased efficiency in adding a new service. For example, a new specialty care service can be brought up as little 4-6 weeks. We are currently working on several projects to expand telemedicine in new communities across the state using with the knowledge and experience we gained from this project.

Implications for Other Communities

- First and foremost do not try to superimpose telemedicine on a service that is currently being provided satisfactorily. It will only cause confusion, delay, and in the end most likely won't work.
- You need to develop a strong team that is invested and committed in your program.
- Identify clinical champions who believe and refer into your programs.
- Be realistic about services and what impact the economics and travel burdens will have on your program.
- Make sure that specialty providers block a certain amount of time designated specifically for telehealth consults. They also need some flexibility for emergent situations when dealing the pediatric behavioral health. A 6-week wait for a child with serious issues is not realistic.
- Establish payment mechanisms and protocols.
- If a specialist requires a face-to-face component, this will cause significant problems for the clinics' patients and families and may result in low participation.

TENNESSEE

Hickman Community Healthcare Services, Inc.

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12765 |
| Grantee Organization | Hickman Community Healthcare Services, Inc. – A member of Saint Thomas Health |
| Organization Type | Faith based healthcare organization |
| Address | 4220 Harding Road, Suite 410, Nashville, TN 37205 |
| Grantee organization website | www.sths.com/networkservices |
| Primary Contact Information | Ranee Curtis Executive Director Phone number: 615-222-4820 Fax number: 615-222-4897 ranee.curtis@stthomas.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$147,594 May 2010 to April 2011: \$124,656 May 2011 to April 2012: \$99,720 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------------|--------------------------|-----------------------------------|
| Hickman Community Hospital | Centerville/Hickman/TN | Hospital |
| Saint Thomas Heart | Nashville/Davidson/TN | Physician practice - cardiac |
| Henry County Medical Center | Paris/Henry/TN | Hospital |
| Crockett Hospital | Lawrenceburg/Lawrence/TN | Hospital |
| SThe Regional Network Services | Nashville/Davidson/TN | Faith based – Consortium Resource |

Community Characteristics

Area:

Hickman, Henry, and Lawrence Counties in Tennessee

Community description:

According to the CDC, Tennessee has the highest prevalence of hypertension and diabetes, which are two of the main symptoms that lead to heart failure. Death rates from cardiovascular disease are 50 % higher than the national average. These areas of Tennessee are considered to be of lower socioeconomic status with high rates of poverty, unemployment, and uninsured/underinsured. The socioeconomic profiles of the targeted counties affirm the CDC's postulated connection between age, income, and education and risk factors for heart disease and stroke. The issue of access to health care for rural populations does not end with poverty and lack of health insurance. Beyond these economic and financial barriers, there is a host of challenges unique to rural areas. According to Healthy People 2010's literature review of Heart Disease and Stroke in Rural America, these challenges include "long travel distances to comprehensive post discharge care for heart failure, limited access to screening services, availability of technology and specialists, and limited access to cardiac rehabilitation services." There is very limited access to specialty care in these areas and all are at least sixty miles from a tertiary care center. When compared to that of urban areas, the spectrum of care in rural areas is effectively subpar.

Need:

This program targets populations at risk for or currently diagnosed with heart failure across rural Tennessee.

Focus Areas

Access: Specialty Care
 Chronic Disease Management: Cardiovascular
 Health Education and Promotion

Target Population

Adults
 Elderly
 Uninsured
 Underinsured

Description:

In summary, the Tennessee Rural Heart Failure Outreach Consortium initiated the launch of three free-standing nurse practitioner-managed heart failure clinics in three rural counties. The nurse practitioner provided consultative visits, patient and family education, reinforcement of education, medication management, and emotional support for each patient. The Consortium raised community awareness about heart disease through the development of community education materials while attending and/or distributing these materials at community events and screenings. The Consortium also facilitated educational events for physicians, nurses, and healthcare providers as well as patient education in the form of booklets and videos. Protocols and pathways tailored for rural healthcare were developed and adopted by the rural hospitals. The nurse practitioner served as a resource for the local communities and participated in hospital readmission panels. Accomplishments include:

- coordinated 5 CME events with over 220 regional physicians in attendance
- assembled a complete referral database of physicians, physician's assistants, and nurse practitioners for mail outs, education, and referring patients to each of the three Saint Thomas Health Heart Failure Outreach Clinics
- created the heart failure component to the NextGen clinical software that completely documents patient medical information and provides an Electronic Medical Record (this component will still be used post-grant to collect patient information)
- created a PowerPoint educational presentation for instruction of nurses, nurse's assistants, and other medical providers to be knowledgeable about Heart Failure – 120 participants to date (this educational tool will be uploaded to the Saint Thomas Health Educational Portal for wider future use and sustained impact).
- developed and disseminated standard protocols for Heart Failure screening, treatment, and chart review in each of the three hospitals in the outreach counties. These protocols were pushed down from the CNOs at each facility.
- created a Heart Healthy Cookbook for patients that will continue to be distributed and uploaded to the department website.
- developed and disseminated a Patient Education – Heart Failure Book that will continue to be distributed to patients and their families/caregivers. The organization adopted this educational tool for internal use and will provide printing costs in-kind.
- developed a DVD that will be aired on internal hospital education channels and can be distributed to other facilities for use.
- purchased AEDs to be installed in each of the three Saint Thomas Health Heart Failure Outreach Clinics that will be maintained by the staff at each clinic.

Role of Consortium Partners:

The three rural hospital consortium members represent the largest and most comprehensive healthcare facilities in their respective multi-county service areas. Each hospital's roles and responsibilities in the planning and implementation of this project included:

- Active interest in developing a standardized approach to heart failure treatment
- Active engagement of rural healthcare providers (primary care and emergency department) with assistance in knowledge of county politics and referral sources
- Providing assistance to the grant-funded nurse practitioner with implementation activities such as educating rural providers on heart failure protocols, raising awareness of heart failure care, identifying community resources, and assistance in providing community education
- Utilizing current relationships in the community to strengthen project success and sustainability
- Engagement of case management with follow-up care
- Continuous data tracking/quality improvement support
- Providing a representative to serve on the Heart Failure Advisory Board

Consortium member Saint Thomas Heart roles and responsibilities include:

- Assisting with gap analysis and heart failure resources, protocol and education currently available in each service area

- Providing representatives to serve on the Heart Failure Advisory Board
- Providing cardiologists and nurse practitioners associated with the Saint Thomas Health Heart Failure Outreach Clinic to assist in clinical development and implementation activities with on-site direction from cardiologists or advanced practice nurses
- Providing space and appropriate support resources for heart failure outreach clinics
- Assisting with data analysis across the service area and all billing and reimbursement processes

Outcomes

The Tennessee Rural Heart Failure Outreach Consortium's primary goal is to improve education, diagnosis, treatment and intervention related to heart failure at the level of three rural, multi-county service areas, resulting in an expanded, seamless system for delivering quality heart failure care to rural patients. This goal was to be accomplished through the following program activities:

1. Developing an implementation plan for standardizing protocols and education at the provider level and initiating educational community outreach at the target population level for each of the three rural, multi-county service areas.
 - The plan was developed in Year One of the grant program. Protocols and procedures were developed by the Consortium that would be implemented at each of the three clinic sites. Patient and community outreach materials were created to reach the target population.
 - Medical Providers that received heart failure protocol and clinic information:

| | |
|-----------------|------------|
| Henry County | 078 |
| Lawrence County | 128 |
| Hickman County | <u>015</u> |
| | 221 total |
2. Standardizing heart failure education among providers related to diagnosing, classifying, and treating heart failure patients, resulting in a unified approach across the service area to managing symptoms and slowing disease progression.
 - Numerous educational sessions were held throughout the project period that included:
 - Nursing/Nursing Assistant Instruction: 117 participants
 - CME Events: 220 participants
3. Standardizing heart failure protocols among providers, resulting in consistent implementation of evidence-based protocols
 - The protocols have been standardized, but their utility is unknown. The protocols were made readily available to all providers in the service areas. The Consortium plans to implement an EMR that will capture the use of this data.
4. Implementing Nurse Practitioner-managed, outpatient Heart Failure Outreach Clinics the three rural, multi-county service areas, resulting in a comprehensive, team-management approach to heart failure treatment and reduced hospital readmission rates.
 - The three clinics were implemented successfully in the three rural service areas. Although there is a lack of data to prove utilization, there is evidence that the standardized protocols are effective due to the reduced readmission rates of heart failure patients enrolled in the program compared to the national average. ***Of the 39 patients enrolled, only 4 had a 30-day readmission. This reflects a 10% readmission rate compared to the 2011 national average of 25%.***

Patient Information

- Total of 39 patients in program

| | |
|-----------------|----|
| Henry County | 31 |
| Lawrence County | 5 |
| Hickman County | 3 |

Of the 39 patients, 17 were uninsured during their visits.

- 131 total visits provided
 - Patients received blood pressure monitors and scales for daily monitoring as well as pill boxes and medicine totes for medication administration that were funded by the project
5. Providing educational community outreach to the target population, resulting in increased awareness of heart failure risks, signs and symptoms, and local treatment availability.

- Heart failure education including signs and symptoms were distributed at over 75 community events with tens of thousands of public attendees from all over Tennessee.
- Over 1,000 cardiac screenings were performed at these events.
- The patient education materials developed by this program received overwhelmingly positive results from patients. 16 clinic patients were asked to complete a survey that addressed the education (one on one, booklets and/or video) received from the Saint Thomas Health Heart Failure Outreach Clinics. Each patient provided a 100% positive response to 8 questions that addressed compliance, understanding of disease and management, family comprehension of disease, and the overall impact that the program had on their life.

Challenges & Innovative Solutions

A particular program implementation challenge throughout the project period involved recruiting and securing a fulltime nurse practitioner. The program required travel to the three rural clinics each week combined with the task of program development made the search difficult. After an extended recruitment period, a nurse practitioner was hired late in Year One. Due to her highly-specialized training, she was recruited into a different internal position ten months later. Near the end of Year Two, the Consortium successfully hired an equally experienced and competent nurse practitioner to assume the duties and implementation of the grant activities. During the recruitment process, the Project Director contracted with another nurse practitioner to continue patient visits at the clinic in Henry County without losing continuum of service. During this transition period the Consortium identified social services/case managers as a valuable resource in each community. They helped to evaluate resources within the new service communities. Their support has also assisted in the risk stratification and referrals to the HF clinic and planning for new clinics.

The financial impact was also a challenge. Many patients that were enrolled in the clinic were uninsured or underinsured, so reimbursements did not come as rapidly as one would hope. However, with the aid of Consortium resources, once these patients were deemed disabled due to their condition, reimbursements were made to the clinic.

Through interviews with county medical centers, healthcare providers, county education boards, community resources, and county health departments, the Heart Failure Outreach Consortium has identified a consistent list of challenges that relate to outreach efforts for residents at risk for Heart Failure living in Hickman, Lawrence, and Henry County, Tennessee. These challenges fall into multiple categories: medical, financial, social, and demographic. Some of the most prominent barriers for the Consortium Outreach to manage and overcome are:

- An elderly population that can be less accessible and more difficult to reach.
The Consortium provided the clinics in the rural areas and community events and screenings were held to reach this population.
- Lack of financial resources within the community for medical compliance.
Clinic patients were provided with blood pressure cuffs, scales, and medication dispensers to assist with their compliance. Consortium member Saint Thomas Heart and the Saint Thomas Foundation aided the program with indigent care costs.
- Lack of knowledge on the part of patients, family and healthcare providers to understand the signs, symptoms and management of heart failure.
Through the patient survey, patients reported that the program had a tremendous impact on their knowledge and understanding of heart failure.
- Lack of transportation to receive preventative care and medical treatment.
The need for transportation was decreased by positioning the clinics in the rural communities. Patients were provided access to public transportation if available.
- Lack of nutritional support that augments the probability of heart failure or reduces treatment response.
The Consortium developed the Heart Healthy Cookbook that provided patients with recipes and substitutions that increased adherence to dietary restrictions.
- Lack of understanding about heart failure and lack of familial and societal support for reinforcement of healthy lifestyle behaviors.
Patients reported an increase in their family/caregiver understanding of heart failure.

Having analyzed the barriers that could hinder outreach efforts, the Consortium members have created strategies and developed methods to significantly overcome these barriers and successfully accomplish outreach objectives. The following are strategies to help Consortium Outreach patients, families and healthcare providers have improved access to information:

- Provide local medical providers with Continuing Education Units on Heart Failure to allow them to stay current on medical knowledge and treatment.
Over 220 providers attended five CME events.
- Provide local medical providers with educational collateral about Heart Failure that can be disseminated to patients that visit their offices.
Over 120 providers were given information about heart failure.
- Work with key community leaders to identify community partners to provide coordinated care services.

The nurse practitioner reached out to nursing homes, health departments, and home health agencies to streamline the continuum of care.

- Develop low literacy heart failure educational material for those with reduced literacy skills.
All educational materials were developed at a low-literacy level with illustrations and can be translated to other languages.
- Identify community events, festivals and media to deliver educational collateral on Heart Failure signs, symptoms and treatments
The Consortium was represented at over 75 community events that were attended by tens of thousands of rural residents.
- Explore resources from neighboring communities that could be supportive of patients and medical providers.
A community directory was developed to ensure community support.

Sustainability

On-going Services and Activities:

The long-term vision is that these Consortium members will continue to work together after the grant expires to share best practices and ensure quality care for Tennessee patients—rural and urban alike. Further, health care providers will be similarly educated regardless of where they live and work in the region. In addition to improving patient outcomes, standardization of protocols will hopefully reduce the hospital readmission rates of heart failure patients. This cost-savings will facilitate sustainability, as it will lessen the burden on already short-staffed rural Emergency Departments.

Saint Thomas Health, the parent organization of Hickman Community Healthcare Services, Inc. will absorb the grant-funded nurse practitioner position to continue the outreach clinics and community education efforts. As an added service, the nurse practitioner will conduct in-depth community screenings for advanced cardiovascular disease.

Sustained Impact:

The Consortium members, Project Director and Advisory Board are in agreement that the overall project is successful and has made positive impact on the health status of the rural counties. The project has already shown positive impact internally, as the Heart Failure Clinic at our tertiary care center has adopted the patient education materials and given out blood pressure cuffs and scales to patients that will now be provided in-kind by the organization. A number of other services, resources, and activities will also have sustained impact. Sustained impact was evidenced through charting changes at the rural facilities. The protocols facilitated a new way of thinking about heart failure diagnoses. The cookbook developed by this project was added to the website to increase its availability and widespread use. The Consortium will continue to have a presence at health-related community events to disseminate heart failure educational materials to the lay public. CME events will be sponsored in-kind through annual conferences and the newly initiated web-based grand rounds beginning in June 2012. The Consortium has recently provided education to rural providers and to the public about destination therapy as a treatment option for heart failure patients that will continue to have sustained impact on the program. Relationships that have been built and fostered by this project will also have sustained impact. The nurse practitioner serves on Readmission Committees at the three rural facilities as well as the tertiary care centers. This provides a link between the rural and urban facilities and helps to streamline the care of the heart failure patient. The program has also forged relationships between heart failure physicians, surgeons, nurse practitioners, case managers, referring physicians, health departments, and other agencies to improve delivery of heart failure care across the spectrum.

Implications for Other Communities

This program can be replicated in other rural communities with similar shared resources. The Consortium had strong support from the urban parent organization coupled with the ability to leverage relationships that were already established through other rural health initiatives. This contributed to the accelerated start-up of the program. Hospitals face a clear incentive to reduce readmissions for this population as Medicare does not offer reimbursement for readmissions within 30 days of discharge for CHF. Improving health requires a community-wide effort; hospitals and hospital systems must reach out to colleagues in their communities in order to manage readmissions and improve overall health. Such collaboration is likely to have benefits for the participating organizations as well as for the local population. With new opportunities presented by national health reform and other changes in the health care system, hospitals stand to benefit from being pioneers in providing high-quality, coordinated care and avoiding readmissions.

TENNESSEE

Ridgeview Psychiatric Hospital and Center, Inc.

Organizational Information

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|------------------------------|--|
| Grant Number | D04RH12764 |
| Grantee Organization | Ridgeview Psychiatric Hospital and Center, Inc. |
| Organization Type | Community Mental Health Agency |
| Address | 240 W. Tyrone Rd, Oak Ridge, TN 37830 |
| Grantee organization website | www.ridgevw.com |
| Primary Contact Information | Stacy Park, LCSW Project Director, Principal Investigator Phone number: 865-276-1219 Fax number: 865-481-6179 parksp@ridgevw.com |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|-----------------------|--|
| Ridgeview Psychiatric Hospital & Center | Oak Ridge/Anderson/TN | Psychiatric Hospital |
| Methodist Medical Center | Oak Ridge/Anderson/TN | Acute Care Hospital |
| Anderson County Health Council | Oak Ridge/Anderson/TN | Health Council |
| TN Department of Children Services | Kingston/Roane/TN | Human Service agency |
| | Clinton/Anderson/TN | |
| OB/GYN Associates of Oak Ridge | Oak Ridge/Anderson/TN | Prenatal care providers |
| Juvenile Court System of Anderson County | Clinton/Anderson/TN | Juvenile Court |
| Juvenile Court System of Roane County | Kingston/Roane/TN | Juvenile Court |
| TN Early Intervention System | Kingston/Roane/TN | Human Service Agency |
| Roane County Headstart | Kingston/Roane/TN | Human Service Agency |
| Roane County Health Department | Rockwood/Roane/TN | Health Department |
| Anderson County Health Department | Clinton/Anderson/TN | Health Department |
| TENNder Care | Clinton/Anderson/TN | Advocacy group of Medicaid funding for infant care |
| | Kingston/Roane/TN | |

Community Characteristics

Area:

Grantee Ridgeview Psychiatric Hospital and Center, Inc.'s project – *Mothers and Infants Sober Together (MIST)* – serves the rural counties of Anderson and Roane in East TN.

Community Description:

While northeastern TN comprises only 13% of the state's population, its citizens are disproportionately over represented among the state's poor, uneducated, and unemployed. The targeted counties of Anderson (13.1% below poverty level) and Roane (13.9% below poverty level) are particularly needy (*US Census 2000*). The issues facing these infants are believed to be why Anderson and Roane counties have extremely high rates of infant deaths. In 2005 (based on 2000-2002 data) TN's infant mortality rate of 8.8 per 1,000 live births was ranked 3rd highest in the nation. The TN infant mortality rate during this period was 31% higher than the national average. In 2009, 655 babies who were born in TN died before their first birthday. The TN Department of Health warns that every 13 hours a baby

dies in TN. From 2004 - 2008, TN ranked higher, by an average of 2% more deaths per 1,000 live births, than the U.S. average. East Tennessee Children's Hospital stated that in October 2011 80% of the infants discharged from the neonatal intensive unit were Neonatal Abstinence Syndrome infants.

Need:

The *MIST* Program worked to address a significant treatment void for Neonatal Abstinence Syndrome infants and their families in 2 counties of rural East TN. The program proposed serving 60 infants/mothers annually and 180 over the course of the grant life. From May 2009 until April 30th, 2012, the *MIST* program had 236 referral, provided services to 154 clients and successfully graduated 76 clients from a six month intensive program. Services which are provided include: 1) Screening and Assessment, 2) Individualized Integrated Treatment, 3) Intensive Case Management, 4) Linkage and Referral and 5) Court Ordered Supervised Visitation. The program team consists of a Program manager, and 2 case managers who conduct assessments and implement treatment plans through a home visitation model. The program staff used an average goal of 6 months to work with each infant & family to stabilize each family unit and facilitate the family's participation with further treatment and a long-term provider.

Program Services

Focus Areas

- Access: Primary Care (prenatal)
- Access: Specialty Care (infants)
- Behavioral/Mental Health
- Children's Health
- Coordination of Care Services
- Health Education and Promotion
- Integrated Systems of Care
- Maternal/Women's Health

Target Population

- Infants
- School aged children – teens (females)
- Adults (females)
- Pregnant Women
- Caucasians

Description:

MIST programming and care provided enhanced services for mothers and their infants as well as to mothers expecting drug exposed babies. Without this program, the mothers would not have sought out services out of shame and doubt in the system of care. The staffs of the *MIST* program were exposed to many situations of mothers who were just seeking prenatal care in their third trimester or even in some cases, the last month of pregnancy. The *MIST* program pulled groups of women together to instill hope in changing their own lives as well as the lives of their babies. Clients who participated in the program defined it as "life changing" and unlike any other treatment they had tried before due to the intensive nature of seeking out the client in their environment and not expecting the client to come on their own. Bonding between mother and infant began to improve with the assistance of the staff in educating the clients as to the baby needs. Case Managers assured that the infants were strongly linked with pediatricians for well-baby visits and that the development was closely monitored. Referrals were made to appropriate settings for pain management for the women who had this need and then strong linkage between providers assured that the treatment fell in line with goals for a healthier lifestyle.

That strong link was also a major benefit between the program staff and the court systems that referred often and regularly to the *MIST* program in both counties in efforts to maintain the baby within the family if at all possible. In cases where the baby was too at risk to remain with the mother, the staff linked regularly with Department of Children's Services (DCS), advocates and others to facilitate safety for the baby and when possible, visits between the mother and infant. Child protection services staff would provide feedback regularly as to the benefit that the program brought to a population that had limited resources. The DCS staff would cite the program as being helpful in targeting a solution for the foster care system being so full because *MIST* provided an alternative.

Role of Consortium Partners:

Consortium members met quarterly throughout the grant program for updates, client success stories and to build a stakeholder base. Most active members included Anderson County Court System, TENNder Care Program, Roane County Headstart, and the medical community who often were the first to see this special population need and find relief in a program such as *MIST*. DCS and court systems were an active part of the client's treatment efforts and in providing feedback as to the successes that they were seeing with the clients in the program.

Outcomes

Preliminary analyses show positive changes on several outcome measures. On the Addiction Severity Index severity ratings, statistically significant differences from baseline to discharge were found in three profiles: drugs, alcohol, and legal needs, with discharge ratings being lower (improved) in all three areas. Small changes in depression were also found in the level of depression from baseline to discharge. The number of mothers who scored in the depressed range on the Edinburgh Depression Scale decreased from 29% at baseline to 26% at discharge.

Importantly, changes were also found in attitudes toward parenting on the Adult-Adolescent-Adult Parenting Inventory. There were significantly lower risk scores from baseline to discharge on “reversing family roles” and “level of empathy.” Given what these two domains measure, participants made improvements in not using their children to meet their own needs, being able to differentiate appropriate parent and child roles, and nurturing and recognizing the feelings of their children.

Challenges & Innovative Solutions

Initial challenges for the grant were in consortium support with the referrals for the new county (i.e. Roane). Our staff met the challenge head on and was actively involved in council meetings, county task teams, and meet-and-greet opportunities. The staff used innovative ways to capture the attention of the referral sources by taking cookie grams to the staff and then using the time to educate about the program. They distributed flyers and letters to many different sources, increasing awareness as much as possible. Community involvement was an essential part of the startup process to the grant. Another challenge was our entire consortium completely changed from our proposal to our implementation phase. We handled that by assessing the agency that was working with similar population of drug exposed infants and spending time educating them on how we could work as partners and tackle this problem together. Also, we thought outside the box and expanded our consortium members to agencies focused on infant care (i.e. TENnder care) or agencies such as Headstart which could provide daycare for our infants.

Sustainability

On-going Services and Activities:

The *MIST* program did attempt a grant proposal to HRSA in December 2011 to both enhance and expand the current services, but the application was not accepted because it was six pages too long – an unfortunate error by a new grant writer. Because of the commitment made to the community and the support behind the mission of the program, Ridgeview Board Members accepted a proposal to sustain program efforts until alternative funding can be found. Because other future grant opportunities exist that could capture the heart of this mission, *MIST* remains optimistic that there will be opportunity for additional growth in the future. Until that time, *MIST* will continue in serving the 2 counties using generated income from the fee for service model used with traditional outpatient services. Since the staffing is already trained and specialized, there can be a continued focus on this special population need without much interruption in services. The program will have to be altered somewhat in that the covered services will not include therapist visits in the home, or the administrative duties associated with the linkage of the clinical product to the custody issues and other limitations.

Sustained Impact:

MIST impact became very apparent as we sought out additional grant funding at the end of 2011. Court Judges sent letters of support totally unsolicited in order to help support the grant impact from their point of view. Child protective workers completed multiple letters of support as well, touting that the program provided a niche that otherwise is not there and that the program is one of the only ones that provide substance abuse help without huge waiting lists and unreasonable access. *MIST* provided the hope that some of the clients needed to seek further education again and to finish school, get jobs and prepare a new life path. The program impacted the foster care system in a tremendous way, paving a different route for clients to use instead of removal of the child from the home/family. Of course, keeping a child with a family that has become healthier can have enormous impact, but is not easily measured. An additional impact that has been extremely beneficial is the partnerships that have grown as a result of the consortium development. *MIST* staff has been requested to come to speak to various audiences about the challenges faced and the success that can result. The collaboration efforts that we have formed with community agencies have been helpful with other grant development and with the existing services in place.

The *MIST* Program will be able to benefit other communities because the research/literature regarding drug exposed infants is mostly focused on infants exposed to cocaine and living in an urban area. The *MIST* Program focus was on infants exposed to different substances, but 54% of our infants were exposed to OXY at some point while in utero. Opiate addiction has become an epidemic and unfortunately the most innocent victims are paying a very high price. In addition, the *MIST* Program is a home based program which there is very little literature on and was implemented in a rural county. Also, our program not only evaluated the client's substance abuse problem, but focused on mental health issues and linkage to other resources such as housing, employment counseling, and educational concerns. This is an important aspect to focus on regarding having an effective relapse prevention plan, not just a sober environment.

An important lesson we learned from implementing this is you cannot work in isolation and expect any longstanding changes to be made. It takes having an invested consortium and agencies willing to work with your agency to effectively combat this issue. If your program cannot be flexible, accessible, or trainable, you will end up being frustrated and making very little progress with your clients or in your community. One of the biggest accomplishments of the *MIST* Program was by the end of our three year grant we had many clients contacting our agency asking for help instead of being mandated by DCS or the court system. If a client has enough trust with your program to ask you for help first instead of being made to participate, the long term results are better and the more effectively you will be able to work with your client regarding their substance abuse issue.

TEXAS

East Texas Health Access Network

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12691 |
| Grantee Organization | East Texas Health Access Network |
| Organization Type | Community Based Organization |
| Address | 117 W. Houston St. Jasper, TX 75951 |
| Grantee organization website | www.ethanresources.org |
| Primary Contact Information | Terry Napper Executive Director Phone number: 409-384-2099 Fax number: 409-384-2011 terry.napper@ethanresources.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|---|-----------------------------------|
| Jasper/Newton County Health Department | Jasper, TX Jasper County | Public Health Department |
| Christus Jasper Hospital Pineywoods Area Health Education Center | Jasper, TX Nacogdoches, TX Nacogdoches County | Hospital AHEC |
| Gulf Coast Health Center San Augustine Family Health Clinic | Newton, TX (Newton County) San Augustine, TX San Augustine County | FQHC RHC – Rural Health Clinic |

Community Characteristics

Area:

The East Texas counties of Jasper, Newton, Sabine, San Augustine and Tyler

Community description:

ETHAN's service area, which encompasses 3,600 square miles, includes Jasper, Newton, Sabine, San Augustine and Tyler counties and has a combined population of 93,315. All counties in the service area are classified as rural and medically underserved. With a population of 35,873, Jasper County is the largest, followed by Tyler at 22,127, Newton at 14,887, Sabine at 10,847 and San Augustine at 9,581. The majority of the population in all five counties is Caucasian at 78.0%, followed by African Americans at 17.0%. Hispanics account for slightly more than 5.0% of the population. Between 1990 and 2000, the region experienced a net population growth of 14.4%, but since 2000, however, the population has steadily declined. This trend was evident prior to the recession but has been exacerbated by the current national economic situation. The 2011 average unemployment rate for the area of 12.6 % far exceeded the state average of 8.5%. Clearly this region of East Texas has not enjoyed the economic benefits occurring in many other parts of Texas. The region continues to lag behind the state of Texas in terms of many socio-economic measures. Median household income for these counties ranges from \$30,306 to \$38,624, substantially below the state wide level of \$50,000. The percentage of the overall population living in poverty also significantly exceeds statewide averages. In addition to the above socio-economic factors, which contribute to a generally unhealthy population, a recent report funded by the Robert Wood Johnson Foundation looked at selected health factors by county and ranked the counties in each state by how healthy they were. The counties were ranked from 1-223 with one being the healthiest. All of the counties in ETHAN's service area were ranked in the bottom quartile. Among problems identified was the high rate

of diagnosed diabetes and heart disease, both of which significantly exceed the state average and the high rates of obesity, hypertension, lack of exercise, and poor diet. Adding to the body of evidence suggesting that chronic disease, especially diabetes, in East Texas is not only prevalent but untreated, is hospital cost data which indicates that from 2005 through 2009 residents of ETHAN's five county service area incurred over 17 million dollars in hospital charges that were directly attributable to complications of diabetes and several more million directly related to heart disease.

Need:

A health district needs assessment performed in 2008 identified East Texas as an area where the rates of chronic disease were higher than the state average and also as an area where several socioeconomic factors such low income, no insurance and lack or education contributed to an increased incidence of complications for those with a chronic disease. ETHAN sought to address this issue through its Care Partners program, which was designed to assist low income, uninsured or underinsured individuals by managing their chronic disease.

Program Services

Focus Areas

Access: Primary Care
 Chronic Disease Management: Cardiovascular
 Chronic Disease Management: Diabetes
 Chronic Disease Management: Other
 Community Health Workers/Promotoras
 Coordination of Care Services
 Health Education and Promotion
 Oral Health
 Pharmacy Assistance
 Physical Fitness and Nutrition

Target Population

Adults
 Elderly
 Caucasians
 African Americans
 Latinos
 Native Americans
 Uninsured
 Underinsured

Description:

Through this grant, ETHAN implemented it Care Partners program, which provides chronic disease self-management education and case management services throughout our five counties. Although the program accepted anyone who could benefit, the primary target group was low income/uninsured or underinsured individuals. Anyone identified as having a chronic disease was enrolled into the Care Partners program, where they received individualized self-management education, navigation services, diet and exercise counseling, prescription assistance, assistance finding a medical home, assistance with enrollment in any government programs that they may be eligible for and access to low cost dental services. Patients were identified through several methods, including referral from a health care provider, patients identified as part of ETHAN's ongoing chronic disease education classes, patients who self-refer and patients that are identified at community events such as health fairs. Patients enrolled in the program visit with a CHW at least once every three months. During these visits goals and objectives are mutually agreed to and progress is tracked. Patients are generally enrolled for up to 18 months and are released sooner if they are meeting their goals. Patients released from the program are surveyed at six and twelve month intervals post discharge to determine if they are still in compliance with their individual program goals.

Role of Consortium Partners:

Jasper/Newton Public Health Department- Provides human resources, makes referrals to the program and provides in-kind space as needed for program activities.

Christus-Jasper Memorial Hospital- Through a contract with ETHAN, provides funding for services to referred patients into the Care Partners program. Also, provides in-kind space for a community health worker in the Emergency Department, refers inpatients and ED patients to program.

Pineywoods Area Health Education Center- Assists with training and certification of community health workers.

Gulf Coast Health Center-Provides in-kind space for a community health worker, refers patients to the program, accepts referred patients that need a medical home

San Augustine Health Clinic- Refers patients to program, accepts referred patients that need a medical home

Outcomes

For clients in the program at least 6 months, the following outcomes have been documented.

| | |
|--|---|
| Percent decrease in average waist circumference | 5% |
| Percent decrease in average BMI | 10% |
| Percent decrease in average A1c | 15% |
| Percent decrease in average fasting blood glucose | 10% |
| Percent decrease in average blood pressure | 10% |
| Percent decrease in average cholesterol | 10% |
| Percent decrease in average triglycerides | N/A% |
| Percentage of participants receiving recommended exams and immunizations (foot, eye, dental) | 70% |
| Number of participants who received a referral to cessation services | 100% of smokers referred to cessation program |
| Percent adherence to medications | 97% |
| Percent referred to a medical home that kept the first appointment | 80% |

In addition, with regard to increased compliance with an exercise program, in a recent survey, all patients report exercising at least once per week from none per week previously.

From our educational activities, post testing revealed that the knowledge level regarding chronic disease was significantly increased from very little or no knowledge to well informed concerning chronic disease.

Along with our partner, Christus Hospital, patients referred to the program who return to the ED or are readmitted to the hospital for complications related to their chronic disease are tracked and an ROI analysis is performed by the hospital. The latest reporting period, which ended in December 2011, showed an ROI of \$4.35. Basically this means that for hospital referred patients, every dollar invested in the program saved Christus four dollars and thirty five cents.

Challenges & Innovative Solutions

Motivating patients to participate in their own health has been problematic at times. ETHAN has taken a very proactive approach to this problem by staying in close contact, following up on physician visits, making home visits when necessary and assisting the patient with other services such as benefits counseling.

Getting and keeping people engaged in our classes has also been somewhat of a challenge. ETHAN has employed several strategies to recruit clients as well and engage them to continue attending the complete series of classes. Some of these include getting prominent members of the community to participate, such as the mayor, serving meals and providing chances to win a prize for each time they come to class.

Compliance in general has been an issue as often patients do not show up for their case management or physician appointments. ETHAN has sought to address this issue by going with the clients to see their physician and performing home visits for disease case management.

Another challenge has been the inability to date to have any employers contract for worksite wellness services. ETHAN will continue to use their value proposition-based brochure to outreach to employers.

Another challenge is the lack of commitment of area hospitals in addition to Christus to contract for chronic care management services of patients. ETHAN will use the growing ROI data from Care Partners to market.

Sustainability

On-going Services and Activities:

ETHAN plans to continue the Care Partners program after the grant ends by partnering with our local hospital as well as other hospitals in the area to provide CHWs in the ED to proactively recruit patients into the program. Our current partner, Christus Hospital, has

agreed to pay the salary of one CHW for their facility because of our tremendous success with the program. We are currently exploring similar arrangements with other hospitals in the area. Gulf Coast Clinic, an FQHC, has also agreed to help with the program by funding an FTE in their clinic to help support the program. ETHAN also derives revenue from prevention training programs to the Council of Governments entities. ETHAN also has improved revenue stream from the prescription assistance and dental programs. Also, they have packaged, priced and developed marketing brochure and outreach script for selling worksite wellness services to local businesses. Uptake by paying customers has been slow in coming but it seems to be an approach to network mission and sustainability that has real prospects. ETHAN is also seeking grant funding from other sources to continue to provide our educational outreach in the smaller communities in our counties. To that end, ETHAN has received a state diabetes management grant. ETHAN has also just received approval as a funded implementing partner for breast cancer control underwritten by the Cancer Prevention Institute of Texas.

Sustained Impact:

Through this grant, and others, ETHAN has developed lasting relationships with its coalition partners, county governments, and the religious community in the region. Through these partnerships, ETHAN has become a part of the health care fabric of the community and has been identified as an important resource for helping to close the gap that so often occurs when patients are left to educate themselves regarding their disease. Healthcare providers throughout the region regard ETHAN as an important asset to the healthcare continuum. As a further example of ETHAN's relative importance to the community, the Executive Director was recently asked to participate on a Regional Healthcare Partnership committee that will assess the impact of the 1115 Medicaid waiver on East Texas as well as work with the state to implement the Affordable Care Act. All of our coalition partners feel that ultimately this will result in funding for Community Health Workers to provide Chronic Disease Self-Management education and case management services.

Implications for Other Communities

ETHAN's program has proved that proactively managing patients with a chronic disease will result in improved health, improved lifestyles and reduced community costs for healthcare. The most successful part of our program has been the establishment of the community health worker within the ED where she soon becomes an integral part of the multidisciplinary care team. The impact has been significant for Christus Hospital, resulting in a cost savings of over \$200,000 in 2011 and improving the health of several hundred individuals enrolled in the program. Other communities could benefit by implementing a plan similar to ETHANs that proactively recruits patients by having community health workers work alongside health care professionals at the source of care, thereby becoming an integral part of the multidisciplinary team and reducing health care costs. Our only caution from this strategy is that placing a community health worker in the ED without the support of the community based organization has failed in East Texas when other hospitals have tried it. We think that the CHW needs a CBO to refer patients to so they can take over management of that patient. We hope that as other hospitals in the region become aware of our success that they will contract with us to provide this service, thereby improving sustainability of the program.

ETHAN has also had great success with taking its education program into the smallest communities, often with population less than 1000 people, in the most rural parts of our counties. This strategy could be easily implemented by any organization and provides a valuable service to the community by reaching individuals that might not otherwise be accessible due to lack of transportation, money or a disability that makes them less mobile. By going into the smallest communities ETHAN has consistently encountered people who have never seen a doctor and who have various chronic diseases that are unknown to them.

TEXAS

Migrant Health Promotion

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12667 |
| Grantee Organization | Migrant Health Promotion |
| Organization Type | Non profit |
| Address | 437 S. Texas Blvd., Weslaco, Texas 78596 |
| Grantee organization website | www.migranthealth.org |
| Primary Contact Information | Lizette Pacheco Senior Managing Director Phone number: 800-461-8394, Ext. 1006 Fax number: 956-968-3737 lpacheco@migranthealth.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000.00 May 2010 to April 2011: \$125,000.00 May 2011 to April 2012: \$100,000.00 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---------------------------------|--------------------------|------------------------|
| Ashley Pediatrics | McAllen, Hidalgo, Texas | Clinic |
| Methodist Healthcare Ministries | Mission, Hidalgo, Texas | Faith-based non profit |
| Arise | Edinburg, Hidalgo, Texas | Community Center |

Community Characteristics

Area:

Colonia Las Milpas, Hidalgo County
Colonia Muñiz, Hidalgo County
Colonia South Tower, Hidalgo County

Community description:

The target population for *Futuros Saludables* (Healthy Futures) is comprised of Spanish-speaking, Latino *colonia* residents in rural, southern Hidalgo County at the southernmost tip of Texas.

Colonias are unincorporated neighborhoods developed outside of city limits and lacking city services such as clean water, adequate sewage, drainage, garbage collection, utilities, transportation, road signs, and improved roads. In the Lower Rio Grande Valley, a few miles away from the cities and down flat county roads, paved roads turn into dirt and unmarked dusty turn-offs lead to the *colonias*. Spanish overtakes English on the roadside signs, dogs run loose, chickens peck dirt, and front yards are replaced with weedy lots - some with a tied-up skinny cow grazing on the sparse grass.

More than 400,000 Texans live in *colonias*, with the largest concentration in Hidalgo County; an estimated 98-99 percent of *colonia* residents are Latino. Nearly 30 percent of border Hispanics in *colonias* live in poverty; an estimated 50-75 percent of *colonia* residents are, or have been, farmworkers.

Need:

All of Hidalgo County, Texas is designated a Health Professional Shortage Area, a medically underserved area for primary care, and a Medically Underserved Area for mental health. In terms of mental health, 22.8% of the population in the border report having symptoms of depression in the South Texas Regional Health Status Assessment. The same assessment showed that almost 40% of

community members in need of mental health and substance abuse services could not access services¹. Furthermore, national studies confirm that Latinos, and especially Mexicans and Mexican Americans, have greater difficulty accessing mental health services than other groups. Low rates of insurance are partly to blame, but discomfort with mental health therapists and not knowing where to find services are also significant factors².

By bringing mobile medical clinics, psychological counselors, and mental and general health education classes directly to rural *colonias* of the Lower Rio Grande Valley, *Futuros Saludables* improved access to primary and mental health care, as well as nutrition and physical fitness education, to medically underserved Latino residents in Hidalgo County. The program demonstrated the synergistic effect of behaviors and services that enhance both mental and physical health, improve overall wellness, and enhance quality of life.

¹Community Health Development Program, School of Rural Public Health. (2003, June). South Texas regional health status assessment: Executive report. Available from <http://srph.tamushsc.edu/>

²Vega WA, Kolody B, Aguilar-Gaxiola SA. Help-seeking for mental health problems among Mexican-Americans. *Journal of Immigrant Health*, 2001.

Program Services

Focus Areas

Behavioral/Mental Health
 Community Health Workers/Promotoras
 Health Education and Promotion
 Migrant/Farm Worker Health
 Physical Fitness and Nutrition

Target Population

Adults
 Latinos
 Uninsured

Description:

Futuros Saludables' Promotoras (Community Health Workers) conducted door-to-door outreach, talking to families about health concerns and providing referrals. They also organized small presentations around mental and behavioral health that were led by themselves or representatives from local social service agencies. Presentations were held at *colonias* at community centers. Topics discussed include: stress management, nutrition and healthy cooking, gang violence, domestic violence, substance abuse, depression and anxiety, and child neglect and abuse.

In addition, culturally and linguistically competent care, screenings services, and counseling were provided on-site at the community centers to *colonia* residents referred by the *Promotoras*. A full-service mobile medical unit was available to *colonia* residents to access health services. Counseling and physical health services were provided to uninsured, low-income *colonia* residents at no cost. Coordinators monitored referrals, assisted with follow-up, and ensured the provision of services.

Role of Consortium Partners:

The role of each consortium member was as follows:

- Ashley Pediatrics: Provided services at no cost to *colonia* residents through their Mobile unit. The mobile unit was available to *colonia* residents twice a month. A physician was available on site for checkups, prescriptions and referrals. If participants required further medical care they were provided with an appointment to be followed up with at the Ashley clinic.
- Methodist Healthcare Ministries: Contributed by assigning one counselor and a Wesley Nurse. The counselor was available in *colonia* once a week and provided counseling services by appointments. The Wesley Nurse was out in the *colonias* with Promotora facilitating sessions on nutrition, health (high blood pressure, diabetes, cholesterol) and mental health topics.
- Arise: Provided an office for the Counselor from Methodist Health to conduct counseling sessions. Space was also available for the Migrant Health Promotion Promotora to facilitate sessions, to hold physical activity class, and health fairs. Arise, along with the Promotora, coordinated space for days that Mobile unit would be in *colonia*.

Consortium partners met four times a year with Migrant Health Promotion (MHP) and maintained regular contact to coordinate the mobile medical unit and counseling services. Migrant Health Promotion communicated monthly with each partner to plan joint activities, assess the program's progress, and make any needed changes. At the end of each year, the consortium partners also solicited additional community input and made suggestions for changes for the coming year.

Outcomes

Changes in attitude, knowledge and behavior became very noticeable towards the second year of the *Futuros Saludables* Program. *Colonia* residents would attend mental health sessions facilitated by Promotora. They would also refer family members and neighbors to the counselor. *Colonia* residents realized that mental health was a big problem in the community. Some of the women who went through counseling became *colonia* Lideres (community leaders). Through the Mobile unit several residents were identified with medical conditions such as diabetes, high blood pressure, cholesterol, gall bladder problems and mental health. The mobile unit provided services to 620 participants and the counselor provided services to 554. Diagnoses made during counseling included: Anxiety, Adjustment, Post Traumatic Stress Disorder, and Depression.

Challenges & Innovative Solutions

One of the challenges that is common in *colonia*-based programs is access to transportation. In *Futuros Saludables*, the transportation barrier was addressed by bringing services directly to the *colonias*, a response that is often quite rare. Establishing strong relationships with consortium partners was a key factor in the program's success. Prior to participating in the program, the consortium partners were unaware of the existence of *colonias* and the unmet needs that were present there. However, once the partners went out with the *Promotora* and realized how underserved people were, they were willing to accommodate themselves and their services to the needs of the residents in the *colonias*. The Program Coordinator would create a calendar on a monthly basis for Ashley Pediatrics, Arise and Methodist Health Care to plan days that services would be provided in the *colonias*. The Counselor would also schedule counseling sessions based on times that participants could meet for session. If other needs were identified during counseling, Mobile clinic, or outreach, participants were provided with referrals. The *Promotora* was responsible for flowing up with residents to make sure services had been rendered.

Another challenge in the program was the topic of mental health. Mental health continues to be taboo among Latinos. However, having *Promotoras* from the community plays a key role in the program has helped break down this stigma. Because the *Promotoras* are seen as trusted members of the *colonia*, people have opened up and wanted to learn more about mental health symptoms and treatment.

Sustainability

On-going Services and Activities:

After witnessing the success that *Futuros Saludables* has had in the *colonias* and having identified a continued need for their services, the consortium partners have been very open to and enthusiastic about brainstorming on how they can continue to provide services in the *colonias*. As a result, it was determined that counseling and mobile medical services will continue to be available in the *colonias*. The plan includes having community *lideres* (volunteer community members) and Arise volunteers to take on the role of the *Promotora*. Migrant Health Promotion will continue to provide *lideres* and volunteers with material so that they can continue facilitating sessions as well as making sure that referrals are made to *colonia* residents to access clinical and counseling services. *Lideres* and volunteers will also be invited to participate in trainings on health outreach skills facilitated by MHP's Capacity Building Assistance Program.

Migrant Health Promotion will continue facilitating health and physical activity education to the community through the *Promotora* Community Project, a program that focuses on providing health education on nutrition, physical activity, and diabetes management.

Sustained Impact:

One of the most important impacts that the program has had on the community is in breaking down the stigma of mental health. The education that the community received on symptoms, treatment, and community resources has helped them better understand and gain a different perspective on mental health.

Over the past three years of the program, the consortium partners increased their awareness of the *colonias* and the needs that exist. This experience has motivated them to continue working with *colonia* residents to bring them on-site services that were not available before and to identify more *colonias* that could benefit from their services. In fact, one of the partners plans to open a clinic near the *colonias* to increase the community's access to medical care. In addition, consortium partners will continue its collaborative relationship with Migrant Health Promotion through participation on another MHP program coalition.

The *Futuros Saludables' Promotora* strengthened the leadership role in the community, developed health outreach skills, and gained more knowledge about mental health care. This experience can foster a future career in the health care or community development field. In fact, the *Promotora* will continue to work with Migrant Health Promotion on two other health promotion programs after *Futuros Saludables*.

Implications for Other Communities

Having witnessed the need for more mental health education in rural, underserved communities where access to services is limited and where the topic is taboo, there is an opportunity for agencies to create more programming around mental health. Furthermore, collaboration was essential in the success of *Futuros Saludables*, and by incorporating partnerships into the programming, this can open up collaborations where none existed before and be an impetus for future projects in the community.

The *Promotora de Salud* model, which *Futuros Saludables* draws upon, is flexible and adaptable to different budgets and schedules (e.g. seasonal or year-long). The model has been adopted in rural as well as urban populations, and has served a variety of racial and ethnic groups in the United States. The *Promotora* model can be effective in disseminating health information in a culturally and linguistically appropriate manner to populations who are hard to reach or underserved, and can be tailored to a variety of health topics.

VERMONT

Bi-State Primary Care Association

Organizational Information

| | |
|-------------------------------------|---|
| Grant Number | D04RH12687 |
| Grantee Organization | Bi-State Primary Care Association |
| Organization Type | Primary Care Association |
| Address | 61 Elm St, Montpelier, VT 05602 |
| Grantee organization website | www.bistatepca.org |
| Primary Contact Information | Kate Simmons, MPH, MBA Manager, VT Operations Phone number: 802-229-0002 Fax number: 802-223-2336 ksimmons@bistatepca.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,983 May 2010 to April 2011: \$124,987 May 2011 to April 2012: \$99,994 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-------------------------------|------------------------------|----------------------------|
| Open Door Clinic | Middlebury (Addison), VT | Free Clinic |
| NoTCH | Richford (Franklin), VT | FQHC |
| Little Rivers Health Care | Bradford (Orange), VT | FQHC |
| Northern Counties Health Care | St Johnsbury (Caledonia), VT | FQHC |

Community Characteristics

Area:
The project started in Addison, Franklin, and Grand Isle Counties in Year 1, and expanded to include Orange and Caledonia Counties in Years 2 and 3.

Community description:
Vermont is a rural, mountainous, mostly homogeneous population, with a long history of agriculture. For many years, the fruit and vegetable industry has brought workers from Jamaica on temporary visas. In the past five to seven years, dairy farmers have started hiring mostly male, immigrant workers from Mexico and Guatemala to work in the dairy industry, for a conservative total population of approximately 1,500 farmworkers. Vermont's farmworkers are geographically, culturally, and linguistically isolated and have little to no knowledge of the health services available to them. They often work very long hours, usually have no transportation, and are fearful of being seen in the community. In-person interviews have found that their health concerns include skin problems, lower back pain, toothaches and other oral pain, depression, and communicable diseases including tuberculosis.

Need:
Based on the unfamiliarity of health services in the local communities on behalf of both the farmers and farmworkers, the project was designed to bring health services to the workers, whether on the farms, at a nearby church, or through a mobile unit. Providing clinical services on the farms would raise awareness of the local health services, and make patients and employers more comfortable to access their low-cost primary care providers instead of waiting until health situations were emergent.

Program Services

Focus Areas

Access: Primary Care
Chronic Disease Management: Diabetes
Coordination of Care Services
Health Education and Promotion
Migrant/Farm Worker Health

Target Population

Infants
Pre-school children
School aged children - elementary
School aged children - teens
Adults
Elderly
Pregnant Women
Caucasians
Latinos
Uninsured
Underinsured

Description:

Description of services: primary and preventive care services to include health and farm safety education, physical exams, chronic care management, oral hygiene, provided in culturally- and linguistically-competent clinics on farms and in nontraditional community locations convenient for farmworkers.

Role of Consortium Partners:

Bi-State had the role of project oversight, evaluation, strategic and sustainability planning. Each of the clinical partners piloted different models to increase access in their respective regions of the state, through onsite farm visits and referrals in for dental and primary care. Three of the four partners had relationships with their local universities, who collaborated to provide interpretation, health education, clinical services, and transportation.

Outcomes

The Vermont Farm Health Connection provided care to over 300 patients each year, with 2,094 encounters in 2011. Patient satisfaction surveys showed an increased knowledge of where to go for care and improved comfort level with accessing services. Patients also expressed decreased barriers to care, including knowledge of who to call when needing an appointment, transportation, and interpretation.

Challenges & Innovative Solutions

The two clinics in rural, northern Vermont found that farmers were leery of having outside individuals providing services on their farms. Farmers are independent by nature, and proximity to the Canadian Border contributed to a sense of fear and hesitancy, and attempts to reach out (letters and visits) by the health centers were met with concern. To address this challenge, we partnered with an existing entity, the Vermont Migrant Education program, which is based at the University of Vermont (UVM) Extension. The Migrant Education program was already doing farmworker and farmer outreach and had established relationships with the community. At one health center we developed a formal contract relationship with the Migrant Education staff for her to do health outreach and bring clinics to the farms, which was incredibly successful. At the other health center the Migrant Education staff just had to bring the physician along on his visits, to introduce her to the farmworkers and employers. After this intervention the health center noticed an increase in patient flow from the local farms, to both the local dental and health facilities.

Sustainability

On-going Services and Activities:

Partnering with existing, health care entities that have, over the course of the project, made changes to their policies and clinical practices will allow the farmers and farmworkers to continue to access familiar, culturally competent health care services in their regions. When need for particular referrals have arisen, these entities have developed collaborations with other health care providers in the community (for example, hospitals), which have led to changes in their policies as well to ensure migrant farmworkers do not

experience barriers to care. While health centers may still be able to provide clinical services, outreach may suffer since it is a non-funded, (but critically needed) support service. Bi-State will continue to plan for financial sustainability to ensure farmworkers have both outreach and clinical services.

Sustained Impact:

As a result of this grant program, the partner clinics have increased their capacity to better meet the health care needs of the migrant farmworker population in their regions. For example, one partner clinic adjusted the documentation requirements for patients applying for the sliding scale in order to facilitate access for migrant farmworkers. Clinics have also formed new partnerships, or strengthened existing partnerships with other organizations that can provide auxiliary services such as transportation and interpretation services. In addition, one of the strongest migrant farmworker entities in the State, the Vermont Migrant Education program at the University of Vermont (UVM) has developed their capacity in patient health navigation. They are now much more aware of health resources available to migrant farmworkers and farmers and understand how to help facilitate access to care.

Implications for Other Communities

When implementing a project for a small, isolated population subgroup statewide, a multi-level approach is required to ensure migrant farmworkers are able to access health care. This project has opened communication lines so that if a partner runs into access issues, they know who to contact. Conversely, if a provider wants to start to see farmworkers, they have a number of stakeholders they can now reach out to. Increasing awareness, knowledge, and familiarity of the farmworker population with local providers, directors, and billing staff has created long-standing policy changes and has contributed toward ensuring all doors are open for patients.

VERMONT

Mt. Ascutney Hospital Community Health Foundation

Organizational Information

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|------------------------------|--|
| Grant Number | D04RH16292 |
| Grantee Organization | Mt. Ascutney Hospital Community Health Foundation |
| Organization Type | Hospital |
| Address | 289 County Road, Windsor, VT 05089 |
| Grantee organization website | http://www.mtascutneyhospital.org/ |
| Primary Contact Information | Jill Lord, RN, MS Director of Patient Care Services/CNO Phone number: 802-674-7224 Fax number: 802-674-7155 jill.lord@mahhc.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$100,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|-----------------------------------|---------------------|
| Ottauquechee Health Center | Woodstock, Windsor County, VT | Health Center |
| Matrix Health | Burlington, Chittenden County, VT | Mental Health |
| Windsor Community Health Clinic | Windsor, Windsor County, VT | Health Clinic |
| Health Care and Rehabilitation Services of Southeastern Vermont | Springfield, Windsor County, VT | Mental Health |

Community Characteristics

Area:

In Vermont: Windsor, Woodstock, Hartland, Springfield, Weathersfield, Reading, and Brownsville
In New Hampshire: Claremont and Cornish

Community description:

The primary service area for the hospital's acute care services consists of a 9-town area of approximately 16,000 people. Our communities extend to the north and south along the Connecticut River Valley, west to the Green Mountains, and east across the Connecticut River into the Western boarder of New Hampshire, serving a population of approximately 125,000 people.

Our community is a blue collar community with primary employment in service industries. Employed citizens primarily leave the community for work. Our hospital and the school are the primary employers in our primary service area. Our community is rural in nature.

Fifty-four percent (54%) of children in the elementary school come from families where incomes are below 110% of the poverty rate. Families with female head of the household and children under 18, average 33% for the five primary towns of our outreach work. Per capita income averages \$21,936. At the outset of our journey to positively impact indicators of community health, we found the incidence of respiratory disease, COPD and cancer of the respiratory systems, and diabetes, were much higher than state and national averages. All of these diseases have lifestyle implications which can be addressed through targeted community health initiatives. The rural nature of Windsor and the fragmentation of services contributed to the underutilization or lack of access to services for many families. Many of the needed social service agencies had their offices in Springfield or White River Junction, each approximately 25-30 minutes from Windsor. Since many families had no form of transportation, they found it difficult to access these needed services.

Significant gaps in services include psychiatry and dental care. Significant trends are a recent history of constant change in town government, police and fire departments. Also, significant is the loss of a local newspaper for local communication.

Need:

An extensive needs assessment was done with area providers, human service agencies, schools, citizens and consumers of health care. Coalition and community members were asked to assess the state of mental and dental health care in the community. Consumers were asked about their own individual experiences. Both surveys address the same three major issues concerning access to care: (1) the scope of the problem, (2) the causes of the problem and (3) the solutions to the problem.

Access to Dental Services

- 55% of coalition/community members surveyed say that access to dental care is a serious problem for the community.
- 21% of consumers said it was difficult to get needed dental care; they were more likely than others to have gone without dental care for more than 2 years and to have presented with an acute problem when they did see a dentist.
- 85% of survey-takers get their dental services outside the Windsor Area Community Partnership (WACP) towns.
- Coalition/community members and consumers both identify the cost of dental care as the major barrier to access.
- Suggestions for improving access focus on reducing cost through a local clinic with a sliding fee scale and better dental insurance coverage and acceptance by dentists.

Access to Mental Health Services

- 64% of coalition/community members believe that access to mental health care is a serious problem.
- 15% of consumers said it was difficult to get mental health care. This group was more likely than others to have been treated for a mental health problem in the past year.
- Coalition members saw the shortage of mental health care providers as the most serious barrier to care, followed by cost. Consumers reversed the order, identifying cost as the most significant barrier, followed by a lack of available providers.
- Both groups suggested better insurance coverage and acceptance and a local mental health clinic or improved hospital staffing to improve access. Consumers also called for a more responsive system, with more timely appointments and better emergency response.
- Suggestions for improving services and access to them were led by various cost-cutting strategies—better insurance coverage and acceptance, local clinics with a low or sliding fee scale—and a call to recruit more providers to the area.

Program Services

Focus Areas

Behavioral/Mental Health
Oral Health

Target Population

Infants
Pre-school children
School aged children - teens
Adults
Elderly
Caucasians
African Americans
Uninsured
Underinsured

Description:

Improve Access to Mental Health Services: The goals of the program to improve access to mental health services included the following:

1. Increase PCP awareness and access to mental health providers.
2. Increase communication and collaborative practice between and among PCPs and mental health providers.
3. Institute mental health self-management skills/recovery program for patients and families.
4. Increase support to PCPs, hospitalists, and psychiatrists in managing patient's mental health issues, especially the more complicated patients in the Mt. Ascutney Hospital and Health Center (MAHHC) system.
5. Ensure that mental health initiatives are coherent and on schedule.

Achievements and services as they relate to the above goals include:

- Created a Community Mental Health Providers Brochure; distributed it widely in the community; placed it on the hospital's web page; revised it 2 times; and reprinted 2 times.
- Provided a "Psychiatrist Is In" consultation service to PCPs.
- Instituted Psychiatry Grand Rounds with Dartmouth-Hitchcock Medical Center (DHMC), opened it to PCPs, psychiatry and community mental health providers.
- Researched best practice approaches and selected the Wellness Recovery Action Plan (WRAP) self-management program.
- Provided 3 Adult WRAP Programs and 1 Teen WRAP Program with 7 participants
- Provided WRAP facilitator training.
- Jane Korey, PhD, completed an excellent and comprehensive evaluation of WRAP Self-Management Program; available upon request.
- Organized Peer Facilitator Leadership Group—the *Windsor Area Wellness Network*—and developed mission statement and by laws.
- Organized a pediatric focus group which will serve as the platform for a Pedi-WRAP.
- Working with Matrix Health, increased psychiatry services for 0 to 5 days a month.
- Working with Blueprint for Health, instituted a Behavioral Specialist on the Community Health Team who is also a Licensed Alcohol and Drug Counselor (LADC). This exponentially increased access to counseling for mental health and substance abuse in an integrated approach for our Medical Home.
- Instituted a Pediatric Behavioral Consultant to build capacity of pediatricians to manage youth with mental health issues.
- Instituted a Pediatric Psychiatrist Consultation service through a grant with Matrix Health.
- Provided mental health voucher programs for uninsured and underinsured.

Improve Access to Dental Health Services

The goals of the program to improve access to dental health services included the following:

1. Provide oral health education program for MAHHC pediatric and family practitioners to improve prevention activities and health education for patients and families.
2. Expand oral health prevention interventions through a fluoride varnish program to appropriate pediatric and adult patients.
3. Establish a pilot case management program for the Medical/Dental Home at MAHHC.
4. Improve coordination for dental services working with local dentists and case management program.
5. Explore expansion of dental services at existing clinic and/or private practices for low income, uninsured and underserved.

Achievements and services as they relate to the above goals include:

- Researched best practice approach working with Office of Rural Health Outreach and Vermont Dental Society.
- Arranged for Dr. Laura Murphy to educate PCPs and nursing staff on oral risk assessment and fluoride application, certifying PCPs at MAHHC and Ottauquechee Health Center (OHC) to perform these procedures.
- Worked with dental hygienist on best practice approach to education and provided patients and families education on oral health. Created patient education-teaching sheet and ordered education booklets.
- Provided in-service to all nurses on patient/family education.
- Instituted oral risk assessment and fluoride application program for children 6 months and older.
- Instituted a Dental Voucher Program for the uninsured and underinsured, distributing \$10,000 in vouchers for oral health care.
- Collaboration with local dentist, school systems and other dental health clinics.
- Hired a pediatric case manager, Sallyann Silfies, to coordinate medical, dental and mental health linkages for children.
- Joined local, regional, and state dental access and oral health groups.

Role of Consortium Partners:

The grant program had developed an active and tenacious consortium to plan, lead and provide oversight to the implementation and evaluation of this program. Each consortium partner played an active role in the program.

- Mt. Ascutney Hospital Community Health Foundation acted as the grantee and fiscal agent for the grant.
- Mt. Ascutney Hospital and Health Center provided in-kind program management, coordination of services, writing of reports, and fiscal review and management. The pediatricians of Mt. Ascutney Hospital and Health Center increased their

capacity to provide oral health risk exams and fluoride application through an educational process and competency program working with the Vermont State Dental Association.

- Ottauquechee Health Center extended the effort of the program to include access to mental health and dental health services for an additional nine (9) towns.
- Matrix Health provided oversight to the implementation of the mental health activities, led the research for the WRAP Program, and coordinated the efforts to increase the provision of mental health services as well as the implementation of the WRAP Program and the development of the Windsor Area Wellness Network. Matrix mental health worked in combination with Jane Winterling, a consultant for the WRAP Program to ensure fidelity to this research-based effective self-management program for mental health and for community members struggling with mental health issues.
- The Windsor Community Health Clinic provided systematic access to the uninsured and underinsured members of our community. The program coordinator linked uninsured and underinsured members with the program activities and services for increased mental health and dental health care.
- Health Care and Rehabilitation Services of Southeastern Vermont provided a licensed alcohol and drug abuse counselor to serve members of the community with substance abuse and mental health problems with counseling and referral to needed services.

Outcomes

Improve Access to Mental Health Services

- Distributed approximately 3,000 copies of a mental health providers' brochure within the community and placed it on the hospital's web page to open access to existing resources.
- Provided three Adult WRAP Programs serving 34 community members and one Teen WRAP Program serving 7 teens. Outcome of the program was to build hope and self-management skills, avoid crisis, improve functioning. As a result of the program, participants increased activities of daily living, attained jobs, and developed relationships.
- Provided facilitator training for 12 participants. These peers improved confidence, activities and quality of life through developing leadership skills and helping their peers attain coping skills to improve the quality of their lives.
- Organized the peer facilitator leadership group, which, again, promoted confidence, outreach and solidification of the sustainability of the WRAP Program in our communities.
- Increased psychiatry services from 0 to 5 days a month, providing 497 annual visits. This is an increase from 82 visits in year one, and 337 visits in year two.
- Instituted a Behavioral Health Care Coordinator on the Community Health Team, providing 586 annual visits.
- Instituted a Pediatric Behavioral Health Consultant with 20 consultations. Replaced that consultant with a pediatric psychiatry consultant, providing 30 consultations annually.
- Provided 15 mental health vouchers for the uninsured and underinsured for year 3 of the grant.

Improve Access to Dental Health Services

- Instituted oral risk assessments as a systematic process for children 6 months old and older through the pediatric office, serving 47 children, to-date, with oral risk assessments and 47 fluoride varnish applications. This is an increase from 3 visits in year one, and 19 visits in year two.
- Provided over \$10,000 worth of vouchers for access to dental health services for the uninsured and underinsured.
- Served 115 families with case management services for year 3 of the grant.

Challenges & Innovative Solutions

Challenges:

- The biggest challenge of our project was the significant lack of access to psychiatrists and dentists.

Innovative solutions for mental and oral health included the following:

- The development and distribution of a brochure to improve access to the existing resources;
- Working with Matrix Health to expand, to the degree possible, psychiatry services and build capacity within the pediatricians, by providing pediatric consultation of behavioral health and psychiatrists, and the institution of the WRAP Program to build self-management within the affected and at risk population to overcome the lack of access to mental services;

- Worked with the retiring dentist and the recruitment of the new dentist to replace a one-for-one dental services within the community;
- Built capacity within the pediatric service to provide new protection and early intervention for oral health with the implementation of the oral health risk assessment, fluoride application, and dental education;
- Provided case management for medical, dental and mental health linkages with the pediatric services;
- Provided vouchers to improve access to care for the uninsured and underinsured.

Sustainability

On-going Services and Activities:

Mental Health Services

Beyond the grant funded period, Mt. Ascutney Hospital and Health Center will:

- update and distribute activities for the mental health providers' brochure;
- provide psychiatric grand rounds to build capacity for PCPs and local mental health providers;
- work with Matrix Health to provide psychiatric services to our population;
- work with the Blueprint for Health funding to provide adult and teen WRAP Programs to empower patients with mental illness and substance abuse issues with self-management, anxiety reducing, and coping skills;
- continue the Pediatric Case Management Program through the Blueprint for Health Community Health Team; and
- work with Health Care and Rehabilitation Services of Southeastern Vermont to continue to fund a Behavioral Health Care Coordinator through Blueprint for Health funding for access to mental health counseling and substance abuse treatment.

Dental Health Services

- Mt. Ascutney Hospital and Health Center pediatricians will continue to provide oral health assessments, fluoride applications, and dental education to families in a systematic ongoing manner.
- Windsor Community Health Clinic will seek additional private donations for dental vouchers for the uninsured and underinsured. In 2012, an additional \$3,000 has already been obtained.

Sustained Impact:

Mental Health Services

The WRAP Program and its facilitators have added a new service with the institution of this Rural Health Outreach Program. Already, waiting lists have developed for future programs, and funding has been identified to continue this service through the Blueprint for Health. This is new capacity to directly build the self-management skills of the patients themselves, and to enlist the patients in leading their peers towards health, wellness and development of new skills.

The use of consultative services for pediatric providers has increased the capacity of the pediatricians to manage and serve youth struggling with behavioral health and mental health issues.

Dental Health Services

The impact of the Rural Health Outreach Program, in the area of oral health, has fundamentally changed the pediatrician's involvement in oral health. They have now implemented a systematic activity of oral health assessment and fluoride application for patients 6 months to 5 year olds. This protects and transitions our young citizens prior to linkage with their first dental home and the Tooth Tutor program in the schools, which provides the fluoride applications after year 5, creating an appropriate continuum of care for the community. The program has created a strong collaboration among consortium partners and we will continue to collaborate on expanding access to mental health and dental health for the members of our community beyond the grant period.

Implications for Other Communities

Lessons learned from this experience demonstrates that, in the face of a shortage of traditional psychiatry and dental professionals, new and innovative mechanisms can increase access to mental health and dental health services. The WRAP Program builds skills within those members of our community struggling with mental health issues. This capacity exponentially reduces the problem by intense skill-building among those most affected. Increasing the capacity of the pediatricians with this simple education process and instilling an inspiration to make a difference, again has protected our at risk population prior to joining their first dental home.

This program has taught us to build capacity in innovative ways. These programs can be replicated in other communities to improve the mental health and dental health well-being of citizens.

VERMONT

Southern Vermont Area Health Education Center

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12782 |
| Grantee Organization | Southern Vermont Area Health Education Center |
| Organization Type | Health Education Center/ School based Program |
| Address | 55 Clinton St Springfield Vermont 05156 |
| Grantee organization website | www.svahec.org |
| Primary Contact Information | Marty Hammond Executive Director Phone number: 802-885-2126 Fax number: 802-885-2128 mhammond@svahec.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,957.00 May 2010 to April 2011: \$124,968.00 May 2011 to April 2012: \$99,064.00 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|--|---|
| Springfield Medical Care Systems | Windham/ Windsor Counties, Vermont with limited medical practices in NH | FQHC |
| Windham North East Supervisory Union | Rockingham Vermont township | School district |
| Springfield School District | Springfield Vermont | School district |
| Café Services | South Eastern Vermont | School Food Service |
| Abbey Group | South and Central Vermont | School Food Service |
| Cornerstone Pediatrics | Windham County Vermont | Pediatric medical office |
| Vermont Department of Health | Windham/Windsor County Vermont | Health Department |
| All For One | Windsor Vermont | After and before school program |
| Rockingham Recreation Center | Bellows Falls Vermont | Town Recreation Center |
| Greater Rock Fitness | Bellows Falls Vermont | Non Profit Fitness Club |
| Springfield Family Center | Springfield Vermont | Non Profit Community Resource Center |
| Meeting Waters YMCA | Rockingham Township | Youth Support Program |
| Windham County Farm to School Network | Windham County Vermont | Local Food/ Farming Advocacy Group |
| Post Oil Solutions | Windham County | Local Food Advocacy Group |
| Edgar May Health and Recreation Center | Windsor County reaching p populations in surrounding VT townships , including NH | Nonprofit health and exercise facility |
| Springfield Town Recreation Department | Town of Springfield and local area | Town recreation department |
| 3 Community members | From Windham and Windsor County | Self-advocates |
| Southern Vermont Area Health Education Center | Windham and Windsor Counties Vermont | Health Education Center |
| Retired Senior Volunteer program (RSVP) | Windham County | Non-profit senior advocacy and enrichment program |

Community Characteristics

Area:

The 30+5 program served elementary school youth in the school districts of Bellows Falls and Springfield, Vermont. Approximately, 700-900 youth were involved yearly in 30+5 activities. 30+5 offered their services at the elementary schools, in after school programs, and through community events and organizations catering to this target population.

Community description:

Both Springfield and Bellows Falls were formerly vibrant manufacturing communities, now both towns reflect high unemployment with 27-28% of the population under 200% of the federal poverty level. In addition to high poverty rates, both towns have high rates of school special education services and failing schools; these issues divert resources, providing less funding for schools to provide quality physical activity and nutrition. The Bellows Falls Elementary School has a rate of 67% free and reduced lunch; in Springfield the Elm Street School's rate is 59% and Union is 55%. The towns have a similar population Bellows Falls 3,148 and Springfield with 3,979, The 2010 Census reports both towns with 21% single parent households and 20% of adult residents with less than a high school education.

Need:

The need identified by the 30+5 program was to reduce childhood obesity and correlating problems by increasing opportunities for physical activity and improved nutrition. At implementation of the 30+5 grant, there were little physical activity options for the target youth and often school and afterschool nutritional offerings contradicted the 30+5 program message to promote movement and healthy eating. Prior to the grant there were few physical activity options for youth in the afterschool programs in one town, and the other target town had no afterschool opportunities.

Program Services

Focus Areas

Children's Health
Physical Fitness and Nutrition
School Health

Target Population

School aged children - elementary

Description:

The major goals of the 30+5 program were to increase nutrition and physical activity awareness and provide options for the approximate 759 target elementary school youth. The program strengthened school nutrition/ health advisory committees by enlisting the support of collaborators and having them join these committees. These meetings became an opportunity to work with school administration and school food service providers and to address barriers to providing nutritious foods within the schools. Through these efforts the following was accomplished:

1. **School foods:** free and accessible water was made available during lunch time at all 3 schools, 1 school added a successful salad bar and salad consumption went from 6 premade iceberg lettuce salads to 30-40 mixed vegetable salads eaten daily. More fresh vegetables and fruits are served in all target schools, and bulk whole grain cereal is served in reusable bowls in both towns which provides a more nutritious cereal (reduced sugar) and less non-biodegradable waste. Both districts now serve homemade soup at least 1x per month during the cooler weather. Both schools are involved in a vegetable of the month program which features a new and more uncommon vegetable being served at lunch at least 4 xs per month.
2. **School Physical Activity:** Target schools were provided an in-service on Energizers: an approach to integrating physical activity into the classroom. The program planned to offer additional training, but not all teachers were on board. 30+5 realized that the teachers who wanted to incorporate classroom physical activity were doing so and the teachers who were not interested would most likely not attend or incorporate the training. The program decided to procure physical activity equipment to be used during recess along with training for recess providers.
3. **School Gardens:** At the beginning of the grant only one of the 3 target schools had a small school garden. 30+5 helped improve the existing garden by writing and receiving a grant for \$2,000. Through school employee wellness funding the other 2 schools created small gardens. All 3 school gardens are utilized by school classrooms; the 30+5 program assistant created a curriculum and worked with teachers and youth to bring fresh produce into their studies. Garden food has also been utilized in the school cafeteria. The exposure to the garden followed with cooking has familiarized students with new food appreciation.

4. **Nutrition Curriculum:** The 30+5 program created a nutrition curriculum which was made the available for school staff in both districts. The Bellows Falls Health Advisory Committee also discovered a need to include a health and nutrition educational component for their elementary schools and they were able to provide this for their teachers and included it in to their newly developed wellness policy.
5. **School Classroom Cooking:** The 30+5 program received additional funding to procure cooking carts for the target schools. These carts are fully equipped and travel from classroom to classroom. A cooking cart stocked with an assortment of gear, including a convection oven and hot plate, has allowed the lost art of cooking to return to classrooms in this target area. 35%-60% of the teachers use the carts on a consistent basis.

6. Beyond the school, but impacting the same target group:

After school programs: 30+5 worked with afterschool programs to improve the food served. With one program 30+5 offered a healthy food cooking club, the program was duplicated by the providers and will be continued. Prior to intervention the Springfield afterschool program primarily offered board games and a homework club, during the warmer weather they went out on the swings; through 30+5 encouragement they now offer a variety of physical activities and serve healthier food to their 422 afterschool youth. This change has also been replicated in the middle school program (not our current target audience) affecting 194 students in grades 6-8.

In Bellows Falls there were no free after school offerings that provided activities for elementary school aged youth. In the final year of this grant the town of Bellows Falls received funding to make the town recreation center a year round facility offering a safe and free place for youth to play afterschool. The 30+5 program provided this entity with physical activity equipment is working with this group to improve the food options available in the facility vending machine.

The 30+5 program created and distributed brochures that detail the physical activity options available to all ages in the target towns; the program distributed approximately 1,000 brochures yearly. The local hospital has paid for the printing of these brochures and has committed to continue to update and distribute this brochure following the grant period.

Role of Consortium Partners:

Through partnerships with area agencies the 30+5 program has institutionalized many of its successful program components. 30+5 also worked with these associates to promote programs that strengthen the 30+5 agenda. Springfield Hospital (SMCS) is a very strong partner, 30+5 collaborated with the hospital to provide dietitian services for the pediatric population. Staffing complications and the underutilization of this service by the target population motivated the 30+5 program to forgo this component and focus more on our captive audience in the schools and after school programs. In the final year of this grant the hospital redesigned this dietetic module and now offers very successful hands on nutrition and cooking classes for area youth, adults and for school teachers in the hospital service area. Other consortium partners are looking to utilize the hospital's nutrition program. Additionally, SMCS's Foundation has agreed to offer yearly scholarships for their service area. These funds are made available to improve nutrition and physical activity options for youth of all ages. The 30+5 program designed an application process and organized a grant review committee to insure continued and fair distribution of these funds.

All consortium partners have agreed to continue to meet after the end of this grant through the Connect the Dots groups. They will continue to work towards improving nutrition and physical activity options for youth of all ages and they will expand to include more local towns. The program feels confident that the collaborations established during this grant period will continue to flourish.

Outcomes

During the past six years the program documented a steady increase in the number of vegetables served during school lunch. Comparing school lunch menus from the month of December 2008 to December 2011; the following has been documented:

- During December 2008 for the 15 school days: 13 servings of vegetables were offered, 3 of these servings were non-traditional; broccoli, veggie sticks and butternut squash, the other 10 servings were the usual corn, potatoes green beans peas, and iceberg lettuce and zero servings of soup. School food menus for December 2011 note the following: Springfield 25 servings of vegetables were offered during the 17 school days: 11 consisted of potatoes, corn, peas, green beans, but the other 14 options included 3 servings of vegetable soup, 7 servings of less common vegetables, and the rest were mixed green salads
- Comparisons of the 2011 selections for Bellows Falls during the same 17 days showed the following: 22 servings of vegetables: 2 were potatoes, 2 were vegetable soups and the rest of the 18 servings were of the less common, but very

healthy variety: spinach salad, cucumbers with dip, spaghetti squash, cabbage, parsnips, cherry tomatoes, black beans and hummus; this service provider also supplies a daily salad bar for youth.

The 30+5 program feels confident that school foods will continue to improve the quality of the foods offered.

At the beginning of the each school year, the 30+5 program took a nutrition and behavior survey of the K-5 youth in the target schools with these noteworthy findings:

- What would you rather eat? 2008/2009 fruit and vegetables: 41% 2011/2012: 49%
- What do you drink most often at school? 2008/2009: 31% chocolate milk, 2011/2012 43%.
- Soda consumption at home 22-23% 2008/2009, 18% 2011/2012
- Water consumption: 2008/2009: 31%, 2011/2012: 39%
- Healthiest meal identified correctly in 2008/2009:68%, 2011/2012:74%
- The most popular physical activity reported as swimming: 2008/2009: 57%. 2011/2012: 71%

At the beginning of the 30+ 5 intervention, youth were observed during recess: approximately 35% were involved in outside tag, ball games, or engaged on the small number of swing sets. The majority of observed youth were standing around and talking during outdoor recesses, on follow up observations at least 95% of youth were seen to be involved and using all the equipment procured by the 30+5 program.

School foods were noted to contain limited vegetable servings; they have gone from featuring just 1-2 servings a month of a vegetable other than corn or potatoes to featuring non- standard vegetable choice at least 6 times per month.

The number of participants involved on the wellness committees has continued to increase from 2-4 attending meetings at the program's inception to the current 6-10 participants. Vocal and knowledgeable members of the wellness committees will continue to be active participants.

Challenges & Innovative Solutions

The biggest challenge noted was in the carrying out of decisions made by the wellness committees. These groups are mandated to meet at least four times per year to make sure school wellness policies are carried out and to offer advice/ suggestions for continued improvement. Since these committees are only advisory groups, decisions made are perceived as advice that can be either accepted or ignored by the school administration. Wellness committees found that administrators who disagreed with suggestions provided by the Wellness committees never attended the meetings to voice their opposition. Wellness committee are considering adding a provision to their school wellness policy that mandates those with opposing views attend the meeting or hold a special meeting so issues can be discussed by all invested parties.

Having devoted community partners, including school board members on the wellness committee allow for more transparency, follow through and perhaps the biggest benefit of all: a less constrained voice for members who are not employed by the school district. It took the program over five years to strengthen the wellness committees, in particular to add members that saw value in attending these meetings.

Sustainability

From the program's inception sustainability was a key factor in all program components, 30+5 did not offer components or activities that could not be sustained or absorbed by its partners. Some program concepts were continued through unexpected and unsolicited funds as with the commitment from the hospital to pledge \$7,000- 10,000 annually to help the community to access physical activity and nutrition opportunities. The hospital noted that the 30+5 program helped them to identify this financial need, and they wanted to help once the 30+5 program discontinued.

On-going Services and Activities

- **School foods** should continue to see improvement: with a strong and active wellness committee in each district. Health policies and implementation will continue to improve.
- **School physical activity:** Youth will still have access to the equipment purchased by the 30+5, school staff has also been trained to use the equipment. If additional equipment needs to be procured or replaced, there is now a source of funding for which schools can apply.

- **School Wellness Committees:** Both districts have strong committees; these groups will continue to receive input from the community; community partners have committed to continue attendance and to offer their feedback.
- **School Classroom Cooking:** All of the target schools were provided with traveling cooking carts which will continue to be used by the teachers.
- **Dietitian Services:** Springfield Hospital plans to continue to offer these well attended hands on nutrition classes

Sustained Impact

Shortly after the inception of this program, inquiries were made regarding the cooking carts; other organizations have duplicated this component and have brought them into other school districts.

Physical activity and nutrition improvement opportunities will be offered to the hospital's vast service area through promised funding from their foundation, it is reported that applications are already requesting funding to replicate and broaden 30+5 interventions.

The school food service providers hold a contract for all schools in a district; all nutrition changes affect the school district as a whole and not just the target schools. There are two competing school food service vendors; they are engaged in a competition to serve "the healthier food". This rivalry has brought higher quality food into both districts. For next year, the vending contracts remain the same and we can hypothesize this competition should yield the same results.

RSVP, the Retired Senior Volunteer Program, has volunteered seniors to supervise the before school exercise program in one target school. With the need for volunteers to assist with this component and the need for RSVP to provide meaningful volunteer experiences, RSVP plans to run a pilot program in another county linking an afterschool program with their services to duplicate modules of the 30+5 program; if this arrangement proves successful they plan to duplicate it in other parts of the state.

An original intervention for this grant was to sustain the summer lunch program in Bellows Falls, this component was sustained immediately by moving the location, both the school district and the school service provider made a commitment to simplify and to use existing resources; the school budgeted for the cafeteria service to provide the program and the school district granted a school as the summer lunch site. The summer lunch program continues to be a dependable source of healthy food in Bellows Falls for youth, beyond the target audience; approximately 45 youth are served daily; the food service provider plans to expand this service. The grant never included the Springfield Summer Lunch Program in its interventions though it collaborated with the agency running this lunch program; through this partnership the 30+5 program was able to offer suggestions for distribution and food improvement. Adopting 30+5 suggestions have allowed Springfield's summer lunch program to expand from 30-50 lunches daily to 300+ a day. The food was previously nutritionally inferior, it is now of high nutritional quality and has changed from providing Kool-aid punch with Spam on white bread to offering milk, fresh fruit, veggies, lean protein and whole grains; all youth receiving summer lunch from this resource have the opportunity to receive swimming lessons.

It is this program's hope that eating healthier foods and engaging in regular physical activity becomes a normal behavior; though this will take more time than this grant allows. The seeds have been planted both literally and figuratively with the creation of school gardens, the equipment for cooking and physical activity will remain to be used and the school cafeteria services are committed to continue serving healthier food choices. School Wellness committees are vibrant and very vocal. 30+5 collaborators are steadfast to continue program goals and to bring them to other age groups and locations.

Implications for Other Communities

1. **Community Support:** Find passionate supporters, as you cannot do this alone. Get a specific commitment from those that offer help. When selling your program to others make your request resonate with your particular audience; for example when this program asked the hospital for assistance, the program cited obesity numbers and the correlation to chronic conditions along with the fact that many of the students involved were also hospital patients. 30+5 found that school boards want to hear about saving or not wasting the district's money. School teachers do not want additional work or commitments, and school administrations need to have control of what goes on in their schools.
2. **Simplify:** Do not take on too much. Consider small steps that yield a large impact. Just in case you cannot find continued funding, try to implement programs that can be easily absorbed into the existing infrastructure. Find the existing holes and improve upon them. For this program recess equipment, school gardens, classroom cooking, and a strong wellness committee were all areas in need of development and relatively easy to absorb into the organization or to be continued by invested partners.

3. Consider the needs of your target audience and solicit their input. 30+5 originally wanted to implement an evidence based physical activity classroom curriculum. The target youth probably would have enjoyed the movement/ learning experience, but the teachers were not on board. Another mutually agreed upon option was implemented. When trying to improve school foods, ask kids about their food preferences and then try to offer a healthier version. Youth in this program voted macaroni and cheese as a number one favorite. A healthy version of macaroni and cheese using a cauliflower sauce was offered at school lunch and consumed happily and without complaint.
4. Accept that change can be a slow process. It has taken awhile to create the current climate and it will take time to make the healthier choice the normal option. Stand your ground as you know the bottom line: creating a healthy environment for our youth will create healthy adults for our future.

VIRGINIA

Appalachian Agency for Senior Citizens

Organizational Information

| | |
|------------------------------|--|
| Grant Number | D04RH12654 |
| Grantee Organization | Appalachian Agency for Senior Citizens |
| Organization Type | Area Agency on Aging |
| Address | P.O. Box 765, Cedar Bluff, Virginia 24609 |
| Grantee organization website | www.aasc.org |
| Primary Contact Information | Dana Collins PACE Program Director Phone number: 276-964-4915 Fax number: 276-963-0130 dcollins@aasc.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|-----------------|--------------------------|
| Appalachian College of Pharmacy | Grundy, VA | Pharmacy School |
| Cumberland Mountain Community Services | Cedar Bluff, VA | Community Services Board |
| Dickenson County Behavioral Health Services | Clintwood, VA | Community Services Board |

Community Characteristics

Area:

Four rural counties of southwest Virginia that make up the Cumberland Plateau Planning District 2 (PSA 2) and comprised of 1,834 square miles: Buchanan, Dickenson, Russell, and Tazewell counties.

Community description:

For the area served by the Appalachian Agency for Senior Citizens (AASC), population density is 67 people per square mile and the per capita income ranges from a low of \$20,651 to a high of \$25,180, which is considerably lower than the state per capita income of \$37,503. Total population of the four counties is 118,279 with the elderly/PACE population (55+) making up 25% (29,685). The area is also high in unemployment numbers and disability occurs at a younger age. AASC's service area is designated as a health professional shortage area (HPSA) and a medically underserved area (MUA). Virginia reports a suicide rate of 10.9 per 100,000; the Southwest region of the state has the highest rate at 18.3 per 100,000. However, AASC's service area reports much higher numbers at 28.2 per 100,000. Virginia statistics confirm that the rate of suicide is higher for the elderly, particularly the elderly suffering from chronic physical illnesses. The average age of PACE participants is 75 years. PACE programs tend to attract participants who are older and have very high care needs. An analysis of PACE participants has confirmed that 87% have mental health diagnoses. Of that number, 62% suffer from major depression; 54% have a diagnosis of anxiety; 23% have a primary diagnosis of Alzheimer's; 33% have been identified with substance use issues; and 54% have multiple mental health conditions.

Need:

PACE is charged with providing all the care necessary to safely maintain the chronically ill participant in a community setting, and this obligation encompasses mental health needs as well. The prevalence of depression, anxiety, and substance use problems found in the PACE population convinced AASC to develop a mental health program within the PACE program. Cultural beliefs and attitudes surrounding mental health problems and the lack of providers are challenging factors. Locally, community physicians report stigma and denial as reasons the elderly fail to receive appropriate mental health services. Older adults will not report symptoms suggesting

mental health problems because they do not want to be identified as needing mental health services. Additionally, chronic needs typically supplant mental health needs in the primary care office. In rural communities, the point of access and treatment for all care needs, including mental health, is the primary care provider who has a heavy patient load of older individuals. Mental health care providers in the service area have limited staff with high case loads. The number of available private practice mental health professionals in the service area is limited as well. Practitioners identified by the local mental health community as service providers for the area have practice settings outside the service area, which imposes considerable hardship for the elderly in terms of excessive travel and prompt access to care.

Program Services

Focus Areas

Behavioral/Mental Health

Target Population

Elderly
Caucasians

Description:

AASC's project provided geriatric mental health and support services for frail elders in a community setting, provided support services to caregivers of older adults with mental health and/or substance use issues, and increased community awareness of the mental health needs and treatments available for the elderly. Components included:

1. The addition of the Geriatric Mental Health Specialist to the team ensures a truly holistic approach in the treatment and provision of appropriate services for the frail elderly. Program participants are assessed for depression, anxiety, other mental health conditions and substance use/abuse issues, and then care plan strategies are developed to manage the day-to-day psychosocial issues that burden a majority of program participants. Group counseling sessions are also conducted. When necessary, timed medication dispenser units are used to assist with security and compliance to medication regimen. The Geriatric Mental Health Specialist collaborates with the clinical pharmacist and primary care physician in the development of counseling and medication management strategies to ensure appropriate treatment(s) by the Interdisciplinary Team.
2. Tele-Psychiatry Services are available on-site at AASC, utilizing Tele-Medicine from the University of Virginia Health System Of Charlottesville, Virginia. Grant funding covered the cost for the telemedicine equipment.
3. The Geriatric Mental Health Specialist also provides support to the families and/or caregivers through counseling, education, and referral to appropriate community resources. AASC also hosts a monthly caregiver support group for the community.
4. The Geriatric Mental Health Specialist collaborated with partners to provide training for healthcare providers to ensure up-to-date information and best practices for the recognition and treatment(s) for mental health disorders
5. AASC has implemented outreach and education initiatives for increased community awareness of the mental health problems and issues affecting older adults.

Role of Consortium Partners:

- Appalachian Agency for Senior Citizens is the fiscal agent and provides management, coordination, space, supplies, and staff to support the program.
- Both Cumberland Mountain Community Services and Dickenson County Behavioral Health Services were involved in the development and planning of the program. They committed resources including professional, technical, and ongoing support for the recruitment, training, and supervision of the Geriatric Mental Health Specialist. Both CSBs have been a referral source for participants with specialized mental health and/or substance abuse treatment needs, including crisis intervention and psychiatric evaluation. Cumberland Mountain Community Services provided clinical supervision for Virginia State Professional licensure for the Geriatric Mental Health Specialist.
- The Appalachian College of Pharmacy provides patient-centered pharmaceutical care services consistent with the needs of participants in the PACE program. In return, AASC provides practice experiences and training for pharmacy students. As a consortium partner, the clinical pharmacist was involved in development of the mental health project design and service. The pharmacist ensures that the most appropriate medications are utilized and alerts the PACE team when a medication may need to be changed due to safety concerns or adverse side effects.

Outcomes

- Participants have improved health status and quality of life. The program has shown a reduction in hospitalizations, and participants have been able to remain living safely in their home environments. Mental health care services are more accessible to them with less travel and less wait time. Crisis intervention for suicidal ideation has been successful, and only 2 individuals have

had psychiatric hospitalizations. The program has also been successful in putting behavioral plans in place with participants to allow them to be able to continue receiving needed services.

- Group counseling sessions, including Mood Elevation, Smoking Cessation, Music Therapy, Social Skills, Intergenerational Activities, and Pet Therapy, have produced many positive outcomes. Example: One participant's paranoia and anxiety have been greatly reduced, and she is able to interact with her family better and lives independently in her home. With the help of the mental health counselor and the clinical pharmacist, she is on appropriate medication and was thrilled to have 58 pounds of expired medications removed from her home.
- Partnerships among the two community services boards, the college of pharmacy, and the Area Agency on Aging have been strengthened as a result of this program. We collaborate on community events, making a united effort to reach individuals in need of mental health services through increased community awareness of mental health conditions and services available.
- Tele-Psychiatry services were implemented as a result of this program. Older adults can now have a visit in a private room with their psychiatrist from the convenient location of the PACE Center. Without this service, the participant would have to travel 5 hours one way for the visit. This also greatly reduces a financial burden on the PACE program and staff. Unnecessary hospitalizations, trips to the Emergency Room, and long distances being traveled and extensive wait times to receive services have been greatly reduced.
- Thirty-five locked medication dispensers purchased through the program have improved medication compliance by reminding and ensuring that participants take the right dose at the right time. Participants have a better understanding of their medications and the importance of taking them regularly as prescribed for their continued well-being.
- AASC's PACE program has developed relationships and service contracts with both primary care and mental health providers in and near our service area, as well as with the office of telemedicine from the University of Virginia in Charlottesville to ensure prompt delivery of necessary mental health services to all PACE participants.
- During the first 2 years of the project, 56 participants received 760 counseling sessions, 56 caregivers received 225 counseling sessions, and in the community 407,697 contacts were made. An estimated \$168,900 in in-kind support was given by the community partners.

Challenges & Innovative Solutions

- It was extremely difficult to bring all consortium partners together for formal meetings due to scheduling conflicts and the distance that partners had to travel. Consortium Partner meetings were held quarterly, around lunch time with lunch provided. We addressed this challenge by allowing partners to teleconference into the meeting or send a representative to the meeting. The importance of the meetings as a requirement of the grant was also stressed to the partners and their superiors.
- Initially it was hard to find an employee qualified for the position of the Geriatric Mental Health Specialist. The first Geriatric Mental Health Specialist was hired 3 months into the program and worked for 8 months. The current Geriatric Mental Health Counselor was recruited and hired within a month.
- Several other leadership changes during the grant period required careful coordination and communication to position the new staff members for efficient assumption of duties.
- Obtaining the State's approval on the supervision for the Licensed Professional Counselor certification took much longer than expected. As a result, many hours of counseling service provided by the counselor were not applied toward the required certification hours. He is now on track for the LPC certification soon.
- Challenges with the use of medication dispensers included mechanical failure and tampering with devices. Better quality medication dispensers were purchased, those under warranty were replaced, and a system for routine battery replacement was put into place.
- Implementing the Tele-psychiatry services required persistence and patience and took longer than expected to get into operation. Once a contract for services was in place it moved into operation fairly easily.
- An ongoing challenge faced by the program is participant retention. Given the frailty and chronic medical conditions of the PACE population, we continue to struggle to build our census. A consistent increase in census will enable the project to sustain after the grant expires.

Sustainability

On-going Services and Activities:

- PACE participants have the added benefit of a mental health counselor on their interdisciplinary team and available to them for counseling services. The mental health counselor will also continue to work with families and caregivers and conduct group

sessions as needed and educational events and training. This will be continued through revenue generated through the PACE program. The PACE program will benefit from fewer unnecessary hospitalizations due to mental health issues or medication non-compliance.

- The monthly caregiver support group will continue to meet as well at AASC and is open to the community.
- The Tele-Psychiatry service will continue and also ensures that mental health needs of participants are met in ways that are most cost effective and less burdensome on the participant and their caregiver.
- The locked medication dispensers will continue to be used with those participants who can benefit from them, and they are recycled for use with other participants in the future.
- Supervision for Licensed Professional Counseling of the Geriatric Mental Health Counselor will continue to be provided by the local community services board.
- The Clinical Pharmacist will continue to serve as a member of the Interdisciplinary Team and to monitor the medications being utilized by participants.
- The consortium partners will continue networking with one another through sharing of referrals and training opportunities, as well as collaborating on community outreach events to promote mental health awareness.

Sustained Impact:

This project has had a positive impact on our PACE program, the partners, and the community that will continue well beyond the project period. In our rural Appalachian Mountains communities, there has been a change in mindset, attitude, and awareness of mental health counseling among providers, participants, families, and the community. Consortium partners have a better understanding of the services each has to offer in the community, and this has increased the referrals and collaboration on other projects with one another. The PACE program now includes the mental health component and medication monitoring in the Interdisciplinary Team's assessment and care planning. Tele-Psychiatry services will continue to be available for PACE participants and other members of the community.

Implications for Other Communities

Other communities who are lacking resources for mental health services might use AASC's program as a way to work with community partners to meet the mental health needs of their older adults. Uniting local human service agencies can give a project a stronger voice locally as well as at the state or even national level. It is important to identify the most beneficial partners that can help your project reach its goals. In our project, the local community services boards, the local school of pharmacy, and the Tele-Psychiatry providers from the University of Virginia were crucial in achieving successful outcomes for PACE participants and strengthened the impact of the project. With greater awareness of mental health and substance abuse issues, individuals and their families will be able to live healthier and more productive lives.

VIRGINIA

Blue Ridge Medical Center

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12653 |
| Grantee Organization | Blue Ridge Medical Center |
| Organization Type | FQHC |
| Address | 4038 Thomas Nelson Highway, Arrington, VA 22922 |
| Grantee organization website | www.brmedical.org |
| Primary Contact Information | Greg Tyree Program Manager Phone number: 434-946-5193 Fax number: 434-946-5195 gtyree@rhop-brmc.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------------|--------------------|----------------------|
| Nelson Eye Center | Nelson County, VA | Business- Eye Doctor |
| Nelson County Social Services | Nelson County, VA | Community Services |
| Amherst County Social Services | Amherst County, VA | Community Services |
| Free Clinic of Central VA | Lynchburg, VA | Non-Profit Clinic |

Community Characteristics

Area:

The coverage area for the Outreach grant is a three-county area in Central Virginia: Albemarle, Nelson, and Amherst Counties.

Community description:

The Blue Ridge Medical Center (BRMC) is a community health center located in the south central part of rural Nelson County. Nelson County is in the central region of the Commonwealth of Virginia and is bounded by the Blue Ridge Mountains on the west and the James River on the east. **The county is very rural, with a total population is 15,020, or 32 people per square mile.** Northern Amherst County is also classified as rural. Blue Ridge Medical Center as a Community Health Center has a designation as a Health Professional Shortage Area (HPSA). Nelson County is a Medically Underserved Area (MUA). Within its service area to the south, Amherst County is designated an MUA **by the U.S. Department of Health and Human Services' Health Resource and Services Administration (HRSA).** **Amherst County's total population is 32,353, or 60 people per square mile.** Blue Ridge Medical Center (BRMC) is serving people from all of these areas. Over 9000 residents in Amherst County are at or below 200% of the Federal Poverty Level. Over 4500 are uninsured. All adults in these categories are eligible for our Wellness Passport Program.

The Hispanic or Latino population has grown significantly in each county since 2008: Nelson County up 51% from 302 in 2008 to 459 in 2010; and, Albemarle County up 63% (from 3313 in 2008 to 5417 in 2010). It is important to note that the census may not accurately reflect the true Latino population in these counties, since some proportion of Latino residents may be undocumented and therefore may not be counted in official census estimates. It has been the experience of RHOP that these official numbers represent about half of the actual population, depending on the time of year. (There are clearly significant increases in migrant Latino populations during agricultural harvest seasons.)

In looking at two conditions, hypertension and diabetes, incidence rates are higher in the counties. The national statistic shows that 22% of the population has been diagnosed with hypertension; Amherst has 27% with high blood pressure and Nelson has 30%, (Virginia Health Atlas). For those diagnosed with diabetes, 7.5% is the national statistic, and for Amherst it is 8% and for Nelson it is 9%. Clearly, lifestyle changes and patient education are needed to lower these key indicators of health.

Need:

The targeted population is the low-income uninsured population who are primarily adults. As described in Healthy People 2010, Goal 1-1, “uninsured people are less than half as likely as people with health insurance to have a primary care provider; to have received appropriate preventive care...; or to have had any recent medical visits. Lack of insurance also affects access to care for relatively serious medical conditions... Among those without insurance, chronically ill persons are even less likely than those with acute conditions to get health care services they need.” The uninsured population represents 12-20% of the population. According to the Virginia Department of Health’s website “Virginia Atlas of Community Health” (2008), the numbers of uninsured people below 200% of poverty are 4577 in Albemarle Co, 2330 in Amherst County, and 1266 in Nelson County for a total of 8173—all of whom are eligible for the Wellness Passport.

Program Services

Focus Areas

- Access: Primary Care
- Chronic Disease Management: Diabetes
- Community Health Workers/Promotoras
- Coordination of Care Services
- Health Education and Promotion
- Migrant/Farm Worker Health
- Oral Health
- Pharmacy Assistance
- Physical Fitness and Nutrition

Target Population

- Adults
- Caucasians
- African Americans
- Latinos
- Native Americans
- Uninsured

Description:

The Wellness Passport grew out of a need to develop a health benefits plan that could serve the low income uninsured in the three counties and beyond. Offering the uninsured low-income population the benefit of preventive care rather than crisis care and primary care rather than hospital emergency room care is the purpose of the Wellness Passport.

Aimed at the uninsured population with incomes below 200% of poverty level, the Wellness Passport offers affordable primary care with an emphasis on preventive health and affordable co-pay for a visit to a participating practice and a wellness exam and screening tests by a qualified provider. Access to hospital and specialty services is case managed with RHOP staff assisting enrollees with applications for reduced or free care offered by area health organizations. Referrals for discounted dental care, mental health counseling, and eye exams are available from providers within the county as well as in neighboring cities. Transportation is arranged through the Nelson Volunteer Coalition, a program of RHOP. Latino patients are readily assisted through outreach services in a mobile clinic and with medical interpretation provided by trained RHOP staff and volunteers.

Embarking with patients on a road of *health improvement* through goal setting, coaching, classes, and persistence is the emphasis of the Wellness Passport. The outcome of WP is not only access to healthcare, but an *improvement* in the patient’s health status.

Role of Consortium Partners:

Four agencies participated (and continue to participate) in the consortium for oversight and implementation: Department of Social Services (DSS) in Nelson County, DSS of Amherst County, Nelson Eye Center Optometrists (who provided reduced cost eye exams and glasses), and the Free Clinic of Central Virginia, which offers dental services to enrollees at a newly established dental trailer in Nelson County. They cooperated in the accelerated efforts to enroll eligible individuals into the Wellness Passport. The Department of Social Services in both counties interviewed adults whose children were applying for Medicaid. Social Workers took applications for Food Stamps from adults who were also eligible for the Wellness Passport. The Free Clinic of Central Virginia partnered with RHOP to provide much needed dental care for Nelson County uninsured, low income people.

The consortium and other collaborators (Lions Clubs, Nelson Dental Clinic, etc.) assisted RHOP staff in enrollment efforts and other grant related goals as appropriate

Outcomes

One of the goals of the Rural Health Outreach program was for the target group to utilize primary care and chronic care services appropriately and comply with treatment recommendations. We hoped that at least 50% of patients followed-up by the Nurse Practitioner regarding chronic illnesses would have complied with at least one treatment recommendation (such as taking medication as prescribed or changing diet). Ultimately, 63% of said patients complied with treatment recommendations.

Another desired outcome is that RHOP patients would show improvement in health status. We set a goal that at least 50% of RHOP patients served at least two times would show improvement in at least one relevant clinical health status indicator; 61% have shown improvement in at least one relevant clinical health status indicator.

We wanted the target group to understand the importance of preventive health care and how to access appropriate resources for primary and chronic care. Our goal was that at least 30% of RHOP's diabetic or hypertensive patients and clients served at least two times would demonstrate improvements in healthy lifestyles, treatment plan, compliance, or health status; 33% demonstrated improvements in at least one of these areas. Also, we wanted at least 30% of Wellness Passport enrollees seen at least two times to show improved results on health outcomes measuring tool; 31.3% show improved results on the SF-12 or other health outcomes measuring tool.

Return on Investments was demonstrated by the following: Investment of patient is \$100 (\$25 enrollment plus 3 primary care visits per year at \$25 co-pay). Value of services received is \$856 (\$170 for physical exam, \$162 per primary care visit, \$200 case management and coaching services). ROI: \$8.56 per \$1 invested. If one visit to the Emergency Department prevented: \$1,397/856. ROI: \$1.63 per \$1.00 invested.

Challenges & Innovative Solutions

Data collection for our outreach efforts was a challenge through the first two years. To overcome this, we streamlined the SF-12 survey data collection by going "online" with this process. Using a company called Quality Metrics we now have the ability to track our clients on an eight-year rolling basis. Also, our IT officer for Blue Ridge Medical Center continues to explore the possibility of writing a program that can work with our medical records software that will better streamline the process of data-collection and data-retrieval.

We implemented the following enhancements in the Wellness Passport Program:

- **Wellness Passport Plan B**, designed for people who meet our income requirements, but have insurance that is of a nature that precludes them from getting basic health care, services, and education. For example, a "catastrophic health policy" (usually obtained to make premiums affordable) that does not provide for office visits, prescriptions, or general care, was treated as if it was not insurance;
- **Wellness Passport @ Work**, which is not so much a new version or enhancement of the Wellness Passport as it is a "promotion strategy" for the program. The idea is to get business owners to offer Wellness Passport as a benefit to their qualifying employees. The key market target is small businesses with mostly part-time employees.

We struggled to obtain the goal of 100 new enrollees per year. In retrospect, we should have set a goal based on enrollment *and* retention, not just enrollment. That being said, by the third year of the grant the Wellness passport Program was averaging up to 350 enrollees, with approximately one-third being Latino. Considering the size of the target population, there is no shortage of persons who qualify for the Wellness Passport. The key challenge is communicating the services and making the prospective clients aware of the program. Since many of these potential clients are "off the grid," moving frequently, without internet or phones, no transportation, etc., RHOP strives to take the services to "where the people are."

Sustainability

On-going Services and Activities:

The Wellness Passport Program will continue to serve the community, and serves as the centerpiece of a new health outreach paradigm we call the "Health Compass." Because this new paradigm fits so well within the framework of the Patient-Centered Medical Home (PCMH) construct, we anticipate the model being integrated into BRMC's everyday approach to care. RHOP's Health Compass is a four-point approach to providing health services and resources to the medically underserved, low-income and uninsured people. The four points of the Health Compass are:

Navigation (Access to Health Services)

Our casework (including dental and vision services), Wellness Passport Program, Latino Outreach Program (including the CHP Program), centralized office location, and overall philosophy of service facilitates the navigation of health and other services for our clients. Key Word: "Access"

Education (Knowledge of Healthy Behaviors)

Our Nurse Educator, Clinical Director, and Dental, Wellness Passport, and Latino Outreach Coordinators all strive to offer patient centered and easily understood information and resources that educate and equip the client to live a more healthy life. Key word: "Healthy Behaviors"

Services (Provision of Health Services)

The Health Compass includes a variety of services and benefits (such as dental and vision services, health depots and health checks, etc.) that provide the client with much needed health resources and assistance. Key word: "Services"

Wellness (Health Coaching and Support)

The Wellness Passport empowers and enables low-income and uninsured people to have primary health care, access to health services, and supportive health and wellness coaching. Ultimately the Wellness Passport is a conduit to a healthy lifestyle. Key word: "Wellness"

RHOP has also relocated the core of its staff to the main (and brand new) facility of Blue Ridge Medical Center. This move allows us to be more effective in serving our clients, and eliminates many overhead expenses, freeing more funds up for direct services.

The Health Compass will be sustained through contributions from a variety of public and private grants, fundraising events, fees, and the support of the community health centers, partnerships with other agencies, and replicability will be demonstrated for use in other communities.

RHOP has a twenty year history of sustainability as an interagency collaborative and the outreach arm of the Blue Ridge Medical Center. RHOP is not able to survive without grant funding, since the \$25 enrollment fee is the only direct charge for services.

Objective A: Procure and maintain fees and non-grant revenues.

Predictable income can be expected annually through the collection of the Wellness Passport enrollment fee. This fee may be increased in the future. In an attempt to establish a more sustainable funding stream, the Corporate Wellness Program was established, and now has been expanded, whereby businesses "hire" or contract with the RHOP staff for physical exams or health screenings and flu shots. RHOP also receives income from the Jefferson Area Board on Aging (JABA) for services rendered to their clients.

Objective B: Strengthen Collaborations with Other Healthcare Partners.

The neighboring hospitals have been a logical place to seek support. Support from Martha Jefferson Hospital in Charlottesville is sporadic, and we continue to strengthen this relationship. Centra Health in Lynchburg is the leading donor of the three hospital systems that have been involved in supporting RHOP and the Wellness Passport.

Objective C: Secure and Maintain Local and Regional Grant and Foundation Funding.

The United Way Thomas Jefferson Area has been a partner in funding for more than a decade. Each year a detailed application for funds is completed. Nelson County is at the edge of the Planning District served by United Way. We have already begun the process to be eligible for funding by the Central Virginia United Way for operating the new Health Compass extension site in Amherst County. Our program qualifies as meeting one of the primary goals of the United Way.

We have also begun to build relationships in the town of Amherst and Amherst County to solicit funding, as we believe we will be able to prove in the next couple of years the value we bring to that community and the return of investment that will be realized.

RHOP will continue to seek funding from foundations, both state and national. Small, private foundations based in Charlottesville have been identified. These will be solicited during 2012-2015. Several national foundations will also be solicited. Unfortunately, this area of the state has no hospital conversion foundations which have been so beneficial to other localities in their attempts to serve the uninsured.

By demonstrating the improvement in health outcomes, RHOP hopes to attract local funding from health systems and foundations and we hope to be a replicable model for the state and nation.

Objective D: Involve the community and other partners through fund-raising and program awareness.

For six years RHOP has sponsored an annual Spring Fundraiser. The proceeds have netted \$10,000-\$25,000 each year. We will continue these events. For three years RHOP has sponsored a Golf Tournament at Wintergreen. This event has not only resulted in funds for the program, but has increased awareness of and support of the program by individuals who are believers in what we do. We continue to plan this in 2012 and beyond. A future fundraising event is proposed to take place in Amherst.

Sustained Impact:

The major long-term impact is that uninsured, low-income persons and those outside the healthcare system in Nelson, Albemarle, and Amherst counties have access to relevant health services and resources, comprehensive health care, including preventive care, encouraging and effective health coaching, and acclimation into a Patient-Centered Medical Home (PCMH). They are experiencing improved health outcomes and enjoy a better quality of life.

This project also resulted in ongoing partnerships that will function collaboratively beyond the grant period. Relationships with both Departments of Social Services improved during the period, and the entities regularly assist one another and refer to one another to fill service vacuums and to eliminate duplication of services.

This project also resulted in new partnerships, such as with the Nelson Lions. This new partnership will actually provide better vision services to our clients than was previously possible, and has resulted in quicker and more efficient services for our clients.

Finally, the project resulted in a new and improved paradigm for health outreach: the Health Compass. While the Health Compass incorporates the Wellness Passport Program, it broadens the scope of our outreach strategy in four over-arching categories (see above).

Implications for Other Communities

The Health Depot model, a part of the Wellness Passport promotion strategy, has been used in two other Virginia counties as a method of community outreach for screenings: Bath County Community Hospital obtained a grant from the ORHP which was based on the Nelson County model. It was also used by Smyth County Health Coalition and the Virginia College of Osteopathic Medicine. The Virginia Health Care Foundation deemed Health Depots a "Model That Made It" and created a booklet for other communities to use.

The Wellness Passport demonstrates its worth to not only Central Virginia, but also to other communities who can put together a coalition to sustain this type of health benefit for the uninsured. It goes beyond the Free Clinic or even the Community Health Center system of care in that it places preventive medical care in the forefront of services offered.

VIRGINIA

Northern Neck Middle Peninsula Telehealth Consortium

Organizational Information

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|------------------------------|---|
| Grant Number | D04RH12656 |
| Grantee Organization | Northern Neck Middle Peninsula Telehealth Consortium |
| Organization Type | Non-profit organization |
| Address | 659 Hospital Rd., Med Arts A, Ste. 104, Tappahannock, VA 22560 |
| Grantee organization website | www.bayriverstelehealth.org |
| Primary Contact Information | Edie McRee Bowles Executive Director Phone number: 804-443-6286 Fax number: 804-443-3780 ebowles@bayriverstelehealth.org |
| Project Period | 2009 – 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|---|---------------------|---|
| University of Virginia Center for Professional Diabetes Education | Charlottesville, VA | Certified Diabetes Education Center |
| Northern Neck Senior/Aging Network | Lively, VA | Volunteer group of senior services professionals & nurses |
| Riverside Health System (Tappahannock Hospital, Medical Group, Home Health) | Tappahannock, VA | Rural hospital, medical practice, and associated agencies |

Community Characteristics

Area:

The coverage area for the Outreach grant is a ten-county rural area in northeastern Virginia: Essex, Richmond, King and Queen, King William, Middlesex, Lancaster, Westmoreland, Northumberland, Mathews, and Gloucester Counties. All of these counties are MUAs (mental health underserved), most are HPSAs (health provider shortage), and several are underserved for primary and dental health care.

Community description:

Seniors are the fastest growing segment in our region and thus, there is a prevalence of chronic diseases, especially diabetes, and the increased mental health needs related to dementia, depression, anxiety, delirium and other cognitive and neurological disorders. Our Outreach project has served the Middle Peninsula and Northern Neck (10 counties). Based on the 2010 US Census between 2000 and 2010, the population 65 years and over in this region increased at a faster rate (15.1 %) than the total U.S population (9.7 %). Five of our counties are more than 50% above the national average of people aged over 65, with one as high as 31.2%. These elderly are likely to have worse mental health status, more chronic diseases, and greater barriers to care including increased risk of disability and lack of transportation. According to our area's Alzheimer's Association, there are over 4,000 individuals in this region with Alzheimer's disease.

Since 2009 the unemployment rate has increased, with two larger employers closing here in the last year. The Great Recession has impacted gaps in health care since more people are now without health insurance. Also there are increased demands for services -- on the rural mental health clinics (more diagnosed depression and anxiety) and the FOHCs (primary/family care, chronic diseases) that serve lower income residents, as well as more pressure on senior/aging services, such as home health, hospice, and long term care.

And there is over reliance on higher levels of care – hospitals and ERs. Chronic disease rates and obesity, especially among children, are higher. Three years ago one of our major health systems, Riverside (also a key member of our network) supported creation of a new free clinic in Tappahannock to help with health care gaps. Physicians and nurses donate their time at this clinic, as is the case with the other three, older free clinics in the region. Unfortunately, there are no maternity services in the region now. A midwife-model maternity clinic opened in Lancaster County in May 2010 to provide obstetrics delivery services (last hospital delivery unit closed 2003), but it had to close 15 months later, because of lack of a sustainable business plan.

Need:

Our Outreach project was created to assist in meeting two identified needs:

- 1) Provision of specialist consulting services for the rural region through telemedicine, which was particularly needed by patients to manage their chronic diseases such as diabetes, dementia, and depression. The chronic disease problem and lack of specialist health care workforce here were identified as critical needs by our network members. Local physicians emphasize continuing needs for their patients to receive neurology, endocrinology, and psychiatry services.
- 2) Provision of Certified Diabetes Education (CDE): As of October 2008 when our organization submitted its Outreach proposal to HRSA, there were no qualified CDEs offering diabetes education in this region. By partnering with the UVa Center for Diabetes Education, UVa Office of Telemedicine, and the Three Rivers Health District (our region's health dept.), our Alliance offered "virtual CDE" by sponsoring facilitated and interactive CDE sessions on a regular basis through videoconferencing. These sessions to assist rural patients in their families in learning about their disease and management strategies are now presented twice a month for eight months a year, at several locations in the area. This is an increase in frequency from our 2009 series, which was offered five months of the year.

Program Services

Focus Areas

Access: Specialty Care
 Chronic Disease Management: Diabetes
 Health Education and Promotion
 Telehealth

Target Population

School aged children – teens (females)
 Adults
 Elderly
 Caucasians
 African Americans
 Latinos
 Uninsured
 Underinsured
 Local physicians/PCPs

Description:

1. The Alliance's staff organized and administered Telemedicine Outpatient Clinic(s) at 2 locations, offering telemedicine specialty care for rural patients of local providers, and a few inpatient consults. The Outpatient Telemedicine Clinic on the Riverside Tappahannock Hospital campus was in operation for the period April 2009 through April 2011, and from September 2011-April 2012. During the Outreach period equipment located at Rappahannock General Hospital in Kilmarnock, VA was also used for a few telemedicine outpatient consults, from spring 2010 through January 2011. This site was used most frequently for telehealth education (see below).

During the May -August 2011 period the videoconferencing facility in Tappahannock was used for a concentrated Surgery Technician training program, broadcast from the School of Health Professions in Newport News, VA.

The number of patients served/telemedicine encounters for the above two locations were about 150 over the three year grant, not including the health professional sessions.

2. Our Outreach program included a series of health education/promotion programs offered at various locations, using the videoconferencing capabilities of our network members. Instructors were hospitalists, medical or senior services professionals, or nurses who contributed their services for free. We offered 2-3 programs per month except during late summer and December, when we found that participation was low. An important offering has been facilitated and interactive Certified Diabetes Education sessions using videoconference on a regular basis at several locations in the area. Our first

program, which was taught by certified professionals (diabetes educators, nutritionists, behavioral health specialists) at the UVa Center for Diabetes Education, was offered the first week of our grant (April 2009). The diabetes sessions on various topics were broadcast 2x/month. In the first year telehealth on diabetes was offered five months of the year. By the end of our project (April 2012) frequency increased to eight months of the year.

Attendance for telehealth education programs averaged 150 – 200 attendees/year, with highest attendance in year 2. Partners who co-sponsored education with the Alliance included Northern Neck Senior Network, Alzheimer's Association, Bay Aging, Riverside Health System.

3. Working with educators at the UVa Diabetes Education Center and a local primary care physician, our program included a year-long Diabetes education/support group, "Power to Prevent," during the October 2009-September 2010 time frame. Early attendance for the eight weekly video-conference education sessions attracted 24 people, some with diabetes and most pre-diabetic. By the end of a year, when sessions were held monthly, we still had 11 loyal group members. Our evaluation included a check-in with a few of these people a year after the program ended. Participants' feedback, on the whole, was positive, and those who stuck with the program felt their health status improved. After the video-conference, formal education programs ended, the group met at the local physician's office, and 90 minute sessions were facilitated by the Outreach project director, and material on healthy eating, physical activity, and stress management was presented by nursing staff of the medical practice.
4. The Outreach program supported overall operation of the Alliance network also, and financial support for the Alliance included a membership program begun in May 2010. The Alliance was able to write grants and successfully secured additional funding for expanding telehealth to new rural sites, and urban consulting specialist hubs, with a USDA RUS-DLT grant for \$215,000, awarded in 2011. This funding was a stimulus for creation of a new Center for Telehealth by Riverside Health System, launched in October 2011 with a Telestroke initiative. Riverside is now investing heavily in telemedicine, and established a planning team in 2011, after the Alliance helped them with planning and site visits. Also, Virginia Commonwealth University Health System, a founding member of the network, has adopted a strategic plan for telehealth, and is in the process of expanding its rural outreach in telehealth to new areas of Virginia.
5. A new project, focused on Telemental Health, was developed by the Alliance, by engaging several new partners, in addition to capitalizing on new capabilities in place as a result of the USDA RUS-DLT funding – such as availability of telemedicine services at three mental health clinics and state-of-the-art equipment in 3 rural hospital ERs/ICUs, and mobile neurology telemedicine in Newport News at the Riverside hub hospital/practice. The project is the focus of a Telehealth Network Grant Program that was submitted by Bay Rivers Telehealth Alliance in April 2012, and would include telemedicine sites at several nursing homes located in the Middle Peninsula, Northern Neck, and Eastern Shore, and access to psychiatrists, behavioral health and rehabilitation specialists, and nationally ranked experts at the VCU Geriatric Division.

Role of Consortium Partners:

All members of the Alliance, as represented on the organization's Board of Directors, have had a role in identifying needs and guiding the Outreach program, both during its development and over the period of implementation. Each of them has taken on some responsibility in an area that fits their mission and resources. Here are a few examples:

- 1) For our Telemedicine Outpatient Clinic, my program coordinator and I worked with the Tappahannock Hospital's Health Quality Director and nurses who had previously presented for inpatient telemedicine consults to develop the protocols and administrative processes for the new Telemedicine Outpatient Clinic in Tappahannock. For every scheduled patient encounter, the Riverside medical group provided a staff member who served as the patient-side presenter. The Alliance handled all marketing, referrals, scheduling for consults with the UVa and VCU telemedicine offices, and technical coordination.
- 2) In finding speakers and publicizing our Community Telehealth programs on management of diabetes and other chronic diseases, we worked closely with the Northern Neck Senior/Aging Network, and with Bay Aging, a member of our Alliance. Because these organizations have nurses, other senior services staff, and volunteers distributed throughout the 10-county service area, we could more effectively spread information to a wide range of audiences through e-mail and fax blasts.
- 3) Three Rivers Health District provided use of their videoconferencing sites (there are seven available) as an in-kind contribution. We worked with their IT coordinator to schedule sessions in as many locations as possible, to make it convenient for rural residents to attend our Telehealth programs. Also, for each site where a program was held, a staff

member at that health office served as a facilitator that day– setting up the videoconference equipment, registering attendees, providing handouts, and helping with Q&A at the end of the program.

- 4) When the Alliance began administering the Tappahannock Telemedicine Outpatient Clinic, the VCU Office of Telemedicine provided an important technical resource to support this component of the program. For the first six months of operations, the VCU Telemedicine Coordinator traveled to Tappahannock for each clinic day (sometimes biweekly, sometimes monthly) to trouble-shoot technical issues, help to train new presenters, and ensure that protocols were followed. He also provided similar in-kind services when the Alliance coordinated a change in use of the Rappahannock General Hospital's telemedicine facility in Kilmarnock, Lancaster County – from inpatient use only, to outpatient consult availability and a site where telehealth education programs could be presented in the hospital's training center.
- 5) Faculty of the UVa Diabetes Education Center have developed the content of CDE programs, taught the interactive sessions, and their co-directors have worked closely with the Alliance on marketing and planning for the annual series. In addition, the directors provided training to the Alliance and PCP nursing staff for the "Power to Prevent" year-long diabetes support group, and also taught the programs that were video cast during the first 3 months. The directors traveled to our area for three site visits, and taught the support group sessions then. The UVa Center for Telehealth provided the videoconferencing hub sites, and technical expertise.

Outcomes

In terms of outcomes of our Bridges to Health Outreach project, these are those that we consider positive:

- 1) Because the Bridges to Health activities expanded the engagement of health providers and higher level administrators (medical directors, CIOs, VPs), there has been a major shift in level of interest and investment in telehealth. Riverside Health System launched a Center for Telehealth in October 2011, with a pilot Telestroke program at the Tappahannock Hospital. Through early April, 12 patients who presented with stroke symptoms at this rural hospital ER were able to be diagnosed by distant neurologists and neurosurgeons, and some of these patients received tPA at the local hospital and were transferred to a tertiary care hospital for the balance of their inpatient care. Others could be treated at the Tappahannock hospital. Riverside's Telestroke program is launching at their Shore Memorial Hospital on the Eastern Shore of Virginia in May 2012, and at a third rural hospital in Gloucester, VA in July 2012. VCU Office of Telemedicine reports this month that they have begun cardiology, oncology, psychiatry, and genetic counseling services to seven new distant locations, four of these are with rural-located hospitals and physician practices.
- 2) In 2009-10 telehealth stakeholders in Virginia worked together to advocate for state legislation that would require reimbursement for telemedicine services by third party/private insurers. Our Outreach project director was part of this initiative, and testified twice before deliberative bodies at the Virginia General Assembly. We were able to provide case examples of telemedicine's benefits to patients and rural physicians because our Outreach grant supported operation of the telemedicine outpatient clinics. Virginia Senate Bill 675 was passed unanimously by the 2010 General Assembly, requiring reimbursement for telemedicine effective January 1, 2011. Thus, there is now much higher interest in offering services via telemedicine by specialist physicians, and a ROI potential for investment by hospitals/health systems.
- 3) Residents in our rural communities also evidence a higher level of awareness about telehealth. When we began planning our Outreach project almost four years ago and spoke at community events, such as health fairs or Rotary or women's clubs meetings, not many people had heard of telehealth, nor understood how this technology could help with access to health care. This past February our project director and a volunteer diabetes educator spoke at a meeting of 100+ people from several rural Baptist churches. In our presentations we spoke about current telehealth activities and components of our Outreach program. The majority of people in that audience had knowledge of telehealth, and understood how it could benefit patients in our rural communities. No doubt their awareness may have been raised by national publicity on the use of technology in relation to health reform, and articles appearing in publications such as Parade and the New York Times. But also we believe that publicity that our project has placed in our local media (rural weekly newspapers and radio interviews) about our telehealth Outreach program has contributed to a wider knowledge by the public in our area.

There are two primary challenges that we experienced:

- 1) Moving through stages of implementing components of the program required patience often and political finesse sometimes. The project director, evaluator, and external consultants branded this the “inside out” problem. Because our Alliance is a very small, separate non profit organization, and does not operate within a larger (member) organization, we found that it was difficult to get action on tasks, because these were not seen as a “priority” or “owned/assigned” by the staff person’s employer organization. Thus, Alliance staff had to rely on its board representatives within an organization to advocate/push a project forward to get necessary action, or to help staff identify alternatives to pursue.
- 2) In the case of the “Power to Prevent” year-long diabetes support group initiative, there was a need to evaluate individual patient outcomes, as well as the overall program’s effectiveness. Despite focusing this program within a specific primary care practice, and having the advantage of working with a physician and NP who are very dedicated to quality care and improved management for their patients with diabetes, we were unable to procure periodic clinical patient data (i.e. blood sugar levels) on a timely basis, nor for all group participants. We never did find a successful strategy to overcome this challenge. But it has proven instructive to staff who now will determine ahead of time, methods to secure needed clinical data. This requirement is now included in memoranda of understanding/agreement with partners of the Alliance for grant proposals.

Sustainability

On-going Services and Activities:

The main components of the grant-funded “Bridges to Health” Outreach program will continue after the grant period ends, through absorption by Alliance current/former members:

* The Certified Diabetes Education (CDE) series that has been developed and sponsored by the Alliance for the region over the last three years has been taken over by Three Rivers Health District as of May 2012. The CDE programs presented by live video cast from UVa will continue to be offered at two to three dispersed Three Rivers locations in our counties, twice a month through November 2012.

* Telehealth Outpatient Clinic – Riverside Tappahannock Hospital (RTH) and the Riverside medical group (RMG) have committed to move the Outpatient Clinic to a new, more modern and convenient location, near their new Pain Center in a building that opened in 2010. Staffing for administering, presenting, and clinic reception has been identified, and the Alliance has begun training with some of these individuals. RMG is now recruiting one of their PCPs to serve as medical director for the Clinic. The Alliance has been working since February 2012 with a planning team to transfer operations. The Outreach project director is developing a Telemedicine Clinic Manual to be used by the new staff, and as a basis for starting new telemedicine outpatient clinics at Riverside’s other two rural hospitals. The transfer of the current clinic is expected to occur by June 1, 2012.

The Alliance’s network services as a convener of health care organizations committed to using telehealth to improve access to and quality of care will continue, with funding by a membership dues program begun in 2011, and with continued in-kind contributions by network members. Funding for equipment to establish new rural telemedicine service sites, and for more hub/specialist consulting sites is in place through members’ cash investments and foundation grants, and from the USDA RUS-DLT grant awarded to the Alliance in 2011. This project is being implemented through 2012-early 2013, and Alliance staff services are available by contracting for specific projects.

Sustained Impact:

The long-term impact of this Outreach program is that there is a much higher level of engagement and adoption of telehealth by several organizations that are current network members: Riverside Health System, Virginia Commonwealth University Health System, and our local mental health agency. Even organizations that are not paying members of the Alliance, such as an independent community hospital and regional jail, have started using telemedicine.

Current members and three new partners have collaborated with the Alliance to undertake project development and support grants writing for a proposal submitted in April 2012 to the HRSA/OAT Telehealth Network Grant program – focused on telemental health, behavioral health, and geriatrics. Notice is expected by mid-August from OAT on this 4-year telemedicine project. If funded, the Alliance would be lead coordinator and handle grants management during the term of the grant.

Over the period of the Outreach grant, our Alliance members have come together on projects on their own. Several of them are collaborating on developing joint services, working together on new initiatives. These activities come to light during board meetings, and in periodic conversations. It is clear to the Alliance's director that our collaborative project has enhanced the ways these entities serve our communities.

The HRSA Outreach grant has provided a fertile learning ground in the areas of telehealth programs, rural health, project development, network leadership, advocacy and community health promotion for the Alliance's executive director and staff. Another long-term result is that the Alliance's executive director has begun a new consulting relationship as executive director with the statewide telehealth organization, the Virginia Telehealth Network (VTN), as of mid-April 2011. The hope is that this connection will lead to new collaborations, pilot programs, and innovative service models.

Implications for Other Communities

We have learned how to market and coordinate community telehealth education programs by engaging partners, capitalizing on existing resources, and taking advantage of opportunities. Now that the virtual CDE program series has been successfully implemented here for 4 years through our Outreach program, the same series could be deployed in all other rural regions, in Virginia and in other states where there are telehealth capabilities at both rural education site, and hub/diabetes education teaching locations. The programs can be offered in community settings such as schools, community colleges, and libraries.

The process we followed to push more involvement from physicians, nurses, and IT leaders in championing new telemedicine services provided useful lessons that we can share with telehealth programs seeking to increase access to patient care using new technologies.

VIRGINIA

St. Mary's Health Wagon

Organizational Information

| | |
|-------------------------------------|--|
| Grant Number | D04RH12777 |
| Grantee Organization | St. Mary's Health Wagon |
| Organization Type | Non-profit organization |
| Grantee organization website | www.thehealthwagon.org |
| Primary Contact Information | Teresa Gardner Project Director Phone number: 276-328-8850 Fax number: 276-328-8853 Email address: tgardner@thehealthwagon.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,859 May 2010 to April 2011: \$122,450 May 2011 to April 2012: \$99,950 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|--|----------------------------|
| University of Virginia | Charlottesville, Albemarle County, VA | University |
| Mountain States Health Alliance (MHSA) | Johnson City Tennessee, Johnson County, TN | Hospital |
| Appalachia College of Pharmacy | Grundy, Buchanan County, VA | College |

Community Characteristics

Area:

The coverage area for the Outreach grant is a three-county area in Southwest Virginia: Buchanan, Dickenson, and Wise, located in the heart of the Appalachian coalfields. The Health Wagon has several mobile outreach sites located throughout these counties.

Community description:

Located in the heart of the Appalachian coalfields, the rural area served by this grant is characterized by small towns verging on decay and rural communities, where patients have to travel many miles to have access to care. This region of Southwest Virginia is depicted by a community made up of the working poor who are unable to afford health care coverage and fall above the national poverty level. Due to the inability to obtain health care coverage and the lack of primary/specialty care physicians, many individuals refused to seek medical attention, which has resulted in higher morbidity and mortality rates in the region, especially with diseases such as diabetes mellitus and cardiovascular disease. The main source of income in this area is the coal mining industry, health care industry, and multiple minimum wage positions without insurance coverage. According to the County Health Rankings the rates of unemployment in this region are higher than the National Benchmark, and mortality and morbidity rates are double than the National Benchmark. The Appalachian Regional Commission rates all three of the counties in the coverage area as "at risk".

Need:

The region is classified as a Medically Underserved Area and a Health Professional Shortage Area and has limited access to specialty care. Individuals in this area are forced to travel approximately two hours or more to receive specialty care. Public transportation is limited to individuals who have Medicaid, and rising gas prices make access to care even more complicated. The percentage of un-insured residents in these areas is higher than the National Benchmark, and the number of preventable hospital stays are double that of the state. The overall health in this area is effected by poor lifestyle choices and economic factors: work in the coal mines and coal dust in the air, high smoking rates in adults (average 32%), high adult obesity rates (average 31%), little access to healthy foods and recreational facilities have resulted in high rates of chronic diseases especially diabetes.

Focus Areas

Access: Primary Care
 Chronic Disease Management: Diabetes
 Coordination of Care Services
 Health Education and Promotion

Target Population

Uninsured
 Underinsured

Description:

The grant activities were coordinated and implemented through the Health Wagon, with some staffing support and clinical care provided by the consortium partners. The Outreach grant supported the implementation of six main activities:

1. Through the grant, the Health Wagon was able to hire a fulltime nurse practitioner to implement the Chronic Care Model. The model focuses on diabetes screening and diabetes management to include the following:
 - a. Self-care agreement. Every patient entered into the Health Wagon database signed a self-care agreement contract annually to acknowledge their role in disease management.
 - b. Bi-annual hemoglobin A1cs. Patients diagnosed with type I or type II diabetes mellitus were ordered a hemoglobin A1c at least twice yearly and at least three months apart.
 - c. Smoking Cessation Counseling. Patients who were identified as current smokers were provided with smoking cessation counseling.
 - d. Hypertension management. Individuals with elevated blood pressure readings were monitored and provided with medication management, lifestyle counseling, and specialty counseling.
 - e. Diabetes screening. All patients were screened for diabetes through glucometer checks. Individuals identified as at risk received a Hemoglobin A1c test. Mass diabetes screenings were performed at multiple health care outreach fairs, and the Remote Area Medical Event in Wise, VA reaching over 2,500 patients each year.
2. The Implementation of the Electronic Patient Registry (EPR).
 - a. The Health Wagon modified the workflow to include implementation of the CDEMs program as the Electronic Patient Registry.
 - b. The Health Wagon staff was trained on the CDEMs program and utilized its functions to capture and report data.
3. Provision of specialty care with the endocrinologist from the University of Virginia and Dr. Ross Issaccs, nephrology.
 - a. The Health Wagon scheduled specialty clinics for patients being monitored for specialty care in endocrinology and nephrology and coordinated follow-up consults through the University of Virginia's Telemedicine services.
 - b. The Health Wagon began working with Dr. Andrew Rhinehart, diabetologist, to provide specialized care for patients monitored in the program in 2010.
 - c. The Health Wagon coordinated health outreach fairs and the Remote Are Medical Event to provide access to specialized diabetes providers to the residents of Southwest Virginia.
4. Provision of primary care personnel with experience in diabetes care.
 - a. Paula Hill Meade, FNP was hired on September 1, 2009 to coordinate the diabetes-related primary care which included coordinating diabetic care, referring patients to specialist care as needed, prescribing diabetic medication, medication management, ordering diagnostic/management laboratory services, and ensuring the success of the overall program.
5. The development and deployment of culturally appropriate exercise, nutrition, and smoking cessation education.
 - a. Culturally appropriate nutrition, medication review, and self-management education provided by nurse practitioner in collaboration with the Appalachian College of Pharmacy.
6. Increase screening for abnormal blood glucose level and assist patients to receive clinical screening (diabetic, pre-diabetic, and at-risk)

Role of Consortium Partners:

The Health Wagon's outreach program received strong support and cooperation in planning and implementation of activities from the consortium partners. Each consortium partner played an active role in the program:

- MSHA provides discounted lab services for patients of the Health Wagon.
- UVA provided telemedicine consultations, specialty clinics and other outreach efforts throughout the three year program. UVA also provides behavioral health counseling through telemedicine services for patients who meet the requirements.

- The Appalachian College of Pharmacy, a new partner gained through the grant, provided medication education, chronic disease education, and increased monitoring of patients registered in the EPR. The Appalachian College of Pharmacy extended their services to individuals with other chronic diseases such as cardiovascular disease.

Outcomes

The Health Wagon collected evaluation data in six main areas: HgbA1c monitoring, diabetes self management, body mass index, foot health screening, smoking cessation, and blood pressure control. Evaluation findings are summarized below:

HgbA1c Monitoring

- A total of 166 patients were identified or diagnosed with diabetes mellitus and placed into the EPR. The average decrease in HgbA1c overtime was 0.25 for patients who have two or more documented HgbA1c results.
- 89% of active patient have at least 2 HgbA1cs recorded at least 3 months apart.

Diabetes Self Management

- 100% of patients were required to sign a self management contract with the Health Wagon annually. The self- management contract allowed patients to identify factors that could improve their health, including lifestyle habits, medication management, and compliance. Patients were expected to adhere to the self- management contract. Overall, the contract allowed for the patients to take an active role in their health care, resulting in increased compliance with therapeutic lifestyle changes.

Body Mass Index

- The Health Wagon provided education to meet the needs of patients with a Body Mass Index of 25 or greater. The Appalachian College of Pharmacy provided diet and exercise counseling to patients who met these criteria, as well as, other lifestyle changes. 23% of patients experienced weight loss of 10 pounds or greater and 58% of patient experienced weight loss throughout the program duration.

Foot Health Screening

- Due to the damaging effects of diabetes and peripheral neuropathy related to the disease process, the Health Wagon spotlighted foot health to help prevent diabetic ulcers and prevent limb loss. The Health Wagon utilized monofilament foot checks with each patient with a diagnosis of diabetes mellitus. 95% of patients in the EPR received a foot exam annually. The Appalachian College of Pharmacy also provided foot exams and education on diabetic foot care throughout the program. The Health Wagon found that through increased education and observation that complications related to peripheral neuropathy were dramatically decreased.

Smoking Cessation

- Due to the increase risk for patients with diabetes mellitus to have other chronic disease such as Cardiovascular Disease, the Health Wagon strove to decrease the number of current smokers, and to provide increased education to current smokers to help promote a healthy lifestyle. 64% of the diabetes mellitus patients reported that they did not smoke, 27% of diabetes mellitus patients reported that they currently smoked, and 9% of patients quit smoking during the program. All patients were provided with smoking cessation education, and medication if needed.

Blood Pressure Control

- Due to the effects of diabetes mellitus on cardiovascular disease, the Health Wagon took an active role in promoting blood pressure control. The Health Wagon providers added medication management beside increased education to help promote healthy lifestyle choices. This resulted in 60% of patients with hypertension and diabetes mellitus having a blood pressure of less than 130/80.

Challenges & Innovative Solutions

The main challenges faced by the Health Wagon during the program implementation were costs of laboratory tests, patient compliance, limited staff, and the transition from the EPR to an Electronic Medical Record (EMR). The Health Wagon believes that their success was due to the following factors:

- Strong relationships with consortium partners made laboratory tests more accessible. MSHA provided HgbA1c tests at cost at a price of \$20. This amount was still too much for some patients to afford out of pocket. The University of Virginia helped provide in-house testing for HgbA1c that resulted in no cost to patients. Moore Medical provided three machines to run these tests in-house at no cost to the Health Wagon. The Health Wagon's EMR system eClinicalWorks provides easy access to laboratory results, and will give alerts for patients who are due a repeat laboratory test.
- Patient compliance with the program was another issue in the early implementation of the program. The Health Wagon providers found that increasing in-clinic visits to every six weeks had a dramatic effect on non-compliant patients. Patients kept appointments and were more cooperative with scheduling appointments with specialty providers.
- Limited staff was an obstacle the Health Wagon had to overcome. The Health Wagon solved this problem by hiring a fulltime nurse practitioner and a data coordinator. The Health Wagon also placed one individual over the EPR to ensure that all information was entered correctly.
- The conversion from the EPR to an Electronic Medical Record created a huge data collection challenge for the Health Wagon. eClinicalWorks was chosen as the Electronic Medical Record to be used at the Health Wagon due to its long standing use at Federally Qualified Health Centers. The Health Wagon felt that it would be able to capture data and report it with great ease, and spent several weeks transferring the data from the EPR, paper charts, and laboratory results to the new system. The system, however, had many flaws with little support from the software provider. The Health Wagon soon learned that the reporting issues encountered were not limited to our usage, and that other clinics, that had similar reporting criteria, were having to hand count data as well. The Health Wagon is still in the process of correcting this issue. Several options have been presented which involve outside programs to pull data from the system. The Health Wagon is currently reviewing these programs to find the best match for our reporting criteria.
- The Health Wagon found that hand counting the data was a temporary solution to the problem, and will continue to search for other solutions.

Sustainability

On-going Services and Activities:

The main components of the grant-funded program will continue after the grant period ends. The Health Wagon will continue to provide outreach to its current patient census especially those with a diagnosis of diabetes mellitus. The Health Wagon will also perform glucose checks on each patient at time of visit.

- The Health Wagon and the consortium partners are dedicated to providing mass diabetes screenings through the counties it presently services due to the high prevalence of patients who have diabetes mellitus that goes undiagnosed in Southwest Virginia.
- The University of Virginia will help to coordinate telemedicine encounters for the patients of the Health Wagon.
- The Health Wagon will continue to work with the University of Virginia and Mountain States Health Alliance to provide accessibility to discounted and free laboratory testing.
- The fulltime nurse practitioner will continue to see patients at the Health Wagon, and has received a supplemental grant to continue services.
- The Health Wagon with the Appalachia College of Pharmacy will continue increased education and promote therapeutic lifestyle changes.
- The Health Wagon will continue to coordinate health outreach fairs with consortium partners to increase access to specialty providers across Southwest Virginia.
- The Health Wagon will continue to provide primary care in the mobile unit sites that have already been established.
- Dr. Rhinehart, diabetologist, will continue to volunteer his time in-kind to the health wagon for specialty services.
- Patients with a BMI of >25 will continue to have increased education and will have one-on-one counseling sessions with a representative from the Appalachia College of Pharmacy.

The Health Wagon will be able to continue these components through the relationships with consortium partners that have developed from the implementation of this grant-funded program. The Health Wagon will continue to seek funding to expand services beyond the established sites to increase access to health care for the residents of Southwest Virginia.

Sustained Impact:

The overall effect is healthier lifestyle choices that can potentially prevent, manage, and in some cases eradicate diabetes mellitus. The communities have gathered around the Health Wagon's initiatives making it a strong and recognizable force in Southwest Virginia. The relationships with the consortium partners continue to grow, creating a united front to provide outreach health care to the un-

insured and under-insured residents of Southwest Virginia. The prideful attitude that is highly characteristic of these communities have changed to one that is acceptant of the care that the Health Wagon can provide.

Implications for Other Communities

The Health Wagon feels that implementing the Chronic Care Model, developed by the staff of the McColl Institute for Healthcare Innovation, is easily adjustable for any community and can have a long term effect on chronic disease management. Communities will see positive health outcomes by establishing long term relationships with consortium partners, increasing education, promoting healthy lifestyles, and increasing patient compliance with care. The overall effect will be a healthier community, decreased mortality rates, and an increased economy.

WASHINGTON

Yakima Valley Farm Workers Clinic

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12750 |
| Grantee Organization | Yakima Valley Farm Workers Clinic |
| Organization Type | Federally Qualified Health Center |
| Address | P.O. Box 190, Toppenish, WA 98948-0190 |
| Grantee organization website | www.yvfwc.com |
| Primary Contact Information | Stella Vasquez YVFWC Director of Program Operations Phone number: 509-865-5898 Ext. 2371 Fax number: 509-865-4814 stellav@yvfwc.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$149,027 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$99,749 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|----------------------------------|---------------------------|-------------------------------|
| Umatilla County Public Health | Hermiston/Umatilla/Oregon | Public Health Department |
| Umatilla-Morrow Head Start, Inc. | Hermiston/Umatilla/Oregon | Head Start Agency |
| Radio KDNA | Granger/Yakima/Washington | Spanish Language Public Radio |
| Morrow County Health Department | Heppner/Morrow/Oregon | Public Health Department |
| Hermiston School District | Hermiston/Umatilla/Oregon | School District |

Community Characteristics

Area:

Yakima Valley Farm Workers Clinic (YVFWC) and Salud en Sus Manos (Health in Your Hands) consortium members (Consortium) provided health care services to primarily Hispanic and Spanish-speaking residents with diabetes and other nutrition-related disease in Morrow and Umatilla Counties in north central Oregon; Benton, Columbia and Walla Walla Counties in southeast Washington State.

Community description:

The targeted counties are economically dependent on agriculture and have higher proportions of residents who are Hispanic, Spanish-speaking, male, non-citizens, living in poverty, and high school non-graduates in comparison with national and Washington and Oregon State residents, overall. Due to cultural and linguistic isolation, the migratory/seasonal nature of agricultural work and economic limitations, many of these residents have inconsistent and limited primary medical care access. BRFSS 2010 Nationwide data indicates that only 66.6% of Hispanic adults 18 – 64 years of age have health care coverage. This compares with 86.4% of White adults and 76.7% of Black adults which have health care coverage. In Washington State the percent of adult Hispanics with health care coverage is ten percent lower than the national average and is 56.5%. In comparing the Census 2000 and 2010 demographics of these counties, all but one have shown marked increases in the percent of the population which is Hispanic and predominantly Spanish-speaking. The 2010 census shows that 11.2% - 31.3% of these counties population is Hispanic. Furthermore, the percent of Hispanics with an income less than 100% of federal poverty limit (*i.e.* poverty) is 25.6% – 37.2%, for these same counties. Compared with non-Hispanic White adults the risk of diagnosed diabetes is 87 percent higher for Mexican Americans (the predominant subgroup of Hispanics in the target area) (BRFSS 2007-2009).

Need:

The Hispanic and Spanish-speaking target population faces two primary barriers to accessing diabetes and other nutrition-related services: a shortage of primary care providers and a lack of culturally and linguistically appropriate services. In addition, three of the five targeted counties are Medically Underserved Areas and Primary Care Health Professional Shortage Areas. Hispanic individuals have a higher risk of being overweight or obese, diabetic and hypertensive than the rest of the population in these counties and have twice the rate of gestational diabetes.

Program Services

Focus Areas

Chronic Disease Management: Self-Management training
Primary Care Integrated Registered Dietitian

Target Population

Pre-school children
School aged children - elementary
School aged children - teens
Adults
Latinos
Uninsured
Underinsured

Description:

Tomando Control de su Salud (Taking Control of your Health) self-management education workshops were provided to Spanish-speaking residents with chronic illnesses in Morrow and Umatilla Counties in north-central Oregon, and Walla Walla County in southeast Washington. Northwest Community Education Center (affiliated with Radio KDNA, Spanish language public radio in south central Washington) produced and aired public service announcements promoting workshops to Central Washington and Northeastern Oregon listeners.

Medical Nutrition Therapy (MNT) was provided in both Hermiston, Oregon (0.5 FTE) and Prosser, WA (0.5 FTE). The registered dietitian (RD) utilized a combination of pre-scheduled appointments and drop-in visits to maximize efficiency of the allotted dietitian time. The drop-in method utilizes wait time in the exam rooms for introductory RD visits. This exposes more patients to the RD than the traditional pre-scheduled appointment model, and helps to decrease patient apprehension of meeting with the RD.

Role of Consortium Partners:

Consortium partners participated in periodic meetings to share resources and provide input to each other on ways to better serve the community. Partners also provided referrals to the Tomando Control de su Salud and Medical Nutrition Therapy programs. YVFWC providers in turn referred patients to the partners. Responses to the consortium survey suggested additional partners to strengthen the consortium for future projects. The partners provided a perspective on regional needs; they indicated the services provided by the Rural Health Outreach project were valuable and needed in the community.

Outcomes

Tomando Control de su Salud (Spanish-language Chronic Disease Self Management) workshops had 370 participants from 6/2009 to 3/2012. Fifty-five percent of the participants attended 4 or more of the 6 classes in the workshop series. Post-workshop surveys indicated improvement in Attitude toward chronic illness, Self Care and Stage of Change for the majority of participants who completed 4 or more classes. Limited data (see explanation under Challenges) on physiological changes in participants indicate no change in body mass index, a small increase in diastolic and systolic blood pressure and a small improvement in hemoglobin A_{1c}.

The Medical Nutrition Therapy component served 3,694 patients in 6,358 appointments from 12/2009 – 3/2012 at the Hermiston and Prosser clinics. Thirty-six percent of the appointments were for diabetes-related counseling, 44% were for weight control counseling (37% adults and 7% children); 16% of appointments were for hyperlipidemia counseling and 11% were for hypertension. Fifty percent of the patients served are Hispanic and two thirds of these Hispanic patients declare Spanish as their primary language. Physiological measures (body mass index, hemoglobin A_{1c} and blood pressure) are also being followed up on these patients and will be reported at a later date.

Consortium members were surveyed annually during the Rural Health Outreach project. In December of the final project year, an external consultant was hired to conduct a telephone survey with consortium members. Nine consortium members participated in the telephone survey. One hundred percent of survey respondents indicated the consortium created value and 89% indicated the consortium was meeting the needs of their organization. Respondents specifically mentioned these factors which created value: mutual clients, connections, community resources, prevent overlapping services and maximizing limited resources. Many of the respondents mentioned that they would have liked to attend more of the consortium meetings, but had scheduling conflicts (this project occurred during the worst of the economic downturn and staff decreases occurred in some of these agencies). Communications with the consortium members outside of the meetings was cited as an area in need of improvement.

Challenges & Innovative Solutions

The challenges of providing the Tomando Control de su Salud workshops were around staffing issues. There was difficulty filling the coordinator position to coordinate, recruit, and set-up the workshops. Some of the Tomando Lay Leaders had FMLA which slowed progress in providing additional classes. In order to address the coordinator issue, a decision was made to split the position to a 0.2 FTE for each site. A staff member at Hermiston, OR was hired and trained to be the site coordinator and program Lay Leader. This individual assisted in the scheduling and recruitment for classes and provided back-up as an instructor. An off-site coordinator assisted staff at the Walla Walla, WA site with recruitment of class participants and provision of data collection materials.

Hiring and retaining a Registered Dietitian in Hermiston, a rural area in north central Oregon, was a challenge. Hiring a bilingual Registered Dietitian in this rural area proved to be impossible during the life of the grant. The clinic provided a bilingual nursing aide to facilitate visits with Spanish speaking patients. Recruitment and retention of bilingual RD staff is a continuing priority for our project and the corporation.

Evaluation of changes in Medical Nutrition Therapy patients and Tomando participants' physiological measures (body mass index, hemoglobin A_{1c}, Blood pressure) was delayed due to changes in the corporation's electronic reporting systems and personnel, secondary to health care reform mandates. These measures will continue to be followed after the grant finishes, to determine the efficacy of these programs.

Sustainability

On-going Services and Activities:

The clinic will continue supporting Tomando Control de su Salud (Spanish-language Chronic Disease Self –Management) workshops in Hermiston, OR and Walla Walla, WA. There will be 2 to 3 workshops scheduled a year and recruitment assistance will be provided by the Yakima coordinator.

Given the success of the Medical Nutrition Therapy visits with patients in terms of number served and positive feedback received, corporate funding will be requested to sustain these positions in the future.

Both the Tomando workshops and the Medical Nutrition Therapy program are considered valuable interventions for the Patient-Centered Health Home, which will also contribute to their sustainability in Yakima Valley Farm Workers Clinic.

Sustained Impact:

The Rural Health Outreach grant and consortium formed as part of this project helped YVFWC to build community connections in north central Oregon. Members of the consortium have a much better understanding of the role of the Yakima Valley Farm Workers Clinic in Hermiston and what services are provided to patients in the community. Consortium members who responded to our telephone survey commented on the value of having a dietitian in the community to see Spanish-speaking patients. The connections formed during this project will be helpful in the transition to a new model of health care delivery that encourages community cooperation to provide seamless care to the patient.

Implications for Other Communities

The two programs which are the basis of this project: Tomando Control de su Salud (Spanish-language Chronic Disease Self–Management) workshops and Medical Nutrition Therapy would be useful interventions in most rural communities (regardless of

language or ethnicity) with limited medical resources. These two interventions empower the patient to decrease their risk of developing the chronic diseases and more effectively utilize the health care resources that are available to them. Chronic diseases such as obesity, hypertension and diabetes are increasing in the U.S. adult population and these interventions help to counteract that trend.

WISCONSIN

Marshfield Clinic TeleHealth

Organizational Information

| | |
|-------------------------------------|---|
| Grant Number | D04RH12696 |
| Grantee Organization | Marshfield Clinic TeleHealth |
| Organization Type | Multispecialty Health Care System |
| Address | 1000 N. Oak Avenue, Marshfield, WI 24609-0765 |
| Grantee organization website | www.marshfieldclinic.org/telehealth |
| Primary Contact Information | Nina M. Antoniotti, RN, MBA, PhD Director of TeleHealth Business Phone number: 715-389-3694 Fax number: 715-387-5225 antoniotti.nina@marshfieldclinic.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|-----------------------------------|-----------------------------|---------------------|
| Pinecrest Nursing Facility | Merrill, Wisconsin | SNF |
| Nu-Roc Nursing Facility | Laona, Wisconsin | SNF |
| Rice Lake Convalescent Center | Rice Lake, Wisconsin | SNF |
| Heritage Manor | Rice Lake, Wisconsin | SNF |
| Good Samaritan Hospital | Merrill, Wisconsin | SNF |
| Ministry Medical Group | Rhineland, Wisconsin | SNF |
| Friendly Village Nursing Facility | Rhineland, Wisconsin | SNF |
| Park Manor | Park Falls, Wisconsin | SNF |
| Riverview Medical Center | Wisconsin Rapids, Wisconsin | Outpatient |
| Riverview Hospital | Wisconsin Rapids, Wisconsin | Hospital |

Community Characteristics

Area:
Communities/counties that the Outreach project served
28 counties in north and central Wisconsin and the primary service areas of Rice Lake, Rhineland, Park Falls, Wisconsin Rapids, Laona, Merrill

Community Description:
There are 72 counties in Wisconsin with approximately 28 located in the central and northern region. Of the total number of counties in Wisconsin, the largest geographic area comprised of rural counties that have disparate populations is in North Central region. The counties of Northern Wisconsin are among some of the most disadvantaged in the state and have significant populations over the age of 65, disabled, and living below the poverty level. Many of the communities in the service area have one health care provider, one critical access hospital, few if any independent dentists, and few community-based pharmacies. The areas are primarily rural, with healthcare, education, and small manufacturing the primary businesses/employers in the communities. Only fifteen to thirty percent of the population has a college degree. Unemployment ranges from 5.2 percent to 8.2 percent. All of the service areas are at least 40 miles from a metropolitan statistical area. There are approximately 150,000 persons in the immediate service area with approximately 18 percent (27,000 persons) over the age of 65 years. From 2000 to 2030, the service area in Wisconsin is projected to experience an increase in its elderly populations, while youth and young adult populations are expected to decrease. Although Wisconsin has a lower

overall incidence of poverty than most states in the U.S., the annual increase in poverty in Wisconsin has been steeper than the increase at the national level. The U.S. national poverty rate increased from 12.2 percent to 13.1 percent from 2000 to 2004. Wisconsin's poverty rate increased from 8.9 percent in 2000 to 10.7 percent in 2004.

Need:

The needs of underserved populations are served through the use of Telehealth. The program addresses the needs of the elderly, patients with end-stage renal disease, and populations with special health care needs. Specifically, the program provides primary and specialty health care services by Telehealth to elderly and special needs residents of rural skilled nursing facilities (SNFs); nephrology and other specialty care to patients receiving dialysis in rural hospital-based dialysis centers; and for hospital patients with unmet health care needs and chronic conditions, who benefit from access to specialist health care services. The problems the program resolves are:

1. Lack of access to primary and secondary care for residents of skilled nursing facilities.
2. Lack of access to on-site evaluations by primary and specialty services on-demand for residents of skilled nursing facilities whose condition changes suddenly.
3. Lack of access to specialty care for patients hospitalized or in the emergency department of a critical access hospital.
4. Lack of access to nephrologists and other specialists involved in the care of renal dialysis patients

Program Services

Focus Areas

Access: Primary Care
 Access: Specialty Care
 Aging
 Behavioral/Mental Health
 Chronic Disease Management: Cardiovascular
 Chronic Disease Management: Diabetes
 Coordination of Care Services
 Integrated Systems of Care
 Oral Health
 Pharmacy Assistance

Target Population

Pre-school children
 School aged children - elementary
 School aged children - teens
 Adults
 Elderly
 Pregnant Women
 Caucasians
 African Americans
 Latinos
 Native Americans
 Uninsured
 Underinsured

Description:

Interactive and store/forward clinical Telehealth services to inpatients, outpatients, persons with ESRD, and residents of skilled nursing facilities. Services included 45 different clinical services in nine locations including critical access hospitals, skilled nursing facilities, and outpatient centers.

Role of Consortium Partners:

- Marshfield Clinic Telehealth was the fiscal agent and provided training, coordination, and teleconnections between the specialty providers and partnering entities.
- The administrator of each respective site helped assist in formulating the project scope and intended uses and in identifying the intended outcomes. Staff members of each facility were trained as telepresenters, and each organization supports its own program with enterprise funds and resources.

Outcomes

Marshfield Clinic is one of the few Telehealth programs in the country that have implemented a successful business model that sustains all programs after grant funding. All sites were involved in planning the transition of services and support to the end site. Grant funds were used primarily as start-up costs, with existing resources being used as much as possible in the start-up phase for staff support, telepresenting, network, and any other aspects of the project. Staff positions are rolled into operational budgets by the end of the grant cycle. The program has been designed with the remote sites developing a plan for using existing staff as telepresenters, IT support, and clinical advisors. Equipment is purchased with anticipated life spans of 10 years to ensure time to budget replacement and maintenance costs. Universal Service Fund support offsets the costs of lines, which is expected to be around

\$140 per month per site, a reasonable cost to absorb by remote sites. All remote sites and the governing agencies have made a commitment to sustaining the program implemented in the grant and have indicated that using Telehealth is a part of their method for ensuring health care in the future. The financial responsibility of the remote sites is for the staff time for telepresenting and evaluation, and exam rooms for clinical video equipment.

- The organizations involved in the program have indicated that Telehealth is viewed as a means to the future, in terms of providing services to their populations in the areas of unmet needs and in increasing contact and access with and for those populations. Cost savings are seen in decreased utilization of services and in the introduction of appropriate specialty services earlier in the process of care. Travel costs have been reduced for staff from the skilled nursing facilities. The cost of seeking and obtaining education and for business and operational meetings has also been reduced through the use of the video system, which replaces traveling. All aspects of the program are self-sustaining through good business practices, engaging our partners, and using Telehealth based on needs assessments.
- Initial research into the feasibility and practicality of providing services in skilled nursing facilities indicated that patient families and the skilled nursing facility both had significant expenditures of money, time, effort, and other administrative resources, each time a resident is transferred. The copy paper used to provide necessary documentation alone contributed to significant cost savings every time a resident was not transferred.
- Patient satisfaction in all services of the program remains high. Patients indicate a positive impact on quality of life. Access to health care is made easier through Telehealth, saving time, money, and risk to persons when travel is averted. Patients or family members do not need to take time off from work.
- Technology failures continue to be less than 1 percent of total volume of calls. Return on investment for a rural site is about three months.

Challenges & Innovative Solutions

There have been no significant challenges, barriers, and there have been no unresolved issues in implementing the activities of the services of the grant project. There was a delay in installation of telecommunications lines due to impending winter weather which delayed the project somewhat in the first year, but the delay had little impact on the ability of the sites to institute the Telehealth program.

Sustainability

On-going Services and Activities:

- All services started under the grant program will be continued due to the business plan put in place at the onset of the grant program. All services continue in the same form and will adapt to changes in the health care environment and based on patient needs. Expansion occurs regularly with additional services and sites being added as enterprise and grant funds are available. The geographic area served continues to expand.
- Currently, Medicare and Medicaid pay for services delivered by Telehealth and cover services provided in the program. Third party payers pay for professional fees and most pay the facility fee. Services have been reimbursement for all services provided in the grant program.
- Marshfield Clinic's Telehealth is a part of its strategic plan and is part of our Quality Improvement and Care Management strategy.

Sustained Impact:

The long term effects on the communities served are an improvement in the health status of populations, improvement in quality of life, stabilization of economics in the provision of specialty health care services, and improved patient and family satisfaction. In addition, new relationships between health care organizations were formed and will continue to improve and expand over time as more Telehealth is implemented in the region. Improved access to health care with a reduction in cost and risk is the ultimate goal of any health care system. Telehealth helps to support improved population health, reduction in the cost of care, and improved patient satisfaction, the three aims of the Institute of Medicine.

Other communities can experience the same benefits of implementing Telehealth for underserved, under and un-insured and disparate populations, as well as the benefits to the health care organization. The model is easily reproducible, and uses economical configurations of equipment that are available through enterprise funding for smaller organizations.

WISCONSIN

Northwest Wisconsin Concentrated Employment Program, Inc.

Organizational Information

| | |
|------------------------------|---|
| Grant Number | D04RH12762 |
| Grantee Organization | Northwest Wisconsin Concentrated Employment Program, Inc. |
| Organization Type | Non-Profit Organization |
| Address | P.O. Box 616, Ashland, WI 54806 |
| Grantee organization website | www.nwcep.org |
| Primary Contact Information | Susan Bodoh Business Services/Special Projects Manager Phone number: 715-492-5126 Fax number: 715-762-4053 sbodoh@nwcep.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--|----------------------|-------------------------|
| Wisconsin Indianhead Technical College | Rice Lake, WI | Technical College |
| Northern Bridges | Hayward, WI | Managed Care Provider |
| Gemini Cares, Inc. | Slinger, WI | Long Term Care Provider |
| Lori Knapp Companies | Prairie du Chien, WI | Long Term Care Provider |

Community Characteristics

Area:
The coverage area for the Outreach grant included eleven counties and five tribal areas that comprise the Managed Care Territorial Area for Northwest Wisconsin: Ashland, Bayfield, Barron, Burnett, Douglas, Iron, Polk, Price, Rusk, Sawyer, and Washburn Counties.

Community description:
Located in Northwest Wisconsin, the target area is an aging rural population that has insufficient health care professionals and is medically underserved. The primary barriers to health care in this area are lack of health care providers, lack of public transportation, and seasonal weather conditions (extreme amounts of snow, strong winds, and sub-zero temperatures) that can make travel difficult. Income levels in this area reveal 40% of service recipients' ages sixty-five and up had incomes at 200% or below the poverty level. The average per capita income in the eleven counties was 16% below the national average.

Need:
The focus of the grant program for the Northwest Wisconsin Direct Care Worker Initiative was to serve rural elderly and physically, mentally, or developmentally disabled residents. The primary goals were to increase the number of eligible persons receiving direct care, increase the number of trained, certified Direct Care Workers, and to enhance the job satisfaction and retention of Direct Care Workers.

Focus Areas

Aging
 Community Health Workers/Promotoras
 Health Professions Recruitment and Retention/Workforce Dev.
 Developmentally Disabled

Target Population

School aged children - teens
 Adults
 Elderly
 Caucasians
 African Americans
 Latinos
 Native Americans
 Uninsured
 Underinsured

Description:

The grant activities were coordinated through Northwest Wisconsin CEP, Inc.

Direct Care Worker Training:

- The Outreach grant supported the training of Direct Care Workers. This training provided certification in the Core Competencies areas of direct care. This training was delivered by Wisconsin Indianhead Technical College and also by employers such as Gemini Cares and Lori Knapp that were trained in core competency delivery of this curriculum as well.
- Career Laddering opportunities were offered to Direct Care Workers who decided to advance from entry level positions to higher levels of pay, skill, and responsibility in the health care field.
- Training was conducted for supervisors of Direct Care Workers. This training included topics such as Communications and Retention in Health Care, Dementia Training, and Supervisory Documentation Training.

Enhancement of Job Satisfaction and Retention of Direct Care Workers:

- The first objective was to determine the applicant's suitability for the job, before the training and placement ever occurred. JobFit™ assessments were conducted to determine an applicants' suitability to the traits compatible with the duties of a direct care worker.
- To promote the image, importance, and value of the direct care workers' contributions, marketing materials were developed and promoted "A Good Job" reference to Direct Care Work. A video was also developed to inform interested applicants of the duties of Direct Care Work. Stipends were given at the end of training to assist with uniform purchases, mileage, and child care. Health care agencies were encouraged to review annually workers' job performance and give recognition and merit increases.

Role of Consortium Partners:

One of the strongest components contributing to the success of this grant was the involvement of the Consortium Partners. Each consortium partner contributed and played an active role in the delivery of services.

- **Northwest Wisconsin CEP, Inc.** acted as the grantee and fiscal agent for the grant. Staffed with the Project Coordinator for this grant, activities included developing a marketing campaign, organizing and coordinating the Advisory and Consortium groups, extensive communication with healthcare employers, Aging and Disability Resource coordinators, training facilities and managed care. Supervisory Training was coordinated by the Project Manager. Business Consultant staff and contracted training providers delivered training services. CEP, Inc. also assessed and enrolled direct care workers into training. Project evaluation was also conducted by NWCEP, Inc.
- **Wisconsin Indianhead Technical College** provided the majority of the training for this grant. The Consortium representative developed the curriculum to train direct care workers in the 13 core competency areas.
- **Northern Bridges** is the entity which provides managed care to the 11 counties of this grant. As a consortium member they were able to provide the group direction about what was occurring with managed care and information on the wait lists of individuals requesting services.
- **Gemini Cares, Inc.** provided training in core competency areas to applicants and employed them upon completion. They gave technical assistance with questions regarding employment situations and extensive feedback on the progress of our

efforts in training additional workers. This employer was named by the state Wisconsin Personal Services organization to represent their group.

- **Lori Knapp Agencies** provided training in core competency areas to applicants and employed them upon completion. They gave technical assistance with questions regarding employment situations and extensive feedback on the progress of our efforts in training additional workers. This employer was named by the state Wisconsin Personal Services organization to represent their group.

Outcomes

We achieved our goal to increase the number of trained, certified Direct Care Workers. By the end of February 2012 (with two months remaining in the grant), 407 individuals enrolled into direct care worker training with 196 completing training to date. Of those completing training, 152 trained Direct Care Workers had been placed into direct care jobs.

We also achieved the goal to increase the number of eligible persons receiving direct care. At the onset of this grant, 1300 individuals were on the wait list for services. On October 5, 2011 the State froze funding for Direct Care Services. The Bureau of Aging and Disability Resources Division of Long Term Care, WI Dept. of Health Services reported at the time that the number on the Wait List for services for our 11 county grant-funded area was 391.

Current data on job satisfaction and retention show that 88% report positive job satisfaction as a Direct Care Worker. Reports from employers using JobFit™ assessments prior to hiring show a much improved retention rate with Direct Care Workers. Follow-up data with workers is in the process of being collected.

Challenges & Innovative Solutions

Earlier this year, the Governor and Legislature included in the state budget a provision to freeze the expansion of Family Care to new counties and capped enrollment in existing Family Care Counties until the Department of Health Services (DHS) determined that the expansion is "cost-effective." As a result, CEP, Inc. experienced difficulty in attracting individuals to this type of training as employment was cut back as a result of the freeze. The number of hours a person would be offered once trained varies, and many individuals found they could not sustain a livable wage.

Northwest CEP, Inc. addressed this issue with a coordinated effort in reaching out on a weekly basis to identify which employers were hiring and referring trained participants to the position openings. The Project Coordinator provided more marketing of the training and worked with staff in recruitment efforts to attract individuals. She also connected with organizations such as IRIS (self-direct approach to acquiring services) to employ trained workers. In addition, career laddering opportunities were offered to keep qualified health care providers in this field. This offered individuals the opportunity to pick up additional hours in direct care work and in areas such as certified nurse's aide duties.

Sustainability

On-going Services and Activities:

All the training and employment aspects of this program will continue upon completion of this grant through absorption and in-kind services.

- Wisconsin Indianhead Technical College (WITC) will continue to offer the Direct Care Worker Training curriculum.
- Funding for the Direct Care Worker training will be provided through Workforce Investment funds through CEP, Inc. CEP, Inc. Business Consultants will work with employers for placement of trained Direct Care workers. CEP, Inc. continues to screen applicants to the JobFit of each person requesting funding.
- WPSA, Wisconsin Personal Services Organization represented by Gemini Cares and Lori Knapp Companies will continue to offer training for Direct Care workers and placement opportunities as they occur.
- Northern Bridges will continue to provide updates on the regulations and direction of managed care in our area to address continued need of services.

Sustained Impact:

The long-term effects of the Direct Care Worker Initiative Grant include the coordination of health care services in our area. The State of Wisconsin has focused on health care as a Sector initiative realizing the importance and need of training individuals in this capacity. We have forged strong relationships with the health care providers and educators in our Consortium group and continue to build upon these relationships. We have already convened health care providers and educators to conduct gap analysis of the health care needs in our Northwest region.

Consortium partners now have a better understanding of services provided by each member. As a result, we are addressing additional areas of health care needs and working toward projects to implement solutions. Wisconsin Personal Services Administration (WPSA) has identified curriculum training modules for additional opportunities for advancement of Direct Care Worker education.

Implications for Other Communities

The experience and program outcomes of knowing what worked and what didn't would definitely provide an advantage to anyone interested in a similar program.

- Follow-up with staff for enrollment and completion of training of direct care workers was important. The longer it takes someone to complete the training, the lower the chance they will complete.
- Communication to the public was an ongoing process and must be consistent throughout the three year period.
- Knowing who to connect with in communities and at the State level was crucial.
- Maintaining consistent contact with employers on their hiring needs was a key component in the referral and placement of direct care workers.
- It is critical to obtain strong Consortium partners who contribute and keep everyone engaged in the delivery of services associated with the grant.

WISCONSIN

Western Dairyland Economic Opportunity Council, Inc.

Organizational Information

| | |
|-------------------------------------|---|
| Grant Number | D04RH12761 |
| Grantee Organization | Western Dairyland Economic Opportunity Council, Inc. |
| Organization Type | Non-profit organization |
| Address | P.O. Box 125, Independence, WI 54747 |
| Grantee organization website | www.westerndairyland.org |
| Primary Contact Information | Mary Jo Hite Head Start Director Phone number: 715-985-2391 Fax number: 715-985-3239 hitewdhs@westerndairyland.org |
| Project Period | 2009 - 2012 |
| Funding Levels | May 2009 to April 2010: \$150,000 May 2010 to April 2011: \$125,000 May 2011 to April 2012: \$100,000 |

Consortium Partners

| Partner Organization | Location | Organizational Type |
|--------------------------------------|---------------------------------------|----------------------------|
| Buffalo County Health Department | Alma, Buffalo County, WI | Public Health Department |
| Jackson County Health Department | Black River Falls, Jackson County, WI | Public Health Department |
| Trempealeau County Health Department | Whitehall, Trempealeau County, WI | Public Health Department |

Community Characteristics

Area:
The coverage area for the Outreach grant is a three-county area in Midwest Wisconsin: Buffalo, Jackson and Trempealeau Counties.

Community Description:
According to the 2010 American Community Survey Estimates from the U.S. Census, the population of the three county service areas is 161,588. Buffalo County had a population of 13,587; Jackson County had a population of 20,449; and Trempealeau County had a population of 28,816. Of the 161,588 residents of the service area, 80,722 were male and 80,866 were female. Of the total population of the service area, 93.6% were White, 0.85% were African American, 1.8% were Native American, 1.1% were Asian American, and 3% were Hispanic/Latino.

There is much diversity over our three county service area. Jackson County, is home to the Ho-Chunk Nation, 6.2% of the population of Jackson County is comprised of Native Americans. Trempealeau County has seen a drastic increase in the Hispanic population over recent years to 5.8%. While the Hispanic population of Jackson County is mostly seasonal migrant workers, the Hispanic population of Trempealeau County is established and with many Hispanic-owned and Hispanic-focused businesses flourishing in our area. The median house income of the three county service area is below that of the State of Wisconsin. According to the 2010 American Survey estimates, the median household income for Buffalo County is \$43,577, Jackson County is \$44,428, and Trempealeau County is \$44,997. The median household income for the three county service areas is \$44,696. While the median household income for the State of Wisconsin is \$49,994. The median household income decreased in our service area, as well as overall in Wisconsin. As with the Median Household Income, the per capita income for the three county service area is substantially below that of the State of Wisconsin. The per capita Income for Buffalo County is \$22,904, Jackson County is \$21,042, and Trempealeau County is \$23,060. The Per Capita Income for the State of Wisconsin is \$26,447.

Buffalo, Jackson, and Trempealeau Counties are experiencing the effects of the down economy. According to the 2010 U.S. Census American Community Survey, 10.5% of the population of Buffalo County is at or below the poverty level, 12.9 % of the population of Jackson County is at or below the poverty level, and 11.6% of the population of Trempealeau County is at or below the poverty level. This reflects an increase in persons living below poverty in all counties in our service area. Additionally, the most recent unemployment rates from the Wisconsin Workforce Development website are: Buffalo County 5.3%, Jackson County 7.1%, and Trempealeau County 5.2%, please note these figures are not seasonally adjusted. Unemployment in our three county service area increased over the past year.

Need:

Head Start and the Buffalo, Jackson, and Trempealeau Health Department nurses heard from families that it was difficult to find a dentist to treat their children. Low income families who have difficulty accessing dental care have a much higher incidence of dental disease and cavities because of their lack of dental care. Research indicates that Medicaid eligible pregnant women suffering from untreated dental disease and cavities can pass these problems on to their newborn babies.

In discussions with area dentists, a number of issues were identified that had caused many dentists to refuse to accept Medicaid. First, dentists indicated that the Medicaid reimbursement rate was too low. Second, the paperwork requirements for submitting Medicaid reimbursement requests were complicated and time consuming. Third, Medicaid patients frequently failed to show up for their appointments which cost the dentists money. Fourth, some Medicaid patients exhibited a lack of understanding about the etiquette of going to a dentist's office such as failing to brush their teeth, bathe, leave children at home, etc.

As more and more dentists in the three county service area declined to accept new Medicaid patients, it was necessary to structure a dental delivery services system that met the dental health needs of Head Start families and Medicaid-eligible pregnant women while at the same time addressing the concerns of area dentists.

Program Services

Focus Areas

Oral Health

Target Population

Pre-school children
School aged children - elementary
Pregnant Women
Caucasians
Latinos
Native Americans
Uninsured
Underinsured

Description:

The grant activities were coordinated and implemented through Western Dairyland Head Start with some oral health care provided by the consortium partners. The focus of the Project was to provide oral health education, screenings and fluoride treatment to Head Start children and their siblings ages ten years and younger. Parents would also receive oral health education. The consortium members would provide oral health education, screenings and fluoride treatment to pregnant women and their children ages ten and younger.

The Outreach grant supported the implementation three main activities:

1. To provide oral health education to Head Start children and their parents resulting in improved knowledge of good oral health practices. Each year of the Project the dental hygienist visited all 15 Head Start sites to participate in Parent Training opportunities. In addition she attended all Head Start Registrations to meet one on one with parents to explain the Project, obtain permission for screening and fluoride treatment and conduct oral health education. She conducted 2-3 classroom visits yearly to teach children good oral health practices and conduct oral health activities.
2. To provide oral health screenings and fluoride treatments to Head Start children. The dental hygienist often provided this service at the same time she visited the center for oral health education. Health screenings and fluoride treatments were completed on Head Start siblings at their elementary schools or during family fun activities.
3. To provide oral health screenings, fluoride treatments and oral health education to pregnant women and their children ages ten and younger during WIC appointments at the consortium members Public Health Departments

Role of Consortium Partners:

The grant program had a very active consortium of public health nurses from local county health departments. The Project Manager held monthly meetings throughout the three year grant to discuss challenges, successes, share resources, conduct training, and discuss sustainability. These monthly meetings attributed to the success of the Project. The consortium members developed a strong partnership and played an active role in the Project. The consortium partners roles in the Project included:

- To provide oral health education, screening and fluoride varnish to pregnant woman and children ages ten years and younger in WIC clinics at local public health departments.
- To provide resources to participants
- Refer patients for treatment needs
- Follow-up for identified treatment needs

Outcomes

To date, 1460 children have received an oral health screening, at least one fluoride varnish, and oral health education. All children identified as needing dental treatment were referred to local dentists and/or pedodontist.

Ninety-seven pregnant women have received an oral health screening, at least one fluoride varnish, and oral health education. All pregnant women identified as needing dental treatment were referred to local dental clinics.

1121 parents, guardians, and/or caregivers of enrolled children received oral health education. Through pre and post testing, results indicate an increase in knowledge and positive attitude toward proper oral health practices.

Approximately 75 Head Start teachers, assistants, bus drivers, cooks, and other staff have increased knowledge of good oral health practices through yearly oral health training.

Challenges & Innovative Solutions

Challenge – At the start of our program we wanted to assure that we had a strong system in place before bringing in our consortium partners (Public Health Depts.) Forms had to be developed, educational information had to be identified; enrollment forms, exam forms, referral procedure, dental etiquette info, dental directories, pre and post tests, data tracking forms, etc.

Solution – We developed a program manual that included all necessary forms, helpful information for the Health Departments, educational information and tools. Our consortium partners were very pleased and impressed with the manual and the ease with which it helped them set up their local program.

Challenge – In order to sustain the program, we needed to become a Medicaid provider. Our consortium partners were also not Medicaid providers for oral health.

Solution – We invited a state Medicaid specialist to provide us with technical assistance in applying for Medicaid provider status and to help with the billing codes. The three county Health Departments and our Head Start program are now considered Dental Providers and are able to bill Medicaid for the services we provide.

Challenge – Because of our very rural area, it was difficult to access the older and younger siblings of the Head Start children, and the children enrolled in our Home Based program. Originally we thought parents would be able to bring the siblings to our Head Start sites for their screenings and fluoride varnishes. We realized quickly that this was going to be a challenge.

Solution – We made a conscious effort to access the older siblings at their elementary school settings. This meant developing relationships with the schools so they would allow us to come “to the children.” Many schools did not want us to come in and disrupt the school day for the children. Through conversations and explanation of our program, the schools are allowing us in. For our younger siblings, we referred the families to our consortium partners, the County Public Health Departments to receive their screenings, education, and fluoride varnishes. Many of these children were already accessing the Health Departments WIC program. The young siblings could receive their fluoride varnish when they went in for their WIC appointments. For Home Based enrolled children, we provided screenings and fluoride varnishes at the Parent Registrations, family fun events and group socializations.

Sustainability

Ongoing Services and Activities:

A one-year no-cost extension will allow us to employ our Dental Hygienist at least part time for an additional year. We will continue to bill Medicaid for the oral health care services we provide in order to generate program income for the foreseeable future. Oral health training given to Head Start staff and the oral health educational materials acquired through this grant will continue to educate children for years to come. We were able to secure funds through a Chippewa Valley United Way grant to provide a similar program with Eau Claire County Public Health Department, and we continue to search for additional grant funding opportunities.

The Public Health Departments (our consortium partners) will integrate the oral health activities and practices into their regular programming, and will continue to bill Medicaid for the oral health care services they provide.

Currently we are in the process of developing a relationship with Kid's First Mobile Dental services to provide oral health examinations, preventative oral health care, and treatment for our Head Start children.

Sustained Impact:

Through this grant, strong networking relationships between our consortium partners have developed and will continue after the grant is finished.

The oral health education that we are providing is making a difference in the community. We are observing a change in family's attitudes about oral health and the importance of good oral health practices. We are seeing less untreated dental carries in our returning Head Start children. Because of the oral screenings done by the program Dental Hygienist or Public Health nurses, the children are becoming more comfortable (desensitized) with an oral health provider (being in their mouth). Positive contacts with an oral health provider will make a lifetime impact on the child and their future families.

As a result of the relationships developed through this program, a FQHC dental clinic will be built in one of our counties. There is a possibility of a future collaborative partnership with the FQHC to provide oral health services to our Head Start children and their families.

Implications for Other Communities

There is an enormous benefit in acquiring a dental health professional, in our case, a dental hygienist, for your dental program. Our dental hygienist brought passion and enthusiasm when training our staff, Public Health Consortium Partners, Head Start parents and the children. This excitement for oral health carried over in all facets of the program.

Since we had a vision of how we wanted our program to look, we were able to develop and put together a manual for our consortium partners. The compilation of clearly defined directions, information, and educational tools provided in this manual, was an advantage for our partners and brought about a more trusting relationship between the partners and us very early in the program. The Oral Health Manual that we developed for our Public Health consortium partners could be utilized by any organization providing a similar program for children and their families, and pregnant women.