Volume 15
Rural Health Care Services Outreach Program
2007-2010

Health Resources and Services Administration
Office of Rural Health Policy
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In FY 2007-2010, ORHP awarded 27 Outreach grantees across 18 States.

The Rural Health Care Services Outreach Grant Program encourages the development of new and innovative health care delivery systems in rural communities that lack essential health care services. The program is unique due to the fact that it is based on the specific need within each individual rural community. Outreach grantees deliver a variety of health services. These include primary health care, dental care, mental health services, home health care, emergency care, health promotion and education programs, outpatient day care and other services not requiring in-patient care. Actual services include health fairs, screenings, training and education of providers to name a few.

To be eligible, the grant recipient's organizational headquarters must be a rural public or rural nonprofit private entity and be located in a rural county or in a rural Census Tract within a metropolitan county, exclusively provide services to migrant and seasonal farm workers in rural areas or be a Federally-recognized Tribal Government. Applicants must also form a consortium with at least two other organizations, which may be rural, urban, non-profit or for-profit. Please check out our website at www.ruralhealth.hrsa.gov
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<td>AHCCCS</td>
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<td>BPRS</td>
<td>Brief Psychiatric Rating Scale</td>
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<td>CATCH</td>
<td>Coordinated Approach To Children’s Health</td>
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<td>MAP</td>
<td>Measures of Academic Progress</td>
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<td>MDU</td>
<td>mobile dental unit</td>
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<td>MNT</td>
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<td>Acronym</td>
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Community Characteristics
The Rural Health Care Services Outreach program was developed to provide Coosa County residents mental health support. Support was provided to school aged children as well as some adult patients in the early stages of the program. Due to the demographics of Coosa County residents the programs support afforded much needed services to the community by being accessible to students in need. Those students being supported in the school atmosphere would have not been identified and serviced if it were not for the program. The training provided to the school staff by the Therapist, assisted in identifying students in need of intervention. Transportation to and from the nearest mental health facility was one of the major problems being addressed in the implementation of this project.

Services Offered
The services provided for the duration of this grant was having an in-house Therapist for the entire school year. The Therapist provided availability of mental health services to students ages K-12. These services were conducted during school hours. This service took extreme pressure off the parents of the students needing services from having to provide transportation to and from sessions.

Innovative Solutions to Problems
Since the inception of the program, there were many problems which were encountered. The most significant problem was the collection of payment for services provided. The program’s goal was to have the program reimburse the Therapist for services. With the demographics of the Coosa County being a very low social economic status community, the students receiving services were not signed up for medical benefits. Most in the community qualify for the free medical benefits for their children, but do not have the knowledge on how to apply for services. The Therapist was proactive on getting the paperwork to the parents, but during our no-cost extension our goal is to have all students receiving benefits.

Results
The grants funds were used to compensate the active participants in the program. The Program Director as well as the Therapist was compensated with the funding. Having oversight of the program and the amount of students serviced in the community was how the program was evaluated. The Therapist regularly communicated with the Program Director on the status and effectiveness of the program.

Potential for Replication
Working with other grants in the rural environment and developing knowledge of what will and will not work, this grant has the most potential of working in any rural environment. In rural communities or in areas which have a high rate of poverty transportation is the most difficult obstacle to overcome. With the program providing support at the school, the student is provided with transportation to and from school which alleviated the key obstacle.

After the Grant
Yes, the program will be sustainable. We feel our program has been successful, but there are still the issues of being able to make a 100% payment for services rendered.
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Community Characteristics

Alaskans living in remote Alaska villages often die alone in hospitals and nursing homes hundreds of miles away from home. This project would serve this population, including both tribal and non-tribal members, who reside within the Eastern Aleutians Tribes and Aleutian Pribilof Islands Association service area by providing hospice care in their community so they can stay connected to their homes and families for as long as possible. The project was designed to test whether hospice services provided by a rural demonstration hospice program to Medicare beneficiaries in rural Alaska who lack an appropriate caregiver and who reside in rural areas of Alaska would result in wider access to hospice services, benefits to the rural community, and a sustainable pattern of care.

Services Offered

During the three years of the grant, hospice care services were provided to eight terminally ill clients in their home communities. These services provided for the physical, emotional, psychosocial and spiritual needs of the client, their caregivers, and their family.

Innovative Solutions to Problems

Due to a high turnover of medical providers in the communities, the hospice training program had to be readily available as new providers arrived. One solution was a Hospice Tool Box which could easily be carried anywhere that the enclosed hospice information was needed. A hospice training module was developed on SWANK-computer based so it could accessed at anytime, anywhere. Both the Hospice Tool Box and the hospice training module are continually updated as new hospice information becomes available. Telemedicine and telepharmacy have bridged the long Aleutian distances which has always been a challenge in Rural Alaska. We were unable to develop a billing/reimbursement policy with Providence Alaska Medical Center for inpatient hospice services since they were only hospice certified for the Anchorage area. The current CMS Conditions of Participation do not recognize our utilization of mid-level practitioners and health aides to provide in-home hospice services. Our solution in overcoming this problem is a tribal waiver which is the process of being developed.

Results

Patient and provider satisfaction assessment through post experience interviews provided us with a satisfaction level and feedback for areas to focus on educational areas. Education was provided as distance delivered by face to face video. On sight education was provided through the Hospice Tool Box.

Potential for Replication

Yes, Even though it is a young program with vision for improvement as new hospice care information becomes available. A member of Eastern Aleutian Tribes had the opportunity to visit the only two tribal Medicare certified hospice facilities in the country. Both these programs could be considered a best practice model. We are not like them yet, but we plan to incorporate some of their models.

After the Grant

Yes, the program will be sustainable. The Board of Directors and the CEO of Eastern Aleutian Tribes have expressed their support of the continuation of our program. Also ANTHC has accepted the next step
in getting a tribal waiver regarding the current CMS Conditions of Participation which are not friendly towards frontier primary care service delivery systems.

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Community Characteristics

The project by Chiricahua Community Health Centers, Inc. (CCHCI) offered a new and innovative health care delivery system in a rural area that lacks primary and dental health services. It proposed to expand dental outreach services by placing a full-time dentist and a part-time pediatrician on a mobile unit that traveled to schools in remote areas and served the children and their families. CCHCI received a mobile van from the State of Arizona and began services in 6 school districts in rural Cochise County in the fall of 2007.

Services Offered

In 2007, the Chiricahua Community Health Centers, Inc. received a mobile dental unit (MDU) from the state of Arizona to delivery dental services in this Medically Underserved area. Dentists in the MDU provided full dental services utilizing standards of care practiced in major clinics, teaching facilities and children’s hospitals around the country. They made assessments of oral hygiene, checked the overall health of the gums, and counted the number of missing, filled and decayed teeth. A dental hygienist cleaned the teeth and applied a fluoride varnish. Children and caregivers were provided with dental health educational materials.

Innovative Solutions to Problems

Hiring trained personnel, particularly fulltime dentists, was the major problem encountered. For the first 2 years, the MDU had to work around the schedules of dentists who worked part time and/or had their own practices. Because of the schedule of providers, service for the first years in the schools was limited to 2 -3 days a week. In the spring of 2010, however, a fulltime dentist was hired to treat patients both in the clinics and the MDU.

Making contact with parents and obtaining their consent form needed to be completed before treatment could begin. Obtaining consent continued to be a significant problem. Once staff received approval to perform treatment, a treatment plan was sent to the parents. Often when the MDU returned to the area to complete the work, contact with the parents revealed that many refused service because of lack of insurance. If eligible, staff helped parents’ complete online applications for Arizona’s equivalent of Medicaid, Arizona’s Health Care Cost Containment System (AHCCCS). AHCCCS offers health care programs to serve Arizona residents provides 95% dental insurance coverage for basic and restorative treatment for 19 and under. It has an annual cap of $1500. A sliding-fee-scale program from CCHCI is explained to parents for those who do not qualify for AHCCCS.

The MDU coordinator spent a significant amount of time sending reminders home to parents and phoning to obtain information on the child. Staff was not notified when a child had moved until they arrived at the site. Parents of children from split families often used the children as a “tool”, with one parent refusing to sign a consent form. In the words of a dentist, “There are lots of delays, and meanwhile the teeth are decaying.”

Dentists at CCHCI acknowledge that dental education is the key to healthy teeth. Raising awareness, particularly targeting younger children, is accomplished during dental visits.

Lack of parental understanding of the role that dental health plays in overall health is of primary concern to dentists, and time is spent educating them as well. One dentist explained, “A lot of parents
don’t think of primary teeth as important. They don’t understand spacers, and leaving room for permanent teeth.” Dentists also mentioned harmful Hispanic cultural norms, such as putting their children to bed with a bottle of chocolate milk.

**Results**

Dentists have noticed some positive changes in response in the schools over the past year. For example, one dentist commented that when the kids are given positive reinforcement, they were glad to come back. Dental hygienists tell the children after cleaning that their teeth “look really good.” Some of the dentists had lunch with the students, and asked them, “When are you going to see me.” They would then tell the child to have their parents sign them up for the program. These measures have shown results, and dentists are gradually seeing a larger number of students in the schools. One dentist noted, “Some areas are slower but we need to get parents to warm up to us.”

For children under 5 seen by pediatricians at CCHCI clinics, a dental exam was given when they received their first physical, the Early Prevention and Screening Detection and Treatment exam. Those in need of dental care were referred for further work to CCHCI clinic dentists.

**Potential for Replication**

Projects similar to this could be successful in other rural settings where transportation and poverty are major barriers to care. For those who do not have insurance, providing a sliding fee scale payment often makes the difference whether a child receives treatment.

**After the Grant**

Yes, the program will be sustainable. The program could not be considered as a best practices model because it does not have a control or comparison group, nor are there results over time for a large number of clients. It has, however, met the vast majority of the established goals and objectives, and it seems to be a good approach in a rural area serving families in poverty. Appropriate educational materials, and treatment available for both English and Spanish speakers were instrumental in the effectiveness of the program.

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Community Characteristics
With Van Buren and Searcy Counties falling well below the national average in nearly all health indicator areas, residents of this area are exceptionally vulnerable to a variety of chronic diseases. In addition, the two counties are medically underserved and have been designated as health professions shortage areas. The Outreach Program was designed to address the chronic diseases Diabetes and Cardiovascular Disease as well as health care fragmentation, low health literacy, and the need for prescription assistance services.

Services Offered
The Rural Health Care Services Outreach Grant Program has allowed us to serve a variety of people with a number of services that were not already present and available in this multi-county area. With grant funding, we were able to implement a culturally sensitive health screening program, performing over 4,000 cholesterol and glucose screenings and improving health literacy through education. While the goal initially set was to perform 4,800 screenings, we fell short by 775. The factors that caused us to fall short were not anticipated and out of our control. Due to the poor economy, many of the events we held simply didn’t have the turn-out that was expected. We are very pleased with our accomplishment of performing 4,025 screenings in only 3 years; it was quite a feat. In addition to the screenings, coalitions were formed in 8 of the exceptionally rural communities within Van Buren and Searcy Counties. Our goal was to form 8 coalitions and that goal was achieved. The mean age of participants of this program was 52 years and the average educational level was 1 year post high school. Many people who were screened through this program returned to be screened again in order to discern whether or not the diet and lifestyle changes that they made were improving their health. The Diabetes program implemented through the Outreach Grant program reached just over 300 people providing glucose, cholesterol, and A1c screenings, and diabetic education. The majority of the population served was approximately 55 years of age, with a gender split of nearly 50:50. Finally, the Medication Assistance program has provided the assistance of prescription medications for 1,477 patients over the past years, representing a savings of $562,000 for the residents of this rural area. In summary, while not all objectives were met for reasons out of our control, we could never have imagined making more of an impact than we did. Through this program we were able to touch the lives of over 3,100 individuals, providing over 1,800 medications worth over $562,000 and saving many lives through our health screenings and Diabetes education.

Innovative Solutions to Problems
Due to the struggling economy, health fair turn-out was a slightly less than expected. When the goals and objectives were initially formed the screening program was a brand new thing to this area and the hindsight shows that we were a little too optimistic about how many people would turn out for each health fair. Factoring that in with the fact that the economy took a huge down-turn and the two largest employers in the area closed their doors, health fair turn-out was less than initially expected. The second most significant problem was staff turnover resulting in a difficulty of follow-up data collection on the diabetes measures. It took a while for the new Diabetes Education coordinator to get a strong sense of where everything stood resulting in a slight gap in patient data collection. By the end of the project, the
new coordinator was well into place and a billable Diabetes Self-Management Training has begun at Ozark Health Medical Center to sustain the program and to continue to collect and track patient data

**Results**

The University of Central Arkansas’ Dr. Jacquie Rainey, Dr.PH, CHES, Professor and Associate Dean of the College of Health and Applied Sciences served as the outside evaluator and lead the evaluation efforts. Dr. Rainey was responsible for creating the instruments, collecting the data, and writing the evaluation reports. Outcomes achieved with the grant funds include: the implementation of the *Reach Out and Connect* (ROAC) program and allowed the purchase of screening machines and cartridges that measure cholesterol and glucose. Blood pressure machines were purchased to measure blood pressure. Brochures and literacy information was given out to each participant. For Diabetes Education, an A1C machine was purchased along with screening cartridges that allowed diabetic participants with immediate results. A Certified Diabetes Education Center has been established along with a kitchen to provide healthy nutritious meals and to teach and demonstrate correct procedures in preparing and presenting food through the Diabetes Education process. Life Form Food Models have been purchased for diabetes classes to demonstrate portion sizes. The Medication Assistance Program purchased software that allows for the tracking of patient’s medications. Each program has been marketed in the county newspapers along with a monthly newsletter and on local radio stations.

**Potential for Replication**

This program would absolutely be successful in other rural settings. It is such an important resource to the residents and they have really come to depend on us for much needed help that they simply can’t afford. It is an amazing program that has truly changed the lives of so many people. It could be very easily replicated and implemented in other rural communities and we would be happy to serve as a resource to other organizations interested in implementing similar programs.

**After the Grant**

Yes, the programs funded by the Outreach grant will continue to be provided to residents of this service area. The Medication Assistance Program will be funded in part by a fee for services and by one of the major Ozark Mountain Health Network partners, Ozark Health Medical Center. The Diabetes Self-Management Education program will likewise be funded by Ozark Health Medical Center for the portion not covered by the fee for service. The last component of the Outreach grant is Reach Out and Connect. It is one of the more expensive programs, mostly because of the cost of the supplies. It will be continued on at least a somewhat limited basis for the residents of the area. The Network is working on a partnership with Ozark Health and also with a local health care organization for funding for program expenses.

**Contact:**

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Community Characteristics

The Across the Smiles Town of Windham program targets the low income residents of Windham; children, pregnant women, migratory workers, the homeless, and those with a history of substance abuse as these populations in particular have high rates of dental decay and untreated dental disease with few options for obtaining oral health care. Broadly, the goals of the grant are to provide access to and delivery of preventive oral health care, to deliver oral health education, and to advocate for improvements in rural oral health policies.

Services Offered

The Across the Smiles Town of Windham program provided school and community-based preventive dental services to the low-income residents of Windham, Connecticut (i.e., children, pregnant women, migratory workers, the elderly, the homeless, and those with a history of substance abuse). These services were provided with portable dental equipment that was used at all 6 Public Schools, 4 Head Starts or Early childhood education programs, and 7 community sites in Windham and for the ‘Home by One” program that provides Fluoride Varnishes to children 6 months to 3 years.

Innovative Solutions to Problems

Key challenges that were encountered in the arena of program delivery were: Program start delays:

- Initially, the Department of Public Health was going to require that each site where program services were delivered be licensed and that a dentist had to be present when services were delivered. After several appeals, the Department of Public Health, Oral Health Director clarified that according to State law, the dental hygienist could provide preventive oral health services at community sites if he/she was working under the general supervision of a dentist at Generations. And the State Licensing Department said that the program would be able to operate under a single umbrella license.
- Three Sites originally identified did not meet Generations and State of CT criteria to deliver services and alternative sites needed to be identified. One site actually had renovations made to meet the requirements. It was a partnership effort that took time.
- Cost was a barrier to enrollment for residents with no insurance (our target population). Generations’ has a sliding scale fee, and the intake forms requested information such as household income, but parents did not want to give out that information. So the partners developed the idea of using free and reduced lunch status in the schools or Head Start enrollment as an alternate determinant of sliding scale fee eligibility should a parent not wish to disclose additional financial information. Additional reassurance for parents was given; the intake form was revised to state that no child would be turned away for treatment even if they were uninsured.
- Delay in equipment and van purchasing and difficulties finding garaging for the van and safe storage for the equipment when not in use.
- Program staff in the schools. The nurses at the schools reported that they were feeling overwhelmed by the added burden of making sure students attended their scheduled dental appointments.
Results

In addition to the above data collection and analysis, we chose to have a Formative (Developmental) evaluation so that we could have an on-going process to evaluate and change the direction of the program based on the evaluation as needed. This provided us the opportunity to look at the bigger picture (partnership and community relationships, etc.) not just the aspects of the program evaluation that were data driven.

Through the grant, we hired an outside evaluator. Our evaluator examined such elements as program delivery, quality and content of the program, cultural competency, community awareness of the program, program replication potential and community access so changes could be made which would strengthen and improve the program. Our evaluator took an active part in the partnership meetings, committee meeting which added a depth to the evaluation process. Since the evaluation was not all data driven, consideration of the partner’s concerns took an important role also and helped us to respond to concerns and made the overall impact of the evaluation much more meaningful.

We used the data to guide us in making decisions such as; determining which sites are successful and want to build our patient base and which sites we should eliminate due to low enrollment or if they are unsuccessful.

Potential for Replication

Duplication of this project in other rural communities would work. This is due to fact that this program eliminates barriers that usually occur in rural settings. These barriers include; access to services due to transportation barriers and parent’s inability to leave work to bring their children for an appointment. It also helps to eliminate No Show Appointments. Generations firmly believes the model of portable preventive oral health care is a best practice and can be easily replicated.

After the Grant

Yes, the program will be sustainable. Generations Family Health Center, Inc.’s Across the Smiles-Windham program will continue the direct service delivery component after grant funding has expired. As a Federally Qualified Health Center (FQHC), Generations has the ability to generate program revenue for the oral health care services provided. The health center’s 330 grant also enables the program to provide sliding fee discounts to patients who are uninsured and underinsured. The program has developed an appropriate payor mix serving a predominantly Medicaid population for which the health center receives cost-based FQHC Medicaid reimbursement. Therefore, with particular attention to achieving certain productivity goals, the program should be self-sustaining in its ability to continue to provide preventive oral health care services such as exams, cleanings, x-rays as needed, fluoride treatments, and sealants. In fact, the program structure is comparatively low-cost compared to other Generations dental services which utilize higher cost supplies for restorative care and which have higher occupancy costs and lower productivity. Therefore, continuation of the preventive oral health services using portable equipment can actually be a revenue driver and case finding mechanism for the health center’s Dental Department.
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Community Characteristics

Chronic health conditions, such as diabetes and hypertension are significant health problems among Latinos. According to Healthy People 2010, diabetes is a significant health problem in rural areas and among Hispanics. The report states, “An important rural population group is migrant farm workers...in two published studies on migrant health clinics, diabetes rose in rank from the sixth most frequent diagnosis or reason for physician visits in 1980 to first place in 1986-98. Diabetes and hypertension are related to healthy eating and healthy lifestyles. Recent immigrants, including farm workers, often rely on inexpensive fast food and foods high in fat and salt to meet their dietary needs, increasing their risk for diabetes, obesity and hypertension. Health data from the Southeast Health District and from East Georgia Healthcare Center indicate that diabetes remains a significant health problem for farm workers in southeast Georgia.

Farm workers can access primary care through the region’s farm worker health program. However, many other Latinos who are low income and without health insurance, with chronic health conditions go without care until the condition becomes very serious or life threatening. Others that have received care may not follow through on their health provider’s recommendations. Many diagnosed diabetics cannot always afford to buy their testing strips, meaning that they may skip testing for long periods of time.

Southeast Georgia Communities Project (SEGCP) recognized that rural, poor Latinos with chronic health conditions often face significant barriers to accessing care, and instituted La RED to address disparities in health access and health literacy among the area’s rural Hispanic population. The goal of La RED is to reduce morbidity and mortality related to diabetes among Hispanics by providing culturally and linguistically appropriate education, non medical case management, outreach, referrals to other support services and language interpretations by qualified medical interpretations.

Services Offered

The target population for La RED is Latinos with diabetes or at risk for developing diabetes residing in a seven county area of rural southeast Georgia. The target counties are Appling, Candler, Emanuel, Evans, Long, Tattnall and Toombs. Located approximately 75 miles from the coast, these rural, agricultural counties are the center of Vidalia Onion production for the region.

Program eligibility is determined by baseline HgA1c testing. A diagnosed diabetic becomes program eligible if the baseline HgA1c is 7 or higher. Once a client enters the program an A1C is obtained on a quarterly basis.

Education is provided to enrolled clients, non medical case management, home visits and outreach are also provided. Access to affordable testing supplies is also provided to the enrolled clients.

Home visits with contracted RN to provide HgA1c testing is also available to clients who either have no way to go to the doctor or are unable to pay the fee for the physicians services.

Innovative Solutions to Problems

The problems/challenges that have been found with the program are: 1.) Collecting intermittent HgA1Cs on patients; 2.) Client adherence to healthy lifestyles, including healthy diet; 3.) Hiring and retaining competent bilingual staff.

The collection of intermittent HgA1Cs on clients was a problem during the initial implementation of the program. Many clients either could not afford the cost of returning to the physician’s office for their
follow up HGA1Cs or they did not have the ability to drive to the location. Transportation can be a very big problem when dealing with the Latino Migrant population. During the first years of the program, La RED clients were able to receive the A1C testing through EGHC during quarterly A1C workshops completed during community events. However, as with most community health centers staffing became an issue. SEGCP overcame this problem by obtaining services from a contracted RN. The RN along with outreach staff provided evening home visits with the clients in order to provide A1C testing for clients during the times when EGHC was unable.

Adherence to healthy lifestyles and diets is a challenge due to the population served within the program. Many Latino farm workers return to their home countries after the planting and harvesting seasons. This leads to the reoccurrence of unhealthy habits and diets. In order to overcome these issues outreach workers encourage program participants to test their blood sugars regularly. Reminders of dietary guidelines are essential to a diabetic’s ultimate health. Alternative cooking strategies is demonstrated for clients during healthy cooking classes. This has been a great success with clients, because they can better understand that they don’t necessarily have to change their food, just change how it is prepared.

Hiring and retaining competent bilingual staff is ongoing. However, the program has found a core group of outreach workers that are passionate about their jobs. We have found that providing ongoing training to our staff encourages better outcomes within the program. The more educated your staff, the better quality of services will be provided to the clients. Also, staff confidence in their own abilities grows when they are given more education on the topic they are delivering to the clients.

Results

Program was evaluated by Georgia Southern Universities Jing Phing Psu College of Public Health.

Potential for Replication

The outreach efforts utilized within the La RED program could be successful in other rural communities. One of the most important lessons learned within this project is that success is not going to occur between the hours of nine to five. Adjustments have to be made and programs must be flexible in order to obtain successful outcomes. We do consider our program a best practice model.

After the Grant

Yes, the program will be sustainable. We do consider our program a best practice model.

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Community Characteristics

The lead agency, Upper Des Moines Opportunity (UDMO), completed a comprehensive oral health needs assessment in the summer of 2006 and four unmet needs were identified for the target population which consisted of missed opportunities by early childhood health professionals to assess, screen, treat, and educate families on the importance of oral health care for young children; unrecognized and different attitudes, beliefs, and knowledge that prevent families from seeking oral health care and understanding the need for such care; lack of knowledge among the general community and policy makers of the importance for preventive oral health care for young children; and limited leadership and capacity to effectively implement a prevention-focused early childhood oral health initiative. Local oral and state data supported evidence of an unmet need regarding children receiving preventive and dental services. Local data from the annual Early and Periodic Screening, Diagnosis, and Treatment Dental Services Report (EPSDT), indicated that 29.30% to 48.4% of the Medicaid-enrolled children in UDMO’s twelve county area did not receive any dental services. The report also indicated that on average only 36% of Medicaid-enrolled children for the 12-county service area received preventive dental services and the average rate for receiving dental treatment is 17.7%. State data from the Iowa Department of Public Health indicated that seventy-two of Iowa’s 99 counties were designated as Dental Health Provider Shortage Areas.

The Early Smiles project was designed to address these unmet needs by providing leadership and capacity to champion an oral health initiative, increase access to oral health prevention services to young children, and bring community awareness to the importance of oral health.

Services Offered

The services provided by the project are based on segments of the target population. These segments include children 0 to 8 years of age; families of children; health, education, and social service professionals; and the community at large. The services provided to each segment are provided in the table below:

<table>
<thead>
<tr>
<th>Target Segments</th>
<th>Services Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children ages 0 to 8 years</td>
<td>• Dental screenings, fluoride application, oral health instruction, and referrals. &lt;br&gt; • Oral health education: puppet shows</td>
</tr>
<tr>
<td>Families of children</td>
<td>• Oral health instruction and prevention education.</td>
</tr>
<tr>
<td>Professionals</td>
<td>• Training on prevention services and oral health instruction. &lt;br&gt; • Resource Lending Library</td>
</tr>
<tr>
<td>Community</td>
<td>• Awareness through prevention education</td>
</tr>
</tbody>
</table>

Innovative Solutions to Problems

The project experienced an initial communication challenge between the Iowa Department of Public Health (IDPH) and the project agency. This was a result of each agency not understanding the other’s role and the most effective way of partnering together. Although it took some time and involvement from outside sources, the end result was a clearer understanding of goals and objectives each agency was able to provide to the service area.
Results

The progress on the project’s goals was evaluated internally and externally. Internal monitoring and evaluation occurred by the project director who used a database system to track progress on the grant in terms of the accomplishment of goals set forth by the initial grant application. The project has been evaluated by external evaluators of Drs. Michele Devlin and Mark Gray, professors and directors on the Iowa Center on Health Disparities. Drs Devlin and Gray reviewed numerous documents and outcome measures, conducted project advisory board member evaluations, and held discussions with project stakeholders regarding the progress and impact of the grant. The external evaluators’ mid-term report indicated that the project was exceeding the objectives of the grant for the project’s three main goals. Achievements include consistent management of the project by the same project director throughout the grant; project director is well recognized by stakeholders as a leader and champion for the project; an extremely large number of low-income children have received oral health outreach, education, and preventive services; the project collaborated professionally with multiple leading agencies to leverage resources and expand the reach of the program; and an extensive collection of oral health teaching aides have been purchased and utilized at dozens of sites throughout the target region.

In addition to external evaluations, the Early Smiles used the data gathered during the three year project to measure changes during the reporting period. While many different variables have been tracked and analyzed, the most important of this information that speaks to the long term goals of the project are changes that occurred in access to care and the presence of decay in young children. Data collected by the project found that access to care increased and the presence of decay in children decreased from 32.2% in Year 1 to 13.5% in Year 2. These improvements occurred despite an increase in the number of children enrolled in medical assistance programs.

Potential for Replication

The Early Smiles project does have some aspects of the project that could be considered best practices such as the project’s community outreach program and prevention education components. The outreach program has had much success in bringing awareness to the initiative and has been instrumental in fostering partnership buy-in for the project. The prevention education component consists of integrating prevention education programs into in-home visitation program, developing and making oral health resource lending library material available for lending to family focused programs, schools, and preschools.

After the Grant

Yes, the program will be sustainable. Various components of the project will be sustained beyond the grant funding period. The direct service component of school or early childhood setting based services of dental screenings, sealants, fluoride application, and oral health instruction will be integrated into the United Community Health Center. The oral health resources have been integrated into the Child Care Resource and Referral Lending Library which will allow borrowers to continue to access those materials in the future.
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Community Characteristics

The Senior Outreach Services (SOS) Consortium was designed to address mental health and substance abuse treatment needs of seniors, age 60 and over. Financial, structural, and personal barriers, that included access issues and stigma, resulted in seniors being underserved by the traditional community mental health system. As a result of unmet treatment needs, seniors were at increased risk for physical health problems, suicide attempts, premature placement in long-term care facilities, psychiatric hospitalizations, and inpatient substance abuse treatment.

Through the Senior Outreach Services Consortium the following areas were addressed during the three year grant project.

- Development of a Consortium to identify needs of seniors and improved elder care services
- Increased access to mental health and substance abuse treatment for seniors
- Improved mental health status through direct service provision and collaboration with other providers
- Reduction of stigma and increase community awareness of mental health and substance abuse issues for seniors

Services Offered

Community-based, in-home mental health assessment and treatment services and mental health case management were provided to seniors, age 60 and above, residing in the Four County Mental Health Center service area of Montgomery, Wilson, Chautauqua and Elk counties. Treatment services included group psychotherapy and community psychosocial groups in addition to individual and family therapy. During the three year period, an average of 143 individuals was served directly by the Senior Outreach Services program each year, ranging from 117* the first year to 161 during the third year. Program participants included both males and females, and representation across cultural and ethnic groups. In addition, 80 community presentations were provided to educate seniors, health care providers, and the public on geriatric mental health issues and promote stigma reduction.

A Consortium was developed and maintained which continues. As a result of the Consortium, the Southeast Elder Abuse Prevention Coalition was formed which is now evolving into the Southeast Kansas Senior Safety & Wellness Coalition. The Senior Outreach Services Consortium will merge into this larger group as the “Health & Wellness” subcommittee.

Innovative Solutions to Problems

The most significant problem encountered was recruitment of mental health professionals eligible for reimbursement through Medicare. In Kansas, licensed mental health professionals credentialed to provide Medicaid services do not automatically qualify for Medicare reimbursement. To resolve this issue, the SOS program recruited a Licensed Masters Social Worker and provided the two years of supervision required for licensure. Supervision was completed, but the required test still needs to be passed. A LSCSW (Licensed Specialist Clinical Social Worker) has been retained on a contractual basis to provide services in the interim.

*In earlier reports, the number of patients served during Year I was reported at 143. In compiling this report an error was discovered in Year I data, and the corrected number for Year I is 117.
Results

As a result of the Rural Healthcare Outreach grant, a Consortium of providers was developed and maintained that included representation from aging services, public health departments, area hospitals, assisted living facilities, long-term care providers, home health, and seniors. Development of the Consortium was the first goal of the project. The most important accomplishment of the Consortium is the role it played in helping the program transition from a “project” to an established service option for older adults with mental health needs.

The Consortium achieved the following: (1) Provided direction for delivery of outreach and community based mental health and substance abuse services to older adults; (2) educated the community about mental health and related needs of seniors to reduce stigma and improve access to services; and (3) helped identify and develop additional services needed for seniors. At the conclusion of the project, the Senior Outreach Services Consortium had grown from nine members to twelve.

During the three year grant period, surveys were collected to evaluate the value of the Consortium. Ratings by members on the extent to which the SOS Consortium had improved mental health services for elderly averaged 4.7 on a 5-point scale, with 5 being excellent.

The Consortium was instrumental in development of the Southeast Kansas Elder Abuse Prevention Coalition with a current membership of over 30 community agencies. Activities co-sponsored by the Consortium members included a Healthy Aging Fair which has evolved into an annual event, and the Independence Community Senior Day that provided social and informational activities for seniors with approximately 30 attendees each month. Consortium members have been strong and effective advocates at the State level for expansion of geriatric psychiatric services in Kansas.

The second goal addressed was increased access to mental health and substance abuse services. Funds through the Rural Healthcare Outreach grant provided staff for community education and community based service delivery that helped address barriers. More seniors began accessing services, not only through the Senior Outreach Service staff, but also through other providers at the community mental health center. Community education helped reduce stigma and increased awareness of mental health service availability. The outcome achieved was increased numbers of seniors receiving mental health services.

<table>
<thead>
<tr>
<th>Year</th>
<th>SOS Served</th>
<th>Agency Served</th>
<th>Total</th>
<th>SOS Encounters</th>
<th>Agency Encounters</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year I</td>
<td>117</td>
<td>298</td>
<td>415</td>
<td>2,193</td>
<td>8,858</td>
<td>11,051</td>
</tr>
<tr>
<td>Year II</td>
<td>151</td>
<td>286</td>
<td>437</td>
<td>3,571</td>
<td>11,693</td>
<td>15,624</td>
</tr>
<tr>
<td>Year III</td>
<td>161</td>
<td>319</td>
<td>480</td>
<td>3,519</td>
<td>9,653</td>
<td>13,172</td>
</tr>
</tbody>
</table>

Note: Some patients were included in the count for more than one year due to services being delivered during more than one grant year.

Improved mental health status for program recipients was the third and most important goal of the program. Five areas were assessed which included symptom reduction; improved quality of life; increased community and family participation; prevention of more restrictive placements; and reduction of hospitalizations for psychiatric and substance abuse treatment. Results of the BPRS (Brief Psychiatric Rating Scale) indicated that the majority of patients’ receiving mental health services experienced a reduction in symptoms. The difference between median admission and follow-up scores at ninety day
intervals showed a statistically significant reduction in the presence and severity of psychiatric symptoms such as depression and anxiety.

The SF-36 health outcomes survey was used to assess Emotional Wellbeing and considered a quality of life measure. Participants with follow-up scores reported statistically significant improvement in Emotional Wellbeing at three months and at discharge. Differences were not statistically significant from admission to 6, 9, 12, 15, and 18 months.

Patients were asked to rate their general life satisfaction on a 1 (poor) to 10 (excellent) scale. Statistically significant improvement was reported by patients’ at discharge and six month follow-up. In addition, statistically significant improvement was seen at discharge in relationship satisfaction, increased interaction with friends and family, and increased community participation.

A primary focus of the Senior Outreach Services program was to prevent the need for psychiatric hospitalizations and residential substance abuse treatment. Data collected on patients at discharge indicated that the program was effective in these areas. Ninety-three percent (93%) of the patients served did not require psychiatric inpatient care (71 of 66 patients), and 99% did not require inpatient substance abuse treatment (70 of 71 patients). At six-month follow-up 100% of 38 patients followed had not been hospitalized for psychiatric or substance abuse problems.

Untreated psychiatric problems, such as major depression, can increase the probability for seniors of premature placement in long-term care facilities. Client Status Reports were completed for 123 unduplicated patients who were provided treatment services between the dates of May 1, 2007 and April 30, 2010. Of these 123 patients, 109 (89%) were able to remain in independent or semi-independent living.

In regard to the 14 patients who were discharged due to a move to a long-term care facility, the average age of these patients was 82.5 years. Many had significant physical health problems at admission. The need for long-term care was the result of physical health decline versus mental health issues or depression in the majority of the cases. Follow-up was conducted for 47 patients at six-months. Of those 47 patients, 42 (89%) had been able to remain in independent or semi-independent living. It should be noted that of the five patients residing in long-term care at six-month follow-up, four of them were in long-term care at the point of discharge. Therefore, only one patient went from independent living to long term care after they were discharged.

The fourth goal was to increase community awareness of geriatric mental health needs and reduce the stigma associated with seeking treatment. Stigma has continued to be a significant barrier for older adults accessing mental health services. During the three year project, 80 educational presentations were provided. Forty-nine (49) targeted seniors and family members, and 31 were trainings for service providers. Over 1,400 individuals attended presentations with approximately 50% of the attendees completing surveys inquiring about the impact on their knowledge of geriatric mental health issues and stigma reduction. The average rating by attendees regarding increased knowledge of mental health issues for seniors was 4.6 on a 5-point scale with 5 being excellent, and the average rating regarding the extent to which stigma was reduced was 4.6.
Potential for Replication

The program has been recognized and presented at the state and national level. An application for recognition as a promising and best practice model was submitted in 2009 to the Western Interstate Commission for Higher Education (WICHE) staff working with Human Resources & Services Administration's (HRSA) Office of Rural Health Policy and the Nakamoto Group, Inc. At last contact, it was understood that this project has been modified and a resource book of mental health programs will be developed, but programs will not be evaluated for determination as a promising or best practice model. Data collected during the Senior Outreach Services Consortium project suggested that the model has potential as a promising practice.

After the Grant

The program will be sustained through recruitment of mental health clinicians who are Medicare reimbursable to provide evaluation and treatment services. Medicaid will reimburse for Case Management services for seniors with Medicaid cards that are identified as severely and persistently mentally ill or at immediate risk of psychiatric hospitalization. Sliding scale fees will be established and collected when possible for those who are not eligible for third party reimbursement.

The program was fortunate to receive a small amount of funding through an ARRA (American Recovery & Reinvestment Act) grant that is supporting part of a Case Manager’s salary. External grant funding and private donations will continue to be explored whenever possible to subsidize the program. Excess funds from other departments at the agency will also be used to sustain the project.

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Community Characteristics

The Promoting Healthy Lifestyles initiative was developed out of a need and support for health promotion and education as integral instruments in alleviating the ongoing health needs of childhood obesity in Marshall and Nemaha Counties in Kansas. Small rural schools and rural health care professionals needed the assistance of their local community to combat obesity and educate individuals about the risks associated with making poor health and nutrition choices.

The specific problems that were addressed in the Promoting Healthy Lifestyles initiative include the following:

- A high percentage of children and adolescence (ages 4 – 19) attending local schools that were at risk of being overweight or overweight.
- Lack of student participation in physical education courses beyond the freshmen year of high school.
- In some schools, the minimal amount of time allotted for students in a physical education class.
- Low scores on the President’s Physical Fitness Test for elementary, middle and high school students.
- A small number of physical education opportunities and low participation by female students and non-athletes at the high school level.
- Few opportunities for students of all ages to engage in nutritional activities.
- Lack of nutrition education resources and assessment tools in adequate quantities to serve all students.
- Limited nutrition information and resources in order for families to encourage healthy eating behaviors.

Services Offered

Body composition training and awareness for physical education instructors school nurses, students and parents. Instructors were trained on how to use equipment and software to collect data. They were also instructed on student privacy and how to talk to students about the results.

The creation, development and dissemination of information to students, parents, instructional staff, school boards, administration, businesses and community members about fitness and nutrition.

The planning and implementation of awareness activities for school children and adolescents to help them understand their health profiles and make educated choices regarding their own health and nutrition. Instructors reviewed student profiles with parents and students. Each student set goals to improve their own personal profile results.

The integration of PE4Life strategies and Kansas State Standards into physical education curriculum at all Consortium schools for grades K -12th. Physical education instructors attended two sessions of training at PE4Life Academies.

An increase in student awareness of activity levels as measured through pedometers for all elementary students (K – 6th), log forms for all junior high and high school students (7th – 12th).

The development of ideas to integrate fitness into the academic classroom at the elementary level for all Consortium schools utilizing such resources as Brian Breaks, Take 10 Curriculum, and action based learning.
The development of physical activity outside the traditional physical education classroom for all Consortium schools including structured recess activities for elementary students and before/after school activities (SPARK) for elementary and junior high/high school students.

The integration of nutrition education in the classroom for all grade levels at all Consortium schools to promote healthy eating behaviors through collaboration with school nurses and Family and Consumer Science Courses. Students were exposed to nutritious foods through the five food groups by color and presentations of nutritional information.

Implementation of nutrition and physical fitness special events at all Consortium schools or within their own community to promote awareness and educate students, school staff, parents, schools boards, businesses, and citizens on making healthier choices. Each school collaborated with hospitals, school nurses, instructors and extension services to expose parents and students to nutrition and physical activities and information in the fall and spring of each grant year.

Innovative Solutions to Problems

The most significant problems encountered in the project implementation include staffing issues within the School-Business Educational Consortium and hospitals; new and different physical education instructors and administration at specific school sites within the three year grant period; and the technical skill level of physical education instructors and school nurses.

During both the first and third year of the grant cycle, staffing issues delayed the implementation of some project activities. An administrative assistant was not hired until three months after notification of receiving the grant award and two contacts at two of the hospital partners left and new ones were hired. This led to some initial delays in basic project implementation before the first school year even started. Once the administrative assistant was hired and the new contacts were versed on the grant, the project was able to get back on pace with its original proposed timeline. However, in the third year of the grant project, this same individual also left the organization to take a job elsewhere. The School-Business Educational Consortium hopes to overcome this absence of staffing in the final months of the project by receiving approval for a no-cost extension to carry out activities related to structured recess in fall of 2010.

Of the Consortium schools involved in the grant, two districts received new superintendents during the grant project, two schools employed new principals, and two school sites had more than one physical education instructor responsible for carrying out grant activities. In fact, one school site had a new physical education instructor for every year of the grant period. As expected, there was a learning curve encountered for all of these new individuals, but it was overcome through awareness activities, professional development and technical training.

The low level of technical skills demonstrated by the physical education instructors and school nurses also played a role in the delayed implementation of activities. Some of the instructors had never even used computer technology in their physical education class let alone other technology tools. Once again these instructors experienced a learning curve and had to be trained on how to properly implement and use their new technology equipment.
Results

The project was evaluated through outcomes for each activity. Data was collected and then sent to an outside evaluator for compilation. Working with five school districts that served 2,499 students made it difficult to manage all of the data collection, so software programs were used to help in the process. Each strategy had several activities that were measured with outcomes, but the overall goal was to address the educational, physical fitness and nutritional needs necessary to promote healthy lifestyles in individuals beginning in early childhood and continuing on through adulthood. Due to space limitations following are the data collection from the activities believed to have had the most impact in our communities:

Potential for Replication

We think parts of our initiative could be best practices, but three years is not enough time to build a best practices model. Analyzing and evaluating long term data is the only way schools will be able to determine what works. If the BMI’s and body fat percentages of Consortium students decrease in the future, then we would consider our program a best practices model. Unfortunately, we don’t know at this time.

After the Grant

Parts and specific activities related to the Promoting Healthy Lifestyles program will be sustainable once the Outreach Grant funding has ended. During our Strategic Planning Session in the Fall of 2009 (Year Three), each Consortium school reviewed and reflected upon the activities and services provided through the grant funds and decided which of these activities/services they would continue with in the future. The activities/services that will be carried out in the future are specific to each school site and what they viewed as both feasible and a priority for their particular school and community.

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Community Characteristics

The service area for PHD is Powell and Estill counties, rural counties located in Appalachian eastern Kentucky. Demographically, this region is primarily White (98%), with 1% African American (U.S. Census 2000) and 1% total all other categories combined. Because of the poverty and mountainous terrain, this area has not experienced an increase in Hispanic residents, as seen by many rural farming communities. Most residents of Powell and Estill counties have lived there for all of their lives, and their families have lived there for multiple generations.

Powell County has a population of 12,614. According to the HRSA Community Health Status Report for Powell County, Kentucky (June 2000), 25.1% of its residents are living below the poverty level (compared to 13.3% nationally). The average life expectancy in Powell County is 72.5 years, compared to the median for all U.S. counties, which is 75.4 years. Powell County exceeds the U.S. rates of death measures for infant mortality, stroke, and coronary heart disease (among others). In 2000, 43% of deaths in Powell County were due to cardiovascular disease. The two main towns in Powell County are Clay City and Stanton. In 1990, for Clay City, the poverty rate was 36.74%, which is 2.76 times the national rate; and for Stanton, the rate was 18.45%, or 1.38 times the national rate. Unemployment is available only on a countywide basis. According to the U.S. Department of Labor, Bureau of Labor Statistics, the most current national unemployment rate (August, 2006) is 4.6%. For Powell County, the August 2006 (the most recent available) unemployment rate was 6.9% that is 1.5 times the national rate.

Estill County has a population of 15,497, with 26.3% of its residents living below the poverty level. The August 2006 unemployment rate for Estill County was 6.1% or 1.32 times the national rate. Of Estill County residents between the ages of 16 and 64, 65% have disabilities. Thirty-two percent (32%) receive disability payments such as SSI or SSDI (American Fact Finder). The average life expectancy in Estill County is 73.8 years, compared to 75.4 nationally. In 2000, 47% of deaths were due to cardiovascular disease. The rates of coronary heart disease and stroke are far higher than national rates. For coronary heart disease, the Estill County rate is 276.2, compared to 216.0 nationally; and for stroke, the Estill County rate is 78.3, compared to 62.0 nationally.

Services Offered

The services that were provided included: nutritional/diabetes counseling, group diabetes/cooking classes, prescription assistance, outreach, transportation to medical appointments, and supportive services (assistance with needed diabetic supplies---test strips, meters, diabetic socks, recipe books, and etc). Services were provided to adults ages 18 years and older. Low income, uninsured, underinsured individuals with diabetes and pre-diabetes were targeted. The overall goal of the project was to provide services to 600 participants (200 users each year).

Innovative Solutions to Problems

The only problem that was encountered was providing a fixed transportation route for participants. Two routes were originally planned but despite being publicized through the local media, only 1 participant took advantage of the service. After several attempts, we learned that a fixed route was not the best way to provide medical transportation for rural people had medical visits for specialty care in
different locations. Therefore, non-emergency medical transportation was provided on a case-by-case basis. Those trips were scheduled in advance requiring a 72 hour notice.

Results

The program was evaluated using a third party evaluator. The evaluator was selected through a Request for Qualifications at the beginning of the grant. Below are the results of each identified goal.

Goal 1: To provide supplemental health services to adults with diabetes in Powell and Estill Counties.

During the first year, the PHD Program served 205 participants, 200 in year two, and 200 in year three, for a total of 605 participants during the three-year funding period.

In addition to providing supplemental health services to the target population, Goal 1 Activities included staff training, developing program intake and assessment forms, and ordering supplies and equipment. The PHD Program completed all of these activities during the three-year funding period. Examples include the PHD Project Director completing the Adult Weight Management Certification Program; creation of a screening form for health departments to use for diabetic patients who need diet consults; development of a screening and MNT (Medical Nutrition Therapy) assessment form to be used by the RHO Program and mobile clinic.

Goal 2: To provide prescription assistance services to 100% of low-income residents of Powell and Estill counties who request assistance and have diabetes or diabetes-related conditions.

A prescription assistance staff member, Tena Pelfrey, was located at Kentucky River Foothills Development Council’s Estill County Health Services Office. Ms. Pelfrey created referral protocols with the health department, as well as the County Diabetes Coalition in order to reach the target population and meet Goal 2.

The total in-kind contributions from the Prescription Assistance Program during the three-year funding period from May 2007 to April 2010 totaled $968,353.

Goal 3: To provide increased access to diabetes-related specialty care by providing no-cost transportation.

The transportation component of the PHD Program was set to begin in late September, with a morning route and two afternoon routes on Tuesdays. It became apparent that this route system did not fit the needs of the clients as many appointments were made far in advance and could not be changed to accommodate the route system.

By October, transportation was scheduled on a trip-by-trip basis with clients providing 48 hours notice of need. When possible, multiple clients are transported together to appointments.
Number of Trips and Participants Served Through the Transportation Component of the PHD Program, Years 1-3.

<table>
<thead>
<tr>
<th></th>
<th>Number of Users</th>
<th>Number of Trips</th>
<th>% of Transportation Budget Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>24</td>
<td>123</td>
<td>100%</td>
</tr>
<tr>
<td>Year 2</td>
<td>17</td>
<td>258</td>
<td>100%</td>
</tr>
<tr>
<td>Year 3</td>
<td>13</td>
<td>112</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>493</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: Total number of users is not cumulative across the three years of the Program due to some repeat users during the three year funding period.

In Year 2, the PHD Program provided emergency dialysis transportation for two participants, requiring three trips a week to Lexington. Foothills had a van going to Lexington on those days for another purpose and was able to transport these two participants at reduced cost. By Year 3, one of the participants requiring frequent transportation had passed away and the other participant had secured alternative transportation. Thus, the Year 3 total number of trips is similar to Year 1.

Goal 4: To provide nutrition and fitness education for low-income persons with diabetes.

The PHD Program collaborated with health departments and extension offices in Estill and Powell counties to enhance the fitness education and cooking classes offered to program participants. In addition, individual dietary consults were provided. In Year 1, the Program was hampered in its efforts to provide dietary consults due to the Estill County Health Department dietitian leaving her job. After some time of being unable to fill the position, the PHD Project Director, April Stone, who is a registered dietitian began performing dietary consults. The Estill County Health Department did not hire another registered dietitian.

A chronic problem with the dietary consults, as shown in Table 3 below, was participants not showing up for scheduled meetings. This was addressed by requiring any participant who requested diabetic shoes to undergo a dietary consult prior to receiving the voucher for shoes.

Table 3. Number of Dietary Consults Provided to PHD Program Participants, Years 1-3.

<table>
<thead>
<tr>
<th></th>
<th>Number of Dietary Consults</th>
<th>Number of No-Shows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>73</td>
<td>Not Tracked</td>
</tr>
<tr>
<td>Year 2</td>
<td>80</td>
<td>19</td>
</tr>
<tr>
<td>Year 3</td>
<td>96</td>
<td>29</td>
</tr>
<tr>
<td>Total</td>
<td>249</td>
<td>48</td>
</tr>
</tbody>
</table>

Goal 5: To implement a successful rural health project addressing diabetes that it is replicable in other rural Appalachian counties.

Detailed records and completed monthly reports, along with compiled data on all components of the PHD Program were maintained. In addition, the RHO network/coalition met monthly, rotating between the counties, to address CQI efforts. Foothills incorporated an internal monitoring program and the PHD program had a positive compliance rating with the budget and program goals/objectives as part of the CQI
efforts. In addition, attention to the sustainability of the program after the end of federal funding was viewed as a critical piece to enabling the Program to be replicable in other rural Appalachian counties. An example of this effort is the partnership formed with the Estill and Powell counties Diabetes Coalition. The Coalition consists of Foothills and RHO network partners, as well as Family Resource Center staff, local doctors’ offices, civic groups, local hospital representatives, and community members. Both coalitions have a set of goals/objectives that addresses diabetes prevention and management with the general public and children. The PHD program coordinated efforts with both coalitions and in Year 2 combined their monthly meetings in order to better coordinate services and activities.

Potential for Replication
A program like the PHD can be implemented in rural areas. However, in order for it to be successful, network partners need to be team players and share the same passion and willingness to carry out the duties of the grant.

After the Grant
The majority of services provided through this grant will be continued through other sources of funding provided through the healthcare for the homeless program. We operate a FQHC that provides healthcare services to Estill and Powell counties. The prescription assistance program will be continued as well as nutritional counseling. The community health center received additional funding to hire health navigators to provide enabling and supportive services. The medical transportation will be continued to diabetics through this funding on a smaller scale. Transportation is a barrier for many low income and uninsured individuals living in these rural areas. Also, network partners in Estill and Powell County have also formed a diabetes coalition in which funding was obtained. Diabetes outreach and resources are provided to the public through the coalition. Also, community diabetes workshops and cooking classes will be continued through the coalitions.

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Community Characteristics

Child overweight/obesity prevention is a top US public health priority. Obesity is a chronic condition with few known effective treatments, making prevention of increased importance. In the US, 25% of children aged 2-5 are already overweight or obese (Ogden et al., 2008). Low-income children enrolled in preschool Head Start programs are at particularly high risk (American Academy of Pediatrics, 2003; Troiano and Flegal, 1998; Mei et al., 1998; Ogden et al., 1997).

School-based obesity prevention/intervention is an appropriate strategy for 3-4 year old US children, as 54.5% attend preschool (US Census Bureau, 2007). However, there is little known about effective obesity prevention interventions in preschool populations (Bluford et al., 2007). A review of evaluated interventions identified seven published studies; of these two treatments and two prevention studies reported statistically significant weight status reductions (National Collaborating Centre for Primary Care and the Centre for Public Health Excellence at NICE, 2006). These limited findings suggest two important components of successful prevention/intervention efforts: utilization of multi-component strategies (focus on nutrition and physical activity (PA)) and inclusion of parents as agents of change.

Services Offered

Healthy Families targeted all enrolled preschool children and their families, engaging them in classroom, home and community settings.

The current Healthy Families Project includes the following:

- **Healthy Start Curriculum for the Classroom**: Includes nutrition education, physical activity, risk behavior prevention in an age-appropriate format
- **Weekly Health Homework** for parents and kids to do together (includes physical activity)
- **Wellness-related field trips** (ex. snow-shoeing, sledding)
- **Wellness special events** such as Grocery Store Scavenger Hunts, Fitness Samplers, Creative Movement classes for kids and parents and many more.
- **Wellness Topic Presentations** at Parent Meetings which take place once a month at each of the 13 Centers.
- **Wellness classroom visits** in which wellness staff regularly engage children in fun physical activity and model this leadership for teachers
- **Wellness gym memberships** at low or no cost for families (with KidFit active childcare available)

Incentive program: Families earn points for all wellness activities and these points give them opportunities to win healthy prizes such cookbooks, exercise equipment, bikes etc

Nutrition and physical activity lessons are led by classroom teachers, wellness instructors and the program coordinator. A modified and expanded version of the Healthy Start Curriculum’s Health Homework was assigned weekly for children to complete with their families. Each classroom was expected to take ≥3 wellness-oriented field trips each school year with at least 2 parental chaperones. Field trips included visits to BHK Wellness Centers, snow-shoeing trails, sledding hills, restaurants and farms. A series of wellness classes were offered to parents, teachers and staff. Extracurricular family fun events were offered for children and parents. Monthly parent meetings routinely included brief informative presentations with groups able to select more extensive 45 minute presentations on a variety
of topics. A monthly “Healthy Times” Family Newsletter was sent home with all preschoolers including recipes, health information, classroom updates and photos. Families participated in a point-based family incentive program in which points are awarded for participation in the activities mentioned above and other self-initiated family wellness activities. Families won healthy prizes based on points earned.

Healthy Families was implemented in all 13 BHK Early Childhood sites including 4 child care centers (child care centers operate full day programs year round as opposed to pre-school sites which operate September to May in half day sessions). Each August, wellness staff trained classroom teachers on program components, resource materials, procedures and evaluation reporting requirements. Program implementation ran primarily from September-May each year, with some summer activities taking place in the year-round child care centers.

The Healthy Families Project Coordinator coordinated with partners to design and offer wellness classes based on program goals and parent interests, hired wellness instructors to conduct classes, presented at monthly parent meetings, supported classroom teachers by locating resources, monitored and supported adherence to program requirements, collected data and provided strategies for increasing family involvement.

Innovative Solutions to Problems

Full integration of the Healthy Families Program into preschool classrooms took time and effort on the part of all involved. Preschool teachers have full days with many objectives to meet in a short amount of time. Some teachers immediately saw the value of this initiative and the potential for positive impact on student health and classroom performance while others initially saw only the burden of increased paperwork and required classroom content. A culture shift was needed in these classrooms. Over time nearly all teachers became invested in the program and worked to faithfully incorporate it within their classroom. Overall, teaching staff has made great progress in ensuring that all children and families receive the education and support they need to lead healthy lifestyles.

Attendance at Healthy Families events during the first year was also a challenge. Fitness classes and grocery store scavenger hunts were well attended; however “Fresh Start for Families,” a multi-session, more didactic offering, saw less participation. This course was initially revised and shortened and then finally replaced with other offerings which better met parent needs. A “Wellness Topics” program was developed and presented at existing monthly parent meetings. At these meetings, the wellness coordinator or a wellness instructor offered presentations on healthy eating on a budget, stress reduction, picky eaters and more. This provided an opportunity to support and educate parents without adding another evening event to their schedules.

A smoking cessation series of classes was offered in Year 1 and 2 but failed to draw significant attendance in spite of efforts to attract people who were even just considering quitting. In year three a decision was made to offer brief, single session presentations on this topic at parent group meetings or playgroups, per parent request.

Over the course of the project, the agency also increased efforts to improve the nutritional quality of classroom meals, establishing regular meetings with meal vendors to provide feedback on menus and share ideas on low-cost ways to improve nutritional value. Barriers include the cost of food and labor as
well as preparation time--ironically some of the same challenges a family has when trying to make improvements to the health and nutrition of their meals.

Finally, while program staff are of one mind on the need for the kind of data collection that allows for a thorough evaluation, it has been a challenge, at least early on, to help teachers and parents see the need to take the time to utilize tools such as pre and post surveys, quizzes, etc. in order to document outcomes. Over time, project staff made adjustments to the length of the parent surveys and asked parents to fill them out during an agency-wide health screening. These steps helped, but we still struggled with time constraints on the part of the teachers and parents. Communicating the importance of learning from this initiative, figuring out ‘what works’ has been an important activity for program staff.

Results

The Healthy Families Program had three cornerstone goals. The following is a description of the implementation of the program as it related to each of the goals and data to show at what level the goals were accomplished.

Goal 1. To improve the health and wellness of 400 preschool children.

A. 95% of enrolled preschool children each year will engage in structured fitness and/or nutrition activities daily when attending.

- Each preschool classroom participated in a bi-monthly visit from a Healthy Families Wellness Instructor. Classroom visits for the past two years have been conducted primarily by a wellness trained instructor. Classroom visits involve a variety of large motor skills, hopping, balance, crossing the mid-line, stretching and aerobic exercise. The instructor works to help the children understand the value of making our hearts and bodies work along with teaching colors, numbers, language, nutrition, problem-solving and team-building.

- Number of Healthy Families classroom visits: Year 1-286 visits, Year 2-250 visits, Year 3-300

- Healthy Start Nutrition and Fitness Curriculum was presented by preschool teachers on a weekly basis ranging from 2 to 13 lessons per week on average. Informal nutrition and physical activity lessons occurred throughout each day at meals, on the playground and in the classroom.

- Tobacco prevention was included through lesson plans in all classrooms.

- Physical Activity in the classroom averaged 33-47 minutes per day.

- Preschool Teachers made a strong commitment to the Healthy Families Project, demonstrating additional instruction and activities that supported healthy active lifestyles for families.

- Family goals were set with each family at the beginning of each year. Teachers encouraged families to set Wellness related goals for themselves. Increased family activity and healthy eating were often set by families.

B. 90% of children will demonstrate increased knowledge of healthy lifestyle choices (including nutrition, fitness and abstinence from tobacco use as adults) as measured by pre and post surveys.

- Year 1 data demonstrated a statistically significant gain in both nutrition and fitness knowledge of the children (p<0.0001). This gain was also noticed by parents and teachers who were inundated with children excited about “go” and “slow” foods.
• Year 2 data indicated that 73% of children increased their total Healthy Start Quiz score from
time 1 to time 2.
  – 68% improved Healthy eating scores
  – 98% improve Fitness scores

• Indications from preliminary results of Year 3 data indicate increases on both the nutrition and
  fitness sub scales for knowledge in children. Awaiting further analysis of data from Children’s
  Memorial Research Center.

C. By year 3, 85% of children will maintain or improve their age appropriate BMI as calculated from
  height and weight measurements at the beginning and end of the school year.
  • In Year 1, 46% of children who were overweight at time 1 moved to a normal weight at time 2.
    In addition, 26% of children who were obese at time 1 moved to overweight at time 2. Overall in
    Year 1, 72% of children improved their age appropriate BMI from the beginning of the school
    year to the end of the school year, 14% maintained their weight status for a total of 86% of
    children maintained or decreased their age appropriate BMI from the beginning of the school
    year to the end of the school year.
  • In Year 2, 19% of students who were overweight at time 1 normal weight status at time 2. In
    addition, 21% of students who were obese at time 1 moved to a overweight or normal weight
    status at time 2. Overall in Year 2, 40% of children improved their age appropriate BMI from the
    beginning of the school year to the end of the school year. Another 37% of children maintained
    their weight status, for a total of 87% of children maintained or improved their age appropriate
    BMI from the beginning of the school year to the end of the school year.

Analysis of Year 3 BMI data is not calculated at the time of this report. A full report will be
forwarded when it is complete.

Goal 2. To increase the Health and Wellness of 400 families with preschoolers.

A. 70% of parents each year will increase their knowledge of family health and wellness as measured by
pre and post health surveys.
  • Health Homework was distributed to parents on a regular basis to complete at home. In Year 1,
    289 out of 362 families returned health homework. In Year 2, 264 out of 363 families returned
    health homework, and in Year 3, 282 families returned health homework. Over the three years the
    numbers of families who returned completed health homework has been consistent. Points for
    completion of homework and participation in other healthy activities were calculated. Incentives
    were given based on number of points a family earned. The number of points that families earned
    was impressive! In Year 1: 36,733, in Year 2: 29,026 and in Year 3: 29,569.
  • Year 1 pre/post survey data indicated the following increases in parent knowledge, attitude and
    behavior:
    – 43% of parents showed an increase in nutrition knowledge
    – 40% of parents showed an increase in healthy eating attitude
    – 51% of parents showed an increase in healthy eating behavior
    – 53% of households had an increase in home fruit and vegetable availability
Year 2 pre/post survey data indicated the following increases in parent knowledge, attitude and behavior:
- 34% of parents showed an increase in nutrition knowledge
- 36% of parents showed an increase in healthy eating attitude
- 44% of parents showed an increase in healthy eating behavior

Analysis of Year 3 Parent Knowledge data is not calculated at the time of this report. A full report will be forwarded when it is complete.

B. By year 3, 60% of parents will take part in out of school time fitness activities with their children as measured by homework activity logs and wellness event attendance sheets.
- The number of families that reported participating in out of school time family fitness activities was as follows: In Year 1 318 families or 88% of families, in Year 2, 259 families or 71% of families, in Year 3 families or 54% of total preschool families.

C. By year 3, 75% of parents will attend at least one Family Wellness Event, as measured by attendance logs.
- Wellness Classes and Events were offered after hours and promoted through the preschool classrooms. They included Wellness Presentations at Parent Meetings, Fitness Classes, Creative Movement for Kids, Creative Movement for Families, Grocery Store Scavenger Hunts, Kids in the Kitchen, Family Wellness Fun Days, Wellness Center and Active KidFit. In addition, well-equipped regional Wellness Centers were open regularly with active KidFit being offered while parents worked out.
- In Year 1, 29 Family Wellness events were offered with a total of 32 families participating in 1-6 events. In year 2, 38 Wellness events were offered with 49 families participating in 1-6 events and in year 3, 74 Wellness events were offered with 62 families participating in 1-6 events.
- Wellness Center Visits for each year were as follows: Year 1-981 visits, Year 2-1,186 visits and Year 3-1,248.
- In years 2 and 3 the Wellness Coordinator and/or a Wellness Instructor presented Wellness Topics at Monthly BHK Preschool Parent Meetings. Wellness Topics included active learning presentations on healthy cooking on a budget, healthy eating for picky eaters, stress management, physical activity with preschoolers and more. In Year 2, 186 parents attended Wellness Topic Parent Meetings in Year 3, 213 parents attended Wellness Topic Parent Meetings.
- Overall, attendance at Wellness Events and Wellness Topic Parent Meetings for each year was as follows: In Year 1, 32 families or 9% of families attended, in Year 2, 186 families or 51% attended, in Year 3, 213 families or 59% attended.

Wellness event participation grew over the 3 Year period. An assessment of what wellness classes were most popular to families was done throughout each year of the program. We are confident that as the program continues to grow and become a stronger part of the agency, participation in Wellness Classes will grow.
Goal 3: To further expand collaboration between agencies/institutions promoting wellness and disease prevention and to increase utilization of their services by community members.

The Healthy Families Community Consortium (as opposed to the Project Consortium made up of the four core organizations partnering to deliver project services), evolved substantially over time. It was first established as the Healthy Families Consortium with a mission to increase community awareness about health and wellness and increase utilization of existing wellness-related services. Initial membership included Healthy Families project staff, representatives from local hospitals, schools, local Michigan State University-extension, and Michigan Tech University wellness staff. The group strategized about local community needs with a general consensus that there was much available in the community but that resources were under-utilized. The group then explored development of a website dedicated to wellness activities in the 3-county area and worked to identify a funding source. The group also identified a need to really look, if significant long-term change was to occur.

The local public health department, a member of the consortium, applied for and received two grants in 2009, addressing these issues. The first, a state of Michigan Building Healthy Communities grant, provided funds to help seed programs aimed at improving access to healthy foods and physical activity. The second grant, Healthy Kids Healthy Communities (Robert Wood Johnson) grant focuses on policy change and the built environment in an effort to prevent pediatric obesity.

Having an active Consortium in place was critical in the success of these grant proposals. The work done through Healthy Families started the community dialogue on the need for childhood obesity prevention and sparked the process of collaboration necessary to make this community a viable candidate for funding. Leadership for the group has transitioned to the health department which has funding to support a full time staff position charged with leading community efforts.

The Consortium began the work necessary to achieve the long-term goal of the Healthy Families project—pediatric obesity prevention. Most importantly, the Consortium continues and will provide ongoing local leadership for change. On-going activities:

- The Healthy Families Community Consortium meeting is held monthly at the WUPHD and includes a representation from a diverse variety of local health and human service agencies in addition to community members, city managers, gardeners, bike task force members, schools and others interested in community change.

- The Healthy Eating Committee meeting is held monthly at BHK and is organized by Ray Sharp through the WUPHD Healthy Kids/Healthy Communities project.

In collaboration with Ray Sharp from the WUPHD’s Healthy Kids/ Healthy Communities program we have recently surveyed local families on their preferences for future wellness opportunities in the area. Families were asked at parent meetings at BHK and through WIC to answer questions to a brief survey and invited to write in their thoughts as well. Individuals that responded to the survey answered that they would like a YMCA in the area or another indoor space for play and recreation as well as better access to school facilities such as pools. In addition they indicated that they would like to have better access to lower cost fresh fruits and vegetables.
Potential for Replication

Yes, however we are still in the process of analyzing data to refine our recommendations for other programs in the area of Preschool Obesity Prevention best practices and then plan to share these findings with other Head Start agencies. BHK will strive to continue its research into “what works” in addressing this critical piece of prevention.

After the Grant

Yes, activities and programs will be supported by existing funding and ongoing effort to secure additional grant funding.

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Community Characteristics

Road to Good Health School-Based Health Clinics included three school districts, and had a service area that covered 1800 square miles. Given that there are approximately 1800 students total for the three districts, you could say there was 1 student per square mile of service area. The school bus is the only form of organized transportation. Given the high rate of parents that either do not have a car, or cannot miss work for a sick child, providing health care right at school was a serious need. Other factors that illustrated need included the fact that the service area is not only a Health Professional Shortage Area (HPSA), but also a Medically Underserved Area. The target population was K-12th grade students in the three school districts. The service area has high rates of chronic illness, poverty, unemployment, single parent homes, abuse and neglect, uninsured and underinsured children, and Medicaid eligible children. The Road to Good Health School-Based Health Clinics was designed to increase access to health care, and to provide comprehensive, quality health care and mental health counseling for rural students. We offered primary preventative, acute, and chronic health care services, as well as mental health counseling.

Services Offered

A number of critical problems were encountered during the life of the project, including:
- coping with the geographical distances that are characteristics of the region
- adjusting to the winter climate conditions
- operating within the confines of the limited scheduling of the clinics' days of operation
- the providing of qualified staff
- providing adequate time for the administrator of the grant
- placement of the clinics within the school buildings
- arranging for and recovering the third party payments for medical services

All of these problems contributed to the basic problem of not being able to generate the number of clinic users needed to make it sustainable.

The nature of the geographical characteristics involved the distances from one high school site to another. The three clinic sites were far enough apart to reduce the ability of the staff to cover them in a single day. In addition, the annual winter snowfall created both travel problems as well as school cancellations. With school cancellations, the impact could be a two week interval between clinic hours of operation. These geographical and climate conditions did not allow for operational solutions. Various efforts were discussed and implemented to reduce the negative impact of these factors. For example, the project placed the Physician Assistant at the largest health center 2 days a week, while serving the other two smaller centers 1 day a week. This left a "floating Friday" to be alternated between clinics.

Innovative Solutions to Problems

A number of critical problems were encountered during the life of the project, including:
- coping with the geographical distances that are characteristics of the region
- adjusting to the winter climate conditions
- operating within the confines of the limited scheduling of the clinics' days of operation
- the providing of qualified staff
- providing adequate time for the administrator of the grant
• placement of the clinics within the school buildings
• arranging for and recovering the third party payments for medical services

All of these problems contributed to the basic problem of **not being able to generate the number of clinic users needed to make it sustainable.**

**Results**

Intake forms were completed by the support person at each clinic. Over the 3 years of the project, the following information was found useful:

To give some perspective of the size of each school, the number of students enrolled in the project’s schools dropped from approximately 1,800, to approximately 1,625. Below is a look at each school’s enrollment for year 3 of the project.

![Bar chart showing number of students enrolled in each school for year 3 of the project.](image)

The total number of visits to all clinics over the 3 years of the project was **2,434 visits**. Visits are defined as a visit/session with a Nurse Practitioner or Mental Health provider. Looking at total visits over the years, we can see how the changing of schedules and providers, which was most dramatic in year 3, and the withdrawal of the mental health provider, also in year 3, affected the program.
As you can see above, the number of visits plummets dramatically in year 3, due to the withdrawal of mental health services and a remarkable flux in schedules and providers for primary health.

Consistency in days and providers is an extremely important part of this type of programs success. Looking at the usage of the clinics by students (percent of total visits) illustrates this point:

Being that Rudyard had 2 days of services a week, versus 1 day a week at the other clinics, one would think that they would have the lion's share of visits. Unfortunately, Rudyard had the most turn-over, as far as providers, and dramatic changes in schedules in year 3. Brimley's days were switched during the project as well. And, because of the high numbers of tribal youth, many of Brimley student parents chose for their students go to tribal health providers. Engadine, which has the smallest student population, kept the same days and provider during all 3 years of the project, thus grabbing a largest percentage of the total visits.

At the end of years 1 and 2, various groups within the schools, or associated with the schools were asked to complete questionnaires concerning their awareness of, and reactions to the health clinics. The following categories were asked to answer the surveys:

- Student who had used the clinics
- Students who had not used the clinics
Potential for Replication

Similar projects could be successful in other rural settings, if certain critical circumstances were different. The geographical distances should be less than experienced in this project or overcome by a telecommunications or telehealth application for providing medical consultations. Another possibility that might apply in other rural areas is the ability to have an on-call agreement with a local health provider. The number of days that the clinic should be functioning should be at least four weekdays; a single day hampers the ability to become accepted by the students. There is a sense that the clinic is not reliably available when needed.

A rural area with a more moderate climate would encounter fewer days where the school is closed due to inclement weather. Other rural areas may experience fewer difficulties with arranging for the recovery of costs. Especially with the provision of mental health services, if the provider is associated with an institution which qualifies for governmental reimbursement, then the recovery of costs would be easier to accomplish.

An administrator who is provided sufficient work time to manage the operations and coordinate the various components involved with a school based health clinic is necessary.

There exists a range of organizational cultures that interact in conducting this type of work, and each culture has the propensity of not understanding how the other cultures act and communicate. Even with the health field there are different approaches: community health staff approach situations differently than hospital oriented staff; mental health professionals may not always fully appreciate the physical health staffs' response to patient problems. An administrator has the potential of serving as the coordinator, if not the referee, under these conditions. The administrator can also monitor the billing process, as well as the budget.

After the Grant

No, the program will not be sustainable, but with the changes suggested in this report, we believe it could be.

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Community Characteristics

The mission of GTRHCC is to help low income (up to 200% FPL), uninsured adults in three (3) counties in northwestern lower Michigan have access to health care. As the organization grew, it became a primary health care home, not just an urgent/episodic clinic, for the needy. Dental services and good oral hygiene habits were identified as high needs in this population. The State of Michigan covers dental services for children with Medicaid and other programs, and eligibility criteria for children are very inclusive. However, Medicaid eligibility criteria for adults are very stringent. Just being poor does not make one eligible. Therefore, the number of adults in need was very large, and is continuing to grow. Our estimate at the time of the grant application of the number of adults who could meet our eligibility criteria in the three counties our organization serves was about 11,000.

Services Offered

The children were students in schools within the 5 county intermediate school district, grades K through 6th.

- Oral health education, including nutrition, brushing, flossing, etc. to the students in their classrooms.
- Actual instruction in “how to brush” and floss.
- Toothbrush, paste and floss kit for each child.
- Visual oral screening exam to identify if there were any “needs”.
- Letters and in some schools, phone calls, to parents of children with identified needs and the offer to assist any parent to get his/her child into a dentist for care.

The adults served are those who are at 200% or less of the FPL and uninsured, and are residents of Benzie, Grand Traverse and Leelanau counties.

- Expand access to dental care (quantity and types of services) within the private, volunteer dental community.
- Increase the network of private community dentists who will pledge free services to adult patients.
- Expand awareness in the community about oral health.
- Consider the possibility of having a mobile dental van.

Innovative Solutions to Problems

We started out with the concept and original grant application with a HUGE target population. We thought we could be all and do all. Identifying a feasible and more realistic school population, e.g. grades, schools, how to repeat in years 2 and 3, for our GKAS activities was absolutely necessary. We were able to identify reasonable numbers by working with the ISD leadership to identify those grades, schools and ages with the most need. This worked well.

Initial contacts with all the individual schools, from principals to secretaries, were challenges to schedule. This was more of a problem than anticipated. Trying to arrange, coordinate and implement the GKAS activities at the same time school was starting was another challenge. We developed a core contact group at the schools to help us, and after the first year it became easier and smoother.
Recruiting volunteers to assist with GKAS education and the screening exams was challenging. Our volunteers decreased in willingness to give up the required time over the course of the 3 years. This was unexpected. We therefore had to use GTRHCC staff to assist.

We also planned to use the Youth Health and Wellness Center, operated/staffed by DCN, as a site to refer students for care. This site closed its dental chair. We then had to arrange other options in private dental offices for students with need.

We initially thought that a mobile dental unit would be possible. Once the project got underway, we lost support from DCN for this idea. Essentially, we had to shelve it. This put a large burden on the volunteer dental network, because our only two options for restorative care for the adults were to utilize our “uncompensated” network and to send patients to DCN, where we received reduced fees (that increased each year).

Results

Our main goals and activities that we addressed and used to evaluate were:
1. Increase access to affordable comprehensive dental services for low-income people.
   Outcomes of actions toward this goal are:
   a. **Recruitment of more private dentists to volunteer** – we were able to increase our network to 38 of 90 dentists participating. This is 42%; we hoped to get 50%. However, the participating dentists have increased the number of referrals (and therefore services) they would accept by a small amount. Because of this network and the people we could send to DCN, we helped 618 people.
   b. **Signing up more people (and small businesses) into the Northern Dental Plan**, a lower-cost “network” of dentists for people who have to pay out of pocket. This is DCN’s program, and it has faltered. Private dentists also have refused to participate.
   c. **Hiring an assistant for the Dental Access Program** – this was done, and the DAP Director and assistant have worked diligently with the private dentists, not only to recruit them but to provide good provider services. This has been successful.
   d. **Creating a process to ensure our patients are committed to the program, and that we are not just giving money for them to receive services**. Our “Commitment to Care” program is well-received by the dentists (makes them want to continue to give uncompensated care), and the patients who do participate, like it because it’s a way to “pay” back, and they also seem to develop some good oral hygiene habits. We hope to measure this as we see existing patients return for prophylaxis after they have completed their restorative care.
   e. **Mobile dental unit** – this idea fizzled. It would be very expensive. No support from the other consortium partners to pursue it.

Overall, we achieved success with this. However, the demand has grown.

2. Increase community awareness of the benefits of good oral health. Outcomes of actions toward this goal are:
   a. **Development and implementation of a marketing plan**. We created and implemented a plan to collaborate within the community at non-health-related events, and at health-related events (described below). Working with two local, renovated movie theaters was especially good as regards increasing community awareness. There were children AND parents. Getting in front of parents was a big help.
   b. **Meet with community agencies**. Collaboration with other nonprofits has been ongoing. They understand our program and are referring many people for care.
   c. **Traverse Bay Give Kids a Smile**. This program educated 12,260 students about oral health, including nutrition. 6,817 of these students were screened for obvious oral disease. 1,501
were identified with need. Of those so identified, only 9%, of whom we are aware, got dental care in spite of substantial efforts to talk with and notify parents of the problem, along with the offer of help getting the students to a dentist for treatment. This program was very expensive to offer. While we believe that our instruction helped the students learn some good oral health habits, we cannot demonstrate that. Also, we are very disappointed that more students with need did not (or we did not learn about it) get the needed care. Any future efforts with children will include their parent(s). The decision maker needs to be aware, too.

d. *Youth Health and Wellness Center having a dental chair for students* – this was disappointing. Dental activities were dropped from this center by DCN who administered the services. Funding was a big issue.

e. *Mobile dental unit* – consortium partners were not enthused or supportive. This is a very expensive endeavor.

Overall, we reached many people, especially children, but we are not sure how effective our message was and if it stimulated people to develop good oral health habits (or maintain good ones). We believe we had success within DAP, and we certainly learned a lot. We are committed to continuing it and have some new, exciting potential opportunities ahead.

**Potential for Replication**

Yes, it would be possible. We believe that GKAS would work better on a much more limited, smaller scale. If done in only one or two schools, it might be better and easier to ensure that the kids got needed care.

For the adults, it would be difficult to have a large volunteer provider network if there are not a lot of dentists. The issues of transportation, appointment times and scheduling are challenges.

Although we were not able to test this, we think that perhaps some type of mobile equipment to go to the patients might be more successful.

**After the Grant**

Yes, the program will be sustainable. First of all, our board of directors made a conscious decision to continue, and grow, our dental program. There is a strong commitment, and that is crucial.

We hired a Development Director a year and a half ago because our whole organization needs community support. She is targeting donations and grants specific to our dental program. We have also been applying for other small grants, all of which help. We believe that we will have the funds to keep DAP going!

Additionally, we have expanded our network of private dentists who volunteer. That will continue. And, we are in discussions with the University of Michigan to create an ongoing dental clinic that will utilize student dentists. If this comes to fruition, we will have much more access.

**Contact:**

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Community Characteristics
The need for the project was critical. The project was designed to: stabilize crisis for youth and families, facilitate access to mental health services, to improve family relationships and communication, and provide transportation for clients to doctor appointments, dentist appointments and mental health appointments. Referrals would be made to appropriate services such as chemical dependency assessments, mental and physical health services. Transportation was a tremendous need due to the long distance between the reservations and services providers. For instance, trips to the nearest dental clinic serving clients with MA were 282 miles round trip. The Red Lake Reservation is very isolated. It is situated about 45 minutes to an hour away from Bemidji, which is the hub for dental, prenatal care, and mental health services.

Services Offered
Services provided through the grant included crisis intervention, family and individual counseling, transportation to and from other appointments such as dentist or medical appointments. Gas vouchers were provided to clients if they had a vehicle and were going a medical, dental, or mental health appointment. Most of the work involved crisis intervention. Crisis included a range of issues from no fuel for heat in the winter to runaway children with drugs and alcohol dependency. The persons dealing with these issues were living with poverty with multiple stressors.

Innovative Solutions to Problems
One of the most significant problems encountered was the widespread service area. The distance to service providers meant sometimes spending an entire day(s) with one family’s need. One of the only dental clinics to take MA patients was located in Deerwood, 141 miles, one way from Red Lake MN.

The consortium partner agencies went through staff shortages, some alarming upheavals and budget shortfalls. New staff lacked experience and relational connections to the client base. Initial networks disintegrated and needed to be reformed. The changing consortiums were trying to navigate their turbulent situations. This generally left the Interventionist alone to pitch in where they could.

The needs on the Reservation were urgent and desperate. The basic presenting need had to be addressed before building skills that would prevent or help turn the tide on future crisis.

Results
Clients self-reported on improvements in target areas. We documented when clients made dental, medical, physical and chemical health appointments. Improved communication and relationships was determined by family members’ use of new communication skills (using “I” statements, taking personal time outs, not yelling or using put-downs, etc.)

Potential for Replication
The position met critical needs and likely saved some lives. The client population struggles with generational poverty. One needs to meet desperate, immediate, physiological needs before gaining traction with larger life changes. For one client, it was a mattress to sleep on. Another needed fuel for the furnace. For another it was insulin. Once that need is met, the next need bobs to the surface. The insulin prescription lapsed because mom was too depressed to get out of bed. She had no ride to meet with the
psychiatrist to assess and prescribe an antidepressant. One hopes to strengthen her to the point where she can start to struggle on her own and start meeting the unmet needs of her children at home. She likely would have died in bed had Concha not gone to her.

The life expectancy for men on the reservation is 48 years old. Everyone has had people close to them die. They struggle while grieving. A native worker confessed, “It’s hard to grow up Indian.”

Honestly, we did not know how hard this would be. The needs were basic and time consuming. The existing systems were overwhelmed and under equipped. More effort was invested with fewer families. These families had further to go to stabilize.

The effect on the family members was amazing. The moms, dads and children weren’t kidding when they said, “I don’t know what I would have done without you.” A mom heard her son could no longer go on living. Where could she take him? How would she get him there? Concha was able to find a mental health center to take him. She drove the family there herself and arranged follow up monitoring and counseling. A student had been referred with mental and chemical health concerns, but their family car wouldn’t start and their home was freezing up. First, Concha found some fuel oil and then they could talk. Many of these situations were a matter of survival. Moms, dads and children were loosing hope. Hope given in a desperate moment is very well received.

**After the Grant**

The project will not be sustainable once the Outreach grant funding has ended. There have been many cuts across the board financially within each community. Combined with changes in tribal leadership, funds are simply not available.

At one point, it looked like Red Lake Family and Children’s Services could sustain some of this with a third party billing system. They lost that capacity when their licensed, Clinical Director left. Evergreen also undertook a feasibility for third party billing. Due to the restrictive nature of our State’s administration of Children’s Therapeutic Support Services, this was not possible.

**Contact:**

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Community Characteristics

The Southeast Health on Wheels “S.H.O.W. Mobile” Program is a primary “whole” health care, health prevention, health literacy and educational program, along with being a site for experiential learning for the students of Southeast Missouri State University (SEMO), and other allied health professions. The program is designed to serve geographically isolated residents in a rural, economically depressed region of the Mississippi Delta. The target community includes the six county area (~3,500 square miles) of Dunklin, Mississippi, New Madrid, Pemiscot, Scott and Stoddard counties of southeast Missouri, referred to geographically as the “Missouri Bootheel.” Four of these targeted counties represent four of the five poorest counties of the 10th poorest congressional district in the nation (MO-8). The S.H.O.W. Mobile is a 38-foot mobile health facility outfitted with specially designed medical and dental equipment. Federally directed funds provided the specific income to purchase the unit and equipment only.

Services Offered

Services provided by the medical providers on the S.H.O.W. Mobile include but are not limited to health literacy programs and activities (a primary monthly, national theme is addressed as well as interventions relevant to individuals/groups as requested/indicated), health promotion interventions (physical examinations), disease prevention activities (vision, hearing, depression, cholesterol, blood pressure, nutrition, diabetes, screenings), and the provision of primary care (diagnosis of acute episodic illness as well as diagnosis and management of chronic conditions). The programs and services offered are available to all residents of the target counties, realizing that many residents are uninsured, underinsured, or face significant access to care barriers. No one is denied service due to lack of funds. A well documented and recurring theme identified as a barrier to care has been transportation. The mobile nature of this project serves to address this barrier.

The program has also been fortunate to have recruited the paid services of one (1) dentist and one (1) hygienist and two (2) volunteer dentists to begin delivering “urgent care” to the residents of 3 (three) of our target counties. This service has been so successful that we are seeing 20-25 patients in a 4-5 hour time span on Saturday mornings. Since beginning this in early 2010, we have seen 133 dental clients, most of which were in severe pain and needed extractions.

During the last funding period, May 1, 2009 through April 30, 2010, we provided direct medical services to 2896 unduplicated clients and had over 11,000 health encounters (health education/literacy) within the targeted service area. Over the past six (6) months we have provided “urgent” dental care to 133 residents. These 127 clients were all in the adult age group and evenly divided between African Americans and Caucasians.
Innovative Solutions to Problems

The major challenge/problem has been with the recruitment/retention of primary health and dental service providers. When the RHO grant application was initially submitted, the University employed their own medical providers and was working to get plans in place to be able to do Medicaid, Medicare and third-party billings. This model did not work out and in late 2007, the S.H.O.W. Mobile Project partnered with SEMO Health Network, a federally qualified health center (FQHC), for the provision of primary health and dental service providers. This partnership also did not work as envisioned and SEMO Health Network withdrew from the partnership in Jan. 2008. In February 2008, Southeast Missouri State University (S.H.O.W. Mobile Program) partnered with Southeast Missouri Hospital (SEH) for the provision of primary health care. This partnership continues today. The S.H.O.W. Mobile Program located our current dental service providers in late 2009/early 2010 and has been able to provide dental care aboard the S.H.O.W. Mobile since that time.

Results

Both major collaborators (SEMO and SEH) will be responsible and will utilize multiple means to collect data for formative and summative evaluation purposes. Forms will be developed specific to anticipated outcomes. For example, quantitative data will be collected by use of surveys through pre and post testing of clients to determine health literacy resulting from S.H.O.W. Mobile intervention. Also, quantitative data of client demographics will be collected each day of service, and will answer such questions as who is being served, what service was provided, when, where, or is this a new or repeat client. Qualitative methods of data collection will include interviews, examination/analysis of client records, and the analysis of data summarized by other groups regarding the health status of residents in the Bootheel. The formative data collection will be verbally reported at the monthly S.H.O.W. Mobile staff meetings. There will be a quarterly summary submitted with this information that includes quantitative and qualitative data collected during that period. Summative data for the program year will be analyzed and reported by the S.H.O.W. Mobile staff to the administrative staffs of both major collaborators. This report will be a part of the SEMO and SEH’s annual assessment processes. Evaluation outcomes will be used for on-going quality improvement and as an accountability measure for
future grant writing activities. Under the leadership of the S.H.O.W. Mobile Director, the S.H.O.W. Mobile staff assigned to the unit will be responsible for the daily collection of data for the formative evaluation. Tracking and documenting the number of faculty and students who have completed clinical and experiential learning activities on the S.H.O.W. Mobile will be the responsibility of the BSN (student preceptor). A thorough accounting of the hours will be maintained, as well as the nature of the service provided and the number of clients receiving the service. Qualitative feedback will be collected through interviews regarding clients, faculty, and student perceptions of their experience. Participant observation methods will be utilized by staff as a part of the evaluation process.

**Potential for Replication**

Absolutely, besides the mobile nature of the program, a partnership between a University and their College of Health and Human Services and a regional Hospital is unique and very advantageous in many ways.

**After the Grant**

Yes, the program will be sustainable, for the short-term, expected to and on-going planning for the long term.

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Community Characteristics

The purpose of the Staying Well at Home (SWAH) project is to support service area regional collaborative activities to address the three goals that define the levels of healthcare needed to help an elderly citizen live independently, avoid re-hospitalization and maintain the best quality of life over an extended period of time. The SWAH project proposes to serve residents with chronic diseases and acute illnesses among the 15,466 elderly residents (age 65 and older) in nine counties: Hall, Boone, Greeley, Hamilton, Howard, Merrick, Nance and Sherman, and approximately 553 elderly who reside in Buffalo, Madison, Platte, Valley, and Wheeler counties.

The Home Healthcare program at SFMC serves approximately 800 patients a year. At a minimum, 120 patients (15%) need telehealth monitors in the home each year. The Staying Well at Home Project serves home-bound residents with chronic diseases and management of care after acute illnesses among the 15,466 elderly residents (age 65 and older) in nine counties: Hall, Boone, Greeley, Hamilton, Howard, Merrick, Nance and Sherman, and approximately 553 elderly residents who reside in the area served by Home Health in Buffalo, Madison, Platte, Valley and Wheeler counties.

Services Offered

<table>
<thead>
<tr>
<th>Services</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage of telehealth monitors to read vital signs at public sites and transmit trended data of participants to a Central Nursing station</td>
<td>Elderly patients (age 65 and older) and/or those at risk for chronic diseases able to live independently</td>
</tr>
<tr>
<td>Usage of discharge protocols to develop a discharge pathway that enables patients to receive information and access to community resources that prevent 30-day re-hospitalizations</td>
<td>Patients hospitalized for diagnoses related to chronic diseases. Patients are categorized as low risk, moderate risk or high risk for re-hospitalization and protocols are administered accordingly</td>
</tr>
<tr>
<td>Usage of telehealth monitors to read vital signs in patients’ homes and transmit trended data to a Central Nursing station</td>
<td>Elderly patients (age 65 and older) and/or those at risk for chronic diseases able to remain in their homes with the assistance of care giver</td>
</tr>
<tr>
<td>Collection of trended data from public site telehealth monitors and in-home telehealth monitors to share with physicians</td>
<td>All participants and patients in the Staying Well at Home program</td>
</tr>
<tr>
<td>Patient education about chronic diseases</td>
<td>All participants and patients in the Staying Well at Home program</td>
</tr>
</tbody>
</table>

Innovative Solutions to Problems

<table>
<thead>
<tr>
<th>Topic</th>
<th>Issue</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge Pathway and Protocols to help reduce re-hospitalizations</td>
<td>The variance in the size and the staffing culture at the hospitals made it impossible to reach the goal of a uniform discharge plan. (i.e., Hospital discharges that happen weekdays are different than those in the evenings or on weekends due to the lack of a designated discharge planner/social worker. Also, many nursing homes to where patients are discharged are not fully staffed on weekends or evenings)</td>
<td>The hospitals agreed to the classification of patients according to their risk of re-hospitalization and created common protocols for each of three categories: low risk, moderate risk and high risk.</td>
</tr>
</tbody>
</table>
### Topic | Issue | Resolution
--- | --- | ---
**Chronic Disease Education to increase management and wellness** | Health educators found it difficult to present chronic disease information to elderly residents in group settings | After trying several additional approaches (such as brochures and CDs), the project settled on 1 on 1 education. Senior residents are most engaged when speaking with a nurse.

**Closing of Student Wellness Works as a public site** | In Grand Island, Saint Francis Medical Center decided to close its education site, located in the community’s major shopping mall, for cost reasons | Site moved to Cardiac Rehab at the hospital (but kept open to the public). This became our most successful location.

**30-Day Re-hospitalizations** | There are too many variables to determine how much impact the Staying Well at Home project is having on readmissions to the hospital for the same diagnosis | For future projects cardiac rehab sites offer the opportunity to statistically compare 30-day readmissions of patients who use SWAH with those who don’t.

## Results

The Staying Well at Home project sought to achieve four key outcomes:

- **Significant and ongoing usage at public sites by swipe card holders to demonstrate significant engagement in technology to provide management of chronic diseases and other health problems by the public.** The participation by swipe card holders has been extremely successful. As shown in the project’s measures, the project easily surpassed its medically tracked readings each year. During the grant period 270 unduplicated individuals have enrolled in the swipe-card program and the number of active users always has been close to its present number, 190.

- **Demonstration of the acquisition of knowledge of vital signs readings and chronic disease information to change behaviors.** Our plan to provide presentations about chronic diseases to older patients during lunches at the senior centers simply didn’t work. The older residents couldn’t focus on the presentations for various reasons. Several had vision and hearing impairments. Others couldn’t stay mentally focused in group sessions. Once we switched one-on-one educational presentations, we were much more successful. Our educator had an immediate impact on each participant because of her nursing credentials. Several regarded her sessions as a free medical visit. We used post-tests to measure patient knowledge in year 1 and provided review questions on chronic diseases (and demonstrations of equipment usage) in years 2 and 3.

- **A reduction in the re-hospitalizations of patients within a 30-day period for the same diagnoses to show impact from the use of technology.** In the planning of our grant we did not anticipate all the variables that factor into patient re-hospitalizations. We believe that the Staying Well at Home program is a tremendous success but do not believe we successfully documented its impact. As shown in the chart on page 8, we could not provide a significant trend on the reduction in hospital rates.

However, SFMC was able to document successes in case studies of four patients, comparing their trips to the emergency room, inpatient care and skilled nursing during the six-month period before they had monitors and then for a six-month period after they used monitors. The patients experienced fewer trips for emergent care and a savings of $13,000 per patient.
**Figure 1**

30-day Re-hospitalization Rates - All Hospitals
Medicare Same Diagnosis

Source: Schmeeckle Research, compiled from data furnished by the 4 participating hospitals

**Figure 2**

<table>
<thead>
<tr>
<th>Home Health Care Studies</th>
<th>2008 (Jan-June)</th>
<th>ER</th>
<th>In-patient Care</th>
<th>Skilled Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without Monitor</td>
<td>8 visits</td>
<td>11 visits</td>
<td>3 visits</td>
<td></td>
</tr>
<tr>
<td>With Monitor</td>
<td>3 visits</td>
<td>3 visits</td>
<td>0 visits</td>
<td></td>
</tr>
</tbody>
</table>

Source: Saint Francis Medical Center medical records

**Figure 3**

<table>
<thead>
<tr>
<th>Financial Impact at SFMC Savings for Medicare</th>
<th>CMS Risk Adjusted Reference Group</th>
<th>15.5% Fewer Hospitalizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Medicare Cost Savings</td>
<td>$13,200</td>
<td></td>
</tr>
<tr>
<td>Total Medicare Cost Savings</td>
<td>$72,000</td>
<td></td>
</tr>
</tbody>
</table>

Source: Saint Francis Medical Center financial records

- **Significant and ongoing usage by in-home patients to demonstrate significant engagement in technology to provide management of chronic diseases and other health problems by the public.**
  During the grant period 260 unduplicated individuals have enrolled in home telehealth monitors program and the number of monitors in use at one time has grown to 30.

**Potential for Replication**

Yes, although we feel it is important gather more data to show that the program can have a significant impact on the reduction of 30-day re-hospitalizations. We believe our program is successful because it provides each patient/participant with statistical numbers on vital signs (such as blood pressure) that they can watch improve or deteriorate based on their own lifestyle behaviors. In addition, the trended data provides physicians better information to make healthcare decisions for their patients.

**After the Grant**

Yes, Home Healthcare Health Agency, which will sustain the costs for this program, sees Staying Well at Home as an ideal way to demonstrate other home healthcare services to hospitals and the public. Home Healthcare, which became HealthConnect at Home in February of 2010 and administers home healthcare in other Nebraska CHI hospitals, is interested in a partnership to expand the program. The Saint Francis Medical Center Foundation will continue to be available to assist the program with some of its needs.
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Community Characteristics

The North Country Health Consortium’s service area includes Northern Grafton and Coos Counties located in Northern New Hampshire and is generally referred to as the “North Country.” This area is bordered on the west by northern Vermont, on the east by northern Maine, and on the north by Quebec, Canada. The North Country is noted for its spectacular vistas and mountainous terrain lending immense beauty to the region but simultaneously creating economic and geographic barriers. More than 37 percent of the service area lies within the boundaries of the White Mountain National Forest. Over 50 percent of the total area is forested and, for all practical purposes, is unpopulated. It is important to understand that this part of New Hampshire is an area geographically and culturally distinct and quite different from the rest of the state, which has more in common with the Boston area than with the state’s northern tier.

The population density in the North Country region is 75 percent lower than the state average or approximately 19 persons per square mile compared to a population density of 132 persons per square mile for the state as a whole. Little public transportation exists for those traveling into and out of the area or between communities. The same winter weather that attracts skiers, snowboarders and others looking for winter activities makes the roads treacherous to navigate for long periods each year. Moreover, as a consequence of the region’s topography, average travel distances from most towns to available sources of health care available for low income families are 25 miles or more. From many towns, one-way trips of 45 minutes or more (in good weather) are likely. Moreover travel to a tertiary care facility (outside the service area) could take four hours or more by car depending on weather conditions.

Services Offered

Oral health services were provided at a number of community locations including community health centers, critical access hospitals, social service sites, community facilities, nursing homes, corrections facilities, faith-based facilities, and public health sites. Services included:

- Oral health screenings
- Health promotion and disease management
- Oral health education
- Oral prophylaxis
- Restorative services
- Extractions
- Denture repair
- Provider education

Innovative Solutions to Problems

The most significant challenge centered on ensuring workforce capacity to implement the project. The project planned for a full-time dentist to be hired. This proved to be very difficult. The Consortium contracted with multiple recruitment agencies and employed a number of efforts. The project used a part-time dentist, locum tenens, per diem and semi-retired dentists until a full-time dentist was found. Staff became very involved in statewide and legislative workforce policy initiatives to develop interest and understanding of rural workforce challenges and solutions. Consortium staff and members persisted in efforts to locate a full-time dentist and secure a contract. The current challenge for the group is to retain the full-time dentist in the region. Successful sustainability efforts are proving to be the most important for clinician retention.
Another significant challenge is the lack of funding sources available to cover adult oral health services for the lowest income population. Staff has written several grants for supplemental funding for both patients and the organization with some success. Limited funding is available for patients through local welfare offices and vocational rehabilitation programs. A sliding scale and payment plans have been implemented and this has attracted an adult population with some ability to pay.

**Results**

The project utilized an outside evaluator to design the evaluation plan as seen below. The following outcomes are observed:

**PROCESS MEASURES**

Expand capacity of Molar Express
- Contract signed with part-time dentist in May 2007
- Contract signed with a full-time dentist in October 2008 and re-signed in April 2010.
- Four volunteer dentists provided services over the course of the project.

Provide restorative care for adult underserved population
- The target adult population was seen at community clinics held at ten different sites over the course of the project including community health centers, critical access hospitals, social service sites, community facilities, nursing homes, corrections facilities, faith-based facilities, and public health sites.

Expand to serve long-term care residents
- MOAs were signed with two nursing homes to provide care on a monthly basis. Treatment plans were developed and preventive and restorative care services are provided.

Expand care to serve adults with developmental disabilities
- Adults with developmental disabilities are served in community clinics sites

Inform and educate North Country adults on good oral health practices
- A full-time Dental Hygienist was hired in March 2010 to provide preventive oral health services to the underserved population.

Patient satisfaction
- Patient Satisfaction Survey conducted February 2008 and July 2010

Sustainability
- A sustainability plan was completed and approved by the Board of Directors December 2009

**OUTCOME MEASURES**

Outcome #1--Expand Capacity
- One full-time dentist hired October 2008
- One full-time dental hygienist hired March 2010
- 184 clinics held in community sites
- All staff were provided with training in the area of x-ray certification, OSHA, CPR, general dental knowledge and integration with primary care
Outcome #2—Improve oral health status

- 1006 unduplicated patients were provided oral health care at 3,132 encounters.
- 87 adults were seen each month
- 92% of the adult patients were new
- 15% of the new patients were referred from member organizations
- Services provided
  - 214 cleanings, 373 evaluations, 490 x-rays, 213 fillings, 14 denture adjustments
- 45% of the patients completed their dental treatment plans
- 90% of the patients needed an extraction
- 30% of the patients no showed

Outcome #3—Improve oral health knowledge and behavior

- In 2008, 65.7% of North Country residents report having had their teeth cleaned by a dentist or dental hygienist within the past 12 months. This is significantly lower than the state average of 76.8%. This question was not asked on the 2009 BRFSS so we will need to wait for 2010 data for a comparison.
- Patient survey:
  - 48% of respondents reported that this was their first visit to Molar Express.
  - 32% reported having a cleaning at the visit
  - 87% report increased knowledge of oral health
  - 63% report improved oral health behaviors

Outcome #4—Ensure sustainability of services

<table>
<thead>
<tr>
<th>Adult population</th>
<th>% of revenues from payor sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH Medicaid</td>
<td>28%</td>
</tr>
<tr>
<td>Sliding Fee</td>
<td>67%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

Funding Sources:

- Revenues
- HRSA-RHOG
- NHDHHS
- Endowment for Health
- Cogswell Trust
- Delta Dental Foundation
- Tillotson Fund
- Merck Family Fund
- Boston University HCOP
- Consortium Members
Potential for Replication

To the extent that the program has been successful and will be sustained, it could be a best practice model and would provide other rural regions and communities with a process and tools for developing a solution to their needs.

After the Grant

Yes, the program will be sustainable. The Outreach Program, funded to expand oral health services to the underserved and unserved adult population, will continue beyond the Outreach funding. The program has been paired with the model of delivering oral health services to children on Medicaid; income is generated through a sliding fee scale, contracts with nursing homes and a corrections facility and insurance billing; grant funding and community support has been found to support the sliding fee scale and will continue to be sought; and the federally qualified community health centers in the region are applying for oral health expansion funding.

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Community Characteristics

Johnston County continues to be one of the largest and fastest growing counties in North Carolina (796 mi²) and is home to one of the most heavily traveled crossroads in the United States - the intersection of Interstates 95 and 40. Johnston County is directly adjacent (southeastern border) to Wake County, home to Raleigh, North Carolina’s capital. The North Carolina State Demographics Unit has classified Johnston County as a “High Growth, High Net In-Migration County” from 2000-2010, with a 35% increase in the total population by the end of 2010. In fact, Johnston County has been the fastest growing county in North Carolina over the last decade, with a 50% increase from 1990-2000 and similar growth patterns from 2000 to present.

The significant increase in population growth is largely attributed to its fortuitous location. Johnston County has long been a hub of business and industry, given the county is home to four major corridors (I-95, 40, and US Highways 42 and 70) and is home to a major rail hub extending along the eastern seaboard. These corridors effectively link any resident, business or industry to any location in the nation. As a result, over the last decade, Johnston County has seen explosive growth in industry – businesses such as Caterpillar (and 10 smaller companies supplying Caterpillar), Talecris Biotherapies, Andrew Corporation, Sysco, Environ Products, Hospira, and Novo Nordisk now operate businesses in Johnston County, employing well over 5,000 individuals. As businesses entered into the county, developers from Wake County, seizing a “golden opportunity”, bought up thousands of acres in the county, where land was much cheaper than its neighbor, Wake County. Unfortunately, the county began to grow in a significantly uneven fashion. The former farm fields in western Johnston, adjoining Wake County, have now become bedroom communities of Wake, attracting middle to high-income urban families seeking a “slow-paced, rural setting”. They have also become commercial centers, housing all of the aforementioned industries seeking cheap land to house commercial operations. While western Johnston County has become the equivalent of a “boom town”, the eastern section (points east of I-95) remains largely agricultural and undeveloped. No businesses, commercial centers or large housing developments have been established in eastern Johnston County in the last ten years (Johnston County Economic Development). While western Johnston County struggles with school redistricting, urban sprawl, and new highway construction (i.e., traffic), eastern Johnston County faces a crisis of infrastructure – most notably, the overall lack of primary care services – especially for those who are uninsured or underinsured.

Services Offered

Services included: (1) general outreach to communities and farmworker camps, including medical, dental and mental health/substance abuse screenings, and referrals to medical care, (2) Establishing permanent satellite outreach sites, where patients would have access to a Mid-Level Provider and Nurse, providing primary care addressing routine medical problems, diabetes, hypertension and cholesterol screenings, limited physicals and well-child checks, immunizations, limited laboratory services to include finger stick glucose, urinalysis, urine pregnancy testing, cholesterol and rapid HIV testing utilizing OraQuick, vision and hearing examinations, oral health screenings, and mental health/substance abuse screens, and finally (3) House Call services Utilizing a model supported by the American Academy of
Home Care Physicians. TCCHC would operate a weekly, full-day categorical clinic focusing on providing home care services to the most critical cases in the local homebound geriatric population.

Satellite outreach clinics and house call services were discontinued following the establishment of the New Access site, funded by the Bureau of Primary Health Care in 2007/2008. Many patients, including those receiving house call services, expressed a desire to receive care in a clinical setting. The focus of ORHP activities then shifted to general outreach and health screenings to communities and camps, while referring patients to the new Health Center site in Four Oaks (centrally located in the targeted service area).

**Innovative Solutions to Problems**

Fortunately, no significant issues were identified during the project implementation. One of the more typical issues, competition for funding, was not experienced due to the mission of each consortium member organization. Simply explained, consortium members (e.g., churches) did not have the capacity to provide direct service to the target population, but expressed commitment in collaborating to ensure comprehensive care services to the indigent were developed.

**Results**

Tri-County Community Health Council’s on-site Quality Council evaluated quarterly the outcomes data from the outreach project. Data were collected by patient surveys, consortium member surveys and review of patient electronic health records. Results were communicated both to the Quality Council and to the Consortium membership. Issues identified were placed into a PDSA cycle (plan, do, study, act) for continuous quality improvement. Evaluation primarily focused on health outcomes/biomarker data of the target population and the 5,380 patients receiving services over time.

**Potential for Replication**

Yes. Outreach, combined with case management provides an effective means of linking indigent/chronic disease patients into primary care in rural areas. The service is critical to Community Health Centers as a means of facilitating consistent care that follows established care guidelines and identifying rural, indigent patients who are lost to follow-up.

**After the Grant**

Yes, the program will be sustainable. The program has been integrated into Tri-County’s New Access Point site in Four Oaks – centrally located to the population residing in the service area. The New Access Point grant, funded through the Bureau of Primary Health Care, supports both outreach activities and primary medical care services. Johnston Outreach Initiative (JOI) activities will continue indefinitely through the established New Access Point.

**Contact:**
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**Community Characteristics**

Community Health Access Network (CHAN) was created as a result of the 2003 Community Assessment indicating the total “At Risk” uninsured in Jackson County North Carolina at a rate of 38% compared to the state average of 32.7%. The total “at risk” below poverty rate of underinsured was 65.9% for Jackson County compared to the state average of 54.7%.

When individuals with low income in the community fall into the uninsured category, their health care is provided primarily on an emergency basis as they seek care only when in crisis. This utilizes the most expensive type of health care, often for illnesses that could have been prevented if the patients had a “medical home” and access to quality comprehensive primary health care.

The Community Health Access Network (CHAN) program was created to promote accessibility to and active involvement in primary health care services for uninsured, low income adults, as a vital link to improved health outcomes for impacted individuals and the community at-large.

A second grant was awarded for 2007-2010 to expand, enhance, facilitate and maintain access to comprehensive primary health care for Jackson County residents that meet CHAN eligibility requirements.

**Services Offered**

The primary goal of the CHAN program was to facilitate accessibility to and maintain comprehensive primary health care for Jackson County residents, who are between the ages of 18 and 64, have income at or below 175% federal poverty level, are medically uninsured and cannot afford medical care. In 2009, CHAN expanded service to Swain County residents due to the expansion of the local hospital services.

The CHAN program staff developed and managed a coordinated system of primary health care, which included: recruiting health care providers to participate in this coordinated system of donated care; arranging for a medical (primary care) home for enrolled participants at no cost or low cost to the patient; obtaining no cost or low cost medications; requesting and scheduling lab services, diagnostic testing, physical and respiratory therapy, cardiac services, surgical services, emergency services, medications and other medical care as needed and ordered by the primary care provider. CHAN also provided on-going support, guidance, and promotion of patient responsibility so that those enrolled would better understand the value of managing their care.

**Innovative Solutions to Problems**

The program initially began with a HRSA grant in 2003 with a no-cost extension through 2007. The most significant problem encountered during implementation was the limited number of primary physicians willing to participate in the program. Although the hospital and several physicians were instrumental in inviting the program, fewer providers actually committed to accept CHAN patients once the program began. Physician recruitment took much more time than expected. This became less of a problem when the GSC (free clinic) became a provider.

Another significant problem was and is the cost of medications. CHAN and GSC began to search for solutions in 2006. The pharmaceutical companies and their representatives were part of the solution. CHAN personnel now apply for medications through the NC MARP program free of charge for a large
number of medicines. GSC still uses donated funds to cover approximately $25,000 of medications costs annually.

Results

The project was evaluated by an independent evaluator in 2007, using our database. The independent evaluator said, “CHAN has maintained the level of their clients and gotten them more services, developed a community health literacy program through the Lunch and Learn series and the medication safety checks, and is developing their staff leadership to take the program further.” The collaboration of the GSC, JCDPH, WestCare Health Systems, and area physicians, program services has saved lives, and improved the over-all health of the residents of Jackson County.

The project ROI for 2003-2006 was 1.887 for every dollar invested by grant funds, with the total dollar amount recorded as a donation by local hospitals and physicians in the amount of $1,014,192.28. This does NOT include all donated services and costs, because some providers did not provide encounter forms.

The project ROI for 2007-2010 is currently estimated at 4.35 to 1 dollar invested by grant funds, with the total amount recorded as donated services as of June 30, 2010 in the amount of $1,632,071.36. Again, it is important to note that this does NOT include all donated services and costs, because some providers did not provide encounter forms.

Potential for Replication

A similar project could be successful with majority support of the medical and health-related community. It would be important to have more than one physician-advocate. However, if the medical community is very small (especially if limited in primary care providers), if there is not a local hospital, if county agencies are not on the same page…it is much less likely to happen.

After the Grant

CHAN program, as a free-standing entity, will not be continued; but the concepts and processes of networking, facilitation and management of donated care will be continued through a merger with related programs. The currently planned location for this merger of services is The Good Samaritan Clinic, currently serving as primary care provider for 82% of CHAN patients. The key will be the continuation of the IMS/MAP and business management positions. Financial support for these positions is still uncertain, due to changes in the regional health system (previously described) and poor economic conditions, but discussions with leadership of the new healthcare system are in process.

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Community Characteristics

The Salkehatchie Healthy Communities Collaborative (the Collaborative) is a partnership of local and statewide healthcare providers, K-12 and higher education professionals, and local citizens in Allendale County. The mission of the Collaborative is to improve community health through education, disease prevention/intervention, and planned physical activity. The primary purpose is to provide the same health care opportunities to adults and children in Allendale County who are living at or below poverty that other citizens currently enjoy. Each member of the Collaborative contributes to assessing the needs, offers support, and solicits additional input from patients and/or clients they serve. The surveys and other data collected by the Collaborative in the community was coupled with research regarding health challenges in the community to substantiate the need for addressing diabetes in Allendale County and surrounding communities. The grant focuses on the unserved and the underserved with intervention/prevention services for diabetics and those at risk for it.

Allendale County, Allendale County has the largest percentage of the state’s population living below the poverty level, 35% (State Budget and Control Board website, Office of Regional Statistics.

Allendale County has a history of being included in many organizations’ grant applications because of its extreme demographics; however, the actual facts are that Allendale County often is not the primary recipient of the funds received through organizations out of the county. The data provide verification of need, yet Allendale County, prior to this grant, had no center for health education and physical activity, no Certified Diabetes Educator, and no programs devoted specifically to diabetes education and disease intervention/prevention. All of the neighboring counties in USC Salkehatchie’s five-county-service area have locations for physical activity. When the grant was written, there were no CDE in the five-county area.

Services Offered

Allendale County currently has the highest unemployment rate in South Carolina and the highest poverty rate. There is a large turnover of physicians and the county has no specialists. The populations in the county who are unserved and underserved are generally those who lack the funds and/or the transportation to go outside of the county for services. Through the grant, the Allendale County Hospital was able to hire a CDE who could provide education services in the county for diabetic patients. She is the only CDE in the five-county area and she receives referrals from the two medical offices owned by the hospital, the federally qualified health center (FQHC), and from providers outside of the county.

When providers refer patients to the CDE, the CDE calls and arranges for an assessment that takes from 1.5 to 2 hours. No charge is made, by agreement between the NEEDS project and ACH, for the assessment. Following the assessment, the CDE determines if patients may be referred to the Fitness Center and the CDE also enrolls patients in education classes which she teaches in the large education room at the hospital.

Often patients are unable to pay for medications and/or the diabetic education services. The NEEDS Team wrote a $5,000 grant and established a Good Faith Fund at the hospital for those patients the CDE determines are eligible for support based upon criteria agreed upon by the hospital and the NEEDS Team. The Good Faith Fund provides limited funding for eligible diabetic self-pay patients receiving diabetes education and served by the federal NEEDS grant partners. The Certified Diabetes Educator (CDE),
employed by the ACH and partially funded by the NEEDS grant, will determine if diabetic clients, whose diabetes education classes are not covered by health insurance, are eligible for the Good Faith Care Fund. The Good Faith Fund has enabled additional services for patients. The NEEDS Team also covers application fees for Welvista, an initial partner that provided prescriptions for one year at a time for those patients qualifying. The CDE also established a Fruit and Vegetable Coupon during the second year of the grant that provided a fifteen-dollar coupon to new patients who came for assessments. This coupon encouraged patients to eat fresh fruits and vegetables and led to a Healthy Taste of Allendale event in July 2009 sponsored by NEEDS partners.

The population reached through this effort included 49 new patients (only new patients received the Fruit and Vegetable coupons). Of the 49 patients, 46 used the coupons as measured by the invoices and coupons sent to the NEEDS office from the participating grocery stores for payment. Sixty-seven community citizens attended the Healthy Taste of Allendale. The services provided by the CDE were often beyond the expectations of the NEEDS team. The CDE is often on the phone trying to get patients help with prescriptions, with appointments, and with referrals related to patient health but not necessarily to diabetes.

Referrals to the USC Salkehatchie Fitness Center were a big draw for patients. Numerous patients called and shared their stories of weight loss and lower A1 C’s following continued participation at the Fitness Center. Very few of these patients could afford membership in a gym and all those referred appreciated the opportunity. Many of the patients had never been on a treadmill. The closest gym is in the next county and charges a monthly fee, not an option for the patients served through NEEDS.

Innovative Solutions to Problems

This rural county did not have a standard for data collection and this presented challenges. Accountability was almost seen as “poking into somebody else’s business” or “making more work when I already have too much.” It took multiple meetings and explanations to get the data needed to demonstrate (and document the work and impact resulting from) success in the program, even when some partners were told that it was required by Washington. When partners were asked to report numbers of provider referrals to the CDE, numbers of referrals to the Fitness Center, numbers of patient visits to the Fitness Center, and numbers transported, it was initially difficult. By grant’s end, partners would often report without a reminder. The same challenges existed with the emergency room numbers for diabetes as a primary or secondary diagnosis. Patience and persistence helped to work this out and enabled the NEEDS Team to receive the numbers. When hospital staff recognized that the ER numbers were gradually decreasing, it became more important to report.

One other significant challenge revolved around the finance office at the hospital. With the help of the grant consultant from the Georgia Health Policy Center, the NEEDS Team agreed upon a billing policy for the diabetic patients that included monthly reporting. This has been difficult to get on a continuous basis and reasons seem to include the computer system at the hospital and lack of finance office staff time to develop monthly reports. We continue to work on this and to offer other possibilities.
Results

The project was evaluated by following the annual workplan required by the ORHP grant. The NEEDS project workplan was thoughtfully developed each year and followed monthly. The workplan included goals, activities, outcome or process measures, as well as the person responsible for the work and the timeline. The workplan served as the project guide and was used to review work planned and accomplished.

Data and special reports specified in the initial grant application and subsequent year proposals were collected, analyzed and corrective action developed, when necessary.

As a result of the work of the NEEDS partners, the following outcomes were achieved:

- The NEEDS Consortium was developed, became fully operational and highly effective in accomplishing the work planned, identifying resources, pinpointing problems and potential solutions, as well as possibilities for expansion and improvement.
- A well qualified Certified Diabetes Educator (CDE) was recruited. Significant factors to the success of the program include that the CDE is a nurse, is from the community and lives in the community where the project was located. Her educational preparation, as well as her familiarity and understanding of the population, knowledge of resources and ability to remain open and flexible was crucial to the success of the program.
- The CDE provided diabetes education to over 200 clients with diabetes over the three years of the project.
- The Project secured diabetes medications for 30 clients using Welvista, a statewide Pharmacy Assistance Program. Client applications to Welvista were paid by the grant as specified.
- The Project worked with primary care practices in Allendale County and received client referrals from these and other practices. Two of the practices located in Allendale County are Rural Health Clinics (RHC) and one is a Federally Qualified Health Center (FQHC).
- The number of clients coming to the Allendale County Hospital Emergency Department was reduced by 30.5% from the baseline year of 2006, to calendar year 20090 which is the latest data year available. Allendale County Hospital is a Critical Access Hospital.
- Forty-six clients purchased fresh fruits and vegetables as part of the evidenced based education program provided by the project’s CDE.
- Over 250 clients used the Fitness Center to increase physical activity and reduce the harmful impact of diabetes.
- The CDE guided the project’s diabetes education program, centered at the Allendale County Hospital (ACH), to receive approval by the American Diabetics Association, a step essential for credentialing and billing major insurance payers, including Medicaid and Medicare.
- The USC, Salkehatchie’s campus Fitness Center was made available to people who were not students of the university, staff or faculty. Opening the Fitness Center to community residents diagnosed with diabetes was not easy. Liability had to be considered, as well as management agreements on when the facility would be opened, how it would be staffed and equipped. In fact, the NEEDS project represents the first time the small Fitness Center was opened to non-
university connected people. As shown in the tables above, having the FC available was a valued asset.

- Through community outreach, provider and Consortium partnerships, the target population was made aware of community resources available to help them reduce the impact of diabetes on their lives and improve their health.
- Transportation was provided to diabetic clients that could not have participated with the CDE or the Fitness Center without transportation support.
- A few children, without other resources, were provided education, transportation or other assistance with special pediatric endocrinology appointments. (The diabetic child population enrolled in school has better access to resources because of Medicaid and other special programs designed to enhance children’s health, such as Healthy Families Allendale.)
- The public health department became a major partner in the project and secured and invested additional funds to enhance the diabetes education and fitness objectives of the NEEDS Project. The state, county and district public health department are plagued by state and local budget cuts but through investment in the NEEDS program, staff of local public health agencies were able to secure special CDC and other funds to help with nutrition and fitness activities. The investments in Allendale County were unexpected outcomes that would not have been made without the federal grant funds from ORHP.
- The Project Director secured funding partners to pay the salary and expenses for the CDE, when it became obvious that earned revenue would not be sufficient to retain the CDE.
- ACH developed a diabetes education department within the hospital.
- The NEEDS Project supported 1,678 trips using project affiliated transportation providers.

**Potential for Replication**

Yes, especially in project management, transparency, accountability for resources and using the Consortium effectively

**After the Grant**

Yes, the program will be sustainable. The local hospital and FQHC are funding the CDE’s salary and DHEC Region 5 is funding materials, fitness opportunities, and data-collection support.

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Community Characteristics

Access to health care in the two County (Chester and Fairfield) Upper Midlands region is ranked among the lowest in the state of South Carolina. The purpose of the Outreach Grant was to expand appropriate services for Network residents including children with diabetes and asthma and or at risk for developing it. The primary goals of the grant were 1) To strengthen the Network and its effectiveness in improving the system of health care in the Network region, 2) To reduce absenteeism of middle school students with the chronic conditions of asthma and diabetes, and 3) To increase community knowledge of the risk factors for diabetes and asthma and how to manage them. Asthma/Bronchitis is the leading cause of hospitalization for children under the age of 18 in the two Counties. Poverty, lack of education, high unemployment, unhealthy lifestyles and poor utilization of preventive health care all contribute to poor health status and strain the fragile rural health infrastructure.

The grant placed a middle school nurse in each County over a three year period and paid a declining portion of their salary each year. The School Districts agreed to continue the program after the three-year grant period barring any unforeseen or unavoidable problems. The program is on schedule to continue this fall. The grant also helped to implement an electronic school health record system to help the school nurses effectively track and manage these students. In addition, we did yearly screenings (BMI, vision and hearing) on all of the students, which enabled us to look at and address the obesity problem. We were able to change the type of snacks sold in the school canteen and create a water drinking program, thus removing sodas from the vending machines.

Through another grant we were able to start an Exploring Healthy Lifestyles classes in all of the middle school in one County and started the Coordinated Approach To Children’s Health (CATCH) program in the other County.

Services Offered

The primary target group was middle school students in Chester and Fairfield Counties, ages 11-15, with asthma and diabetes and how to manage them in order to keep them in school and in their classes. The secondary target group was the adult population who also have asthma and diabetes or who are at risk to develop the diseases.

Innovative Solutions to Problems

Staff turnover from initial group of participants: Middle School Principal, School Nurse, School District Superintendent, and class room teacher for Exploring Healthy Lifestyles classes. This was overcome by educating new staff and getting them on board with efforts.

Limited School District Information Resource Consultant (IRC) support-education of mission and importance of being committed to the project. This was overcome by meeting one on one with all participants and working directly with the IT and District staff.

Budget cuts in School District: limited travel. This was overcome by arranging school nurse workshops on Teacher Workdays, rotating sites between two Counties; offering workshops at no cost with continuing education credits and meal, in-kind support, partnership with agencies/companies to cover cost of meals/speaker honorarium, partner with other workshops (i.e. Asthma with Oral Health); other local grants, donation of door prizes (healthy foods) by local Bi-Lo Grocery Store.
School Nurse acceptance and use of computerized documentation, especially for nurses who were not use to using computer equipment. This was overcome by repeated face to face, hands on trainings and Administrative support and encouragement and finding School Nurses that became “champions” for project.

Results
Based on data from Health Office
- Attitude and Behavior Surveys for Middle School students
- Pre/Post knowledge testing from Exploring Healthy Lifestyles (EHL) classes
- Measures of Academic Progress (MAP) scores from students in EHL versus non-EHL students
Outcomes: School Nurses educated, use of Health Office, more efficient use of time, data—all make schools better.

Potential for Replication
Our program can and has been a best practice model. It has worked in both Counties and was well-received. I think it is a program that can be replicated and we would be glad to share this information with other Networks. Our project has been presented at several national and state meetings with great interest.

After the Grant
Yes, the program will be sustainable. The Nurses hired through this grant program will be sustained by their respective school districts. When the grant was written, we asked the District Superintendents to sign a written commitment, pending any major budget disasters, to continue the program on their own. Although School Superintendents have changed every year or two, they have still honored the contract. Through this grant we provided declining funds over a three year period for a middle school nurse in each District.

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Community Characteristics

The Pine Ridge Reservation: Creating an Early Health Care Community (PRR: CEHCC) project proposed to create local access to a comprehensive and culturally appropriate system of health and developmental services on the Pine Ridge Reservation in order to identify developmental concerns in children birth through five years of age and linkage to services. The Pine Ridge Reservation, located in southwest South Dakota, has been designated as one of the poorest areas in the United States. Over 61% of all children are living below the national averages for poverty and the Reservation, designated as medically underserved, has a health profession shortage for dental, mental health and primary medical care. Lack of trained pediatric specialists required families with young children to travel hundreds of miles to receive these services. In South Dakota, and especially on the Pine Ridge Reservation, the follow-up for most of these children is absent, inadequate or fragmented due to the following five factors that influence rural health care access: availability, accessibility, affordability, acceptability and accommodation. Early intervention services did exist through the education system, but young children need to be diagnosed and identified as eligible before these important services could be provided.

Services Offered

An interagency network system was created in order to construct a comprehensive system of services for young children and their families on the Pine Ridge Reservation. Through networking and sharing of existing resources, a public awareness campaign promoted the positive benefits of developmental health and wellness for young children. The campaign was developed and implemented in all the local Reservation communities. A Reservation-wide system for developmental screening was created with appropriate referral networks established. Pediatric specialists were brought in on a monthly basis to work in partnership with the local health and educational services to establish a comprehensive developmental evaluation clinic where children were thoroughly and appropriately evaluated. Linkages to early intervention and other appropriate needed services were created as follow-up services to the clinic. Tracking and monitoring of children not eligible for services, but considered at risk was a part of this comprehensive system.

Innovative Solutions to Problems

Significant challenges were encountered in the implementation of the PRR: CEHCC especially during the first year. One original partner of the project decided not to participate, therefore other involved agencies in the network assisted in completing the activities designated to the original partner. Another partner, Badlands Headstart, was later added to the consortium and was able to assist with activities as well.

Hiring of a local Project Coordinator initially to carry out the goals of the clinic took about eight months. This person assisted in starting the project, and eventually left the position but remained involved through the Advisory Council for the project. Hiring of a 2nd Project Coordinator took some time as well, though the person remained in the position until the grant ended in May, 2010. The interagency network was instrumental in ensuring the position details and the announcement was posted across the Pine Ridge Reservation.
The weather in South Dakota was also a challenge for the project. Several clinics were cancelled or the date was changed due to adverse travel conditions in the Pine Ridge Reservation area. Despite efforts for back-up clinic dates, as well as alternative travel arrangements, some of the clinics were not held. Local partners assisted in communicating with the lead agency as well as the Project Coordinator to advise as to local weather conditions and if travel was unsafe. The partners also assisted in ensuring families and children traveling to the clinic were notified if the clinic was changed or cancelled. Local partners also assisted in completing evaluations as needed so as not to exceed a minimum waiting list for clinics and allow families and children to access services timely.

Another challenge encountered has been communication with local team members and potential customers of the developmental clinic. Due to a high percentage of families on the Pine Ridge Reservation that speak Lakota as their primary language as well as the number of staff from various agencies involved in this clinic effort, the chances of communication getting crossed was high. In addition distances between communities on the Pine Ridge Reservation add to the concern of communications always being clear and understood as well as timely by all involved parties. To assist with this challenge, quarterly meetings were instrumental in allowing for all parties to ask questions and provide input. Meeting minutes were mailed and emailed to all members regardless of attendance. The project coordinator also has additional communication via phone/email with the project director. This allowed for increased communication as well.

Overall, the PRR: CEHCC, carried out its goals and objectives and met the majority with the exception of sustaining the project once grant funds ended. The interagency partners assisted in finding alternatives and ways to sustain the project, but due to inability of tribal funds to maintain the developmental clinic, the clinic ended in May, 2010.

Results

The PRR: CEHCC was evaluated based on the goals and activities set out in the original grant proposal with the guidance of the local interagency partners. Overall, the project completed developmental evaluations on sixty-three children age’s birth through five years residing on the Pine Ridge Reservation. Additionally forty-three audiological evaluations were completed throughout the project period. Of the evaluations completed, the percentage of children eligible for services was 94%. In summer of 2009, 98% of these children were still receiving services as identified on an Individualized Family Service Plan (IFSP). Additionally, family satisfaction of clinic services was 100%.

The interagency partners assisted in all aspects of the project. The partners were instrumental in assuring goals and activities were met, along with other aspects of the project, including hiring of the Project Coordinators. The consortium functioned as initially planned, and their expertise and guidance contributed to the success of working with children and families on the Pine Ridge Reservation.

The only barrier not successfully resolved in the implementation of this project was sustainability. Attempts were made in terms of presenting information to tribal committees and councils, providing information as requested by interested parties, and conversing with key local leaders. Unfortunately, tribal funds were not able to maintain the continuance of the project. The PRR: CEHCC was viewed as a successful project in the area, thus interagency partners are hopeful that eventually, the project may be reinstated with local funds supporting the project.
Potential for Replication

The project was based on a similar model developed by the Center for Disabilities at the Sanford School of Medicine of The University of South Dakota. Minor adjustments were made to adapt the model based on the local needs. As a result, this project would be successful in other rural settings. However, other communities considering replicating this model should ensure that the partners are equally committed to the project and willing to cooperate in meeting the needs of at-risk children. Additionally, support from partners is needed to ensure recommended services are followed up on in a timely manner as well as sustainability of the project past the grant funded period.

After the Grant

The program was not able to sustain itself past the OHRP funding. This is due to a variety of reasons. The tribe was not able to locate funds to continue efforts in this area. Additionally, Medicaid funding was not able to be finalized to bill for services offered through the grant, thus funding from this stream was not available. The program officially closed offices on the Pine Ridge Reservation in April, 2010. As previously noted, this project was based on a similar model developed by the Center for Disabilities at the Sanford School of Medicine of The University of South Dakota. That original program received a Director’s award in 1996 through HRSA’s Models that Work program.

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Community Characteristics
There was a need in our community to connect the uninsured to primary healthcare, and to provide information that would promote healthier lifestyles. Service area is the Cherokee County, Texas area, population 48,979. East Texas Medical Center and Trinity Mother Frances Hospitals in Jacksonville assisted with health screenings and health education programs.

Services Offered
Connections to primary health care as well as health screenings and health education programs

Innovative Solutions to Problems
Scheduling appointments with physicians. Primary health care is not offered through a program sponsored by the Cherokee County Health Department.

Results
Through surveys and meetings with the Consortium members.

Potential for Replication
Yes. All of the programs can be successful with support from committed volunteers.

After the Grant
Yes, the program will be sustainable. The Consortium members agreed to continue the project with leadership from our organization after the funding ended.

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Community Characteristics

Carilion Giles Memorial Hospital led the creation of a new collaborative Network of four independent non-profit organizations to expand access to health care for residents of rural Giles County, Virginia. This collaborative Network created the Giles Community Health Access Project (G-CHAP), an innovative, inter-agency approach to the delivery of comprehensive health care for the Giles County area. “Full body” holistic health care comprised of medical, dental, mental health and pharmacological services are delivered collaboratively through the Network to indigent and uninsured residents of Giles County.

Services Offered

Services are provided Monday through Friday; although the nature of the various health services available varies. Medical appointment-based services are offered on Tuesday and Thursday, 8:00 AM – 6:00 PM. Walk-ins are welcome during these hours.

A Mental Health Clinic grew from one afternoon per week to three afternoons per week. QPD screenings (mental health assessment) are performed on all patients using an innovative handheld computer in which patients answer specific questions regarding their mental health. The computer is then connected to a printer which prints an assessment and proposed diagnosis based on the questions answered. The QPD helps guide the clinician in assessment and diagnosis of the 8 most common mental health disorders. Patients meeting diagnostic criteria may be referred to mental health counseling.

In addition, a Dental Clinic is available at the Free Clinic of the New River Valley’s dental facility in nearby Christiansburg. Services are provided by our part-time staff dentist, and by twenty New River Valley dentists and their support staff. Dental care includes oral examinations, extractions, fillings, oral surgery and gum treatments.

Medication distribution occurs on Tuesday and Thursday at the G-CHAP clinic. Medications are filled at the pharmacy at the Free Clinic of the New River Valley and transported back to Giles County.

Dr. David Roberts, OB/GYN MD, is available at the clinic twice each month for women’s health issues.

A culturally sensitive Amish clinic is held once each month for Giles County and Monroe County, WV’s Amish communities. These clinics are culturally sensitive in that staff dresses Amish-like to create an atmosphere of comfort and trust. Amish children are treated during these clinics as they do not utilize Medicaid or chip services.

G-CHAP serves as a clinical rotation site for students from Virginia College of Osteopathic Medicine, Jefferson College of Health Sciences, New River Community College nursing program, and the Giles Votech LPN program.

G-CHAP has developed relationships with numerous specialty providers including cardiology, neurology and ophthalmology. Patients have access to specialty healthcare at no cost if needed. Most of these providers will allow a certain number of visits each month for G-CHAP patients. 291G-CHAP patients were referred to specialists for care at no cost in 2009-2010.

In addition, a Program for Special Medical Care (PSMC) has been developed. Patients with chronic health conditions are referred to local physicians for health care services. This allows for continuity of care as patients see the same doctor for all their health care needs.

Carilion Giles Memorial Hospital (CGMH) provides in-kind services to patients of G-CHAP and provided $280,000 in the form of services in 2009. The top five most frequent services provided at no
cost are 1) laboratory, 2) radiology, 3) physical therapy, 4) mammography and 5) ultrasound and imaging services.

**Innovative Solutions to Problems**

The biggest challenge was to “market” our services to a community not familiar with our existence or the services/programs we provide. In addition, we were not able to provide dental services as we had originally hoped – with patients being transported to the Free Clinic of the New River Valley for dental care. We then worked to develop a contractual relationship with the local dentists in the area so patients could receive dental treatment close to home. This attempt failed as the local dentists were unable to commit to the plan because of time constraints. So, we began providing dental care to the patients who were able to commute to the Christiansburg dental facility 35 miles away. However, we are continually working to develop a dental program that more appropriately meets our needs. We also continue to struggle with securing as many volunteers as we would like to have – both lay and professional – to provide added support to our employed staff.

**Results**

The project was evaluated by Beth O’Connor with the Virginia Rural Health Resource Center. She provided the following services with the following outcomes:

- Provided technical assistance to all network members through Virginia Department of Health - Office of Health Policy and Planning, and the Virginia Rural Health Association.
- Conducted process evaluation of the program’s success in meeting its goals, compiled findings. This information was useful in our reports to HRSA and for our on-site visits by HRSA staff.
- Conducted patient outcome and satisfaction survey, compiled findings. The patients were consistently very happy with services at the Clinic. The Clinic staff is well-loved by our patients!
- Disseminated information on project design, outcomes, and replicability to rural regions of Virginia and nationally, through conferences, publications, and meetings. The management team formally presented at the August, 09 Washington DC HRSA Outreach conference and used information culled regarding mental health outcomes to provide to peer clinics.

Outcomes achieved:

- Number of medical appointments made and kept by patients at the Giles Free Clinic (no show rate). Budget year 3: 1,457 appointments with a no show rate of 15%
- Number and percent of patients receiving health education sessions. Budget year 3: 100% of patients receive some type of health education during their visit. An education sheet is used at each visit to document type of education provided.
- Number of visits for mental health care each month. Budget year 3: Mental health visits averaged between 20 visits per month. We are still dealing with the stigma associated with mental health treatment. However, every patient receives the QPD mental health assessment screening.
- Number of dental visits each month. Budget year 3: G-CHAP averages 100 dental visits per month. Lack of a full-time dentist has reduced the number of available slots for dental care and transportation barriers continue to be problematic.
Reduce the number of individuals using the emergency department for non-emergency needs by 25%. This measure was attained in the first year of the grant. Uninsured patient’s now have a medical home, and G-CHAP has greatly reduced the number of patients using the emergency department for non-emergent needs.

Number and value of prescriptions filled at the Free Clinic of the New River Valley Pharmacy. Budget year 3: $501,475.49 in medications (average 300 prescriptions/month) were provided to G-CHAP patients in 2009-2010 through the Free Clinic of the New River Valley’s pharmacy, and 1,571 prescriptions were filled through Wal-Mart’s $4.00 prescription program.

Number of patients who receive annual blood pressure, weight checks, annual cholesterol screening and dietary education. Budget year 3: 100% of patients receive at least an annual blood pressure, weight check, cholesterol screening and dietary education. A brightly colored sticker is affixed to each chart at the start of each year. These items are listed with a place next to each for a check. As the measures are completed, they are checked off ensuring that each patient receives complete screening.

Number and percent of diabetic patients who receive annual foot exam, HgbA1C, exercise and weight loss education. 100% of diabetic patients receive at least an annual foot exam, HgbA1C, exercise and weight loss education. A brightly colored sticker is affixed to each chart at the start of each year. These items are listed with a place next to each for a check. As the measures are completed, they are checked off ensuring that each patient receives complete screening.

Potential for Replication
I absolutely feel this project could be replicated in other rural settings. The biggest component for us was to have a willing and available partner in a local hospital. This element would be critical to having a successful project. Our local hospital serves our patients – no questions asked – free-of-charge. Our patient’s health outcomes are better as a result of this close partnership.

After the Grant
Yes, the program will be sustainable. A fundraising plan was put into place during Year II of our grant cycle so that we could begin bringing in funding for sustainability. Besides soliciting through annual community mailings, the United Way partnership and business solicitation, we are actively seeking grant funding from state and national foundations to continue our operations. We were recently awarded a grant in the amount of $38,878 from the Virginia Healthcare Foundation to expand clinic operations. In addition, a fundraising grant was received in 2009 and as a result we are hosting a fundraising campaign titled “Hope Starts Here” beginning in October 2010.

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Community Characteristics

The need for assistance in the area of health care in Shenandoah County, Virginia (the target area for this grant) was and continues to be quite high. The service area is near the Allegheny, Massanutten and Blue Ridge mountain ranges. It is a stunning landscape, but these hills and mountains make transportation and access to health care problematic for many, especially the poor and disadvantaged. Interstate 81 bisects the County as does the Shenandoah River.

Services Offered

The highest needs, when considered by population, included: Hispanic/Latino; seniors and persons over 50; uninsured 19-64 years of age; and, children up through six years old.

The median household income for Shenandoah County is $35,137—over $5,000 less than the median household income for the State. Additionally, the average per capita income for citizens of the County is $20,896 compared to $28,063 for the State. Citizens of Shenandoah County are generally not as prosperous as their statewide counterparts. Around 11 percent of the County's population lives below the federal poverty line. Even more distressing is the fact that 16 percent of children live in households below this income level.

The County has a one hospital, one free clinic, a health department office, and a small number of practicing physicians (many of these organizations are described in detail in our proposal's Resources and Capabilities section since they are part of the Consortium). Services are somewhat limited, and many have to travel to the larger regional centers of Winchester and Harrisonburg to receive more specialized treatment.

The following were the goals of the project:

- Increase the number of disadvantaged persons receiving health services using a coordination of care model
- Improve the health of chronically ill older adults who cannot access health services, through innovative health care delivery methods
- Assist low-income and disadvantaged persons living in remote areas obtain access key health and human services
- Address mental health needs among seniors and other at-risk populations
- Promote comprehensive community health and wellness education and outreach
- Improve access to health services and services promoting community wellness
- Create partnerships and collaborations among providers so that a well-coordinated approach to meeting rural health needs is in place

Innovative Solutions to Problems

Due to the rugged and mountainous rural terrain that brackets the population centers located in the center of the County following the Shenandoah Valley, getting around the County has always been difficult. This is exacerbated by the fact that there is no local public transportation system. The reality is that many persons who will benefit from the grant cannot provide their own transportation. The usage of volunteers to help provide transportation is a key part of public transportation.
Results

In an attempt to assess the impact and utilization of the grant, qualitative and quantitative analyses were performed. The input received from the Outreach Nurse and the Case Manager was utilized for the quantitative analysis and the input from the consortium partners provided the basis for the qualitative observations.

Table 1. Summary of Outreach Nurse activity from the grant

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Number of times provided/visits/Phone calls</th>
<th>Number of patients</th>
<th>Amount of time spent (hours)</th>
<th>Number of Referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home visits by nurse</td>
<td>1406</td>
<td>133</td>
<td>4710</td>
<td></td>
</tr>
<tr>
<td>Diabetes Education</td>
<td>2156</td>
<td>168</td>
<td>1567</td>
<td></td>
</tr>
<tr>
<td>Medication Education</td>
<td>3139</td>
<td>154</td>
<td>5100</td>
<td></td>
</tr>
<tr>
<td>Coordination of care</td>
<td>4245</td>
<td>176</td>
<td>3863</td>
<td>1763</td>
</tr>
<tr>
<td>Total</td>
<td>10,946</td>
<td>631</td>
<td>15,240</td>
<td>1763</td>
</tr>
</tbody>
</table>

Table 2. Depression Outcomes

<table>
<thead>
<tr>
<th>Service</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Patients evaluated</td>
<td>45</td>
</tr>
<tr>
<td>Total Number of patients with Depressed mood</td>
<td>38</td>
</tr>
<tr>
<td>Total Number of patients with severe depressed mood</td>
<td>7</td>
</tr>
<tr>
<td>Total Number of patients with severe mild mood</td>
<td>15</td>
</tr>
<tr>
<td>Patients improved from mild to none</td>
<td>17</td>
</tr>
<tr>
<td>Number of patients improved from severe to mild</td>
<td>6</td>
</tr>
</tbody>
</table>

Home visits by nurse:

Home visits by the outreach nurse included activities in these major areas:

- Education on Health care interventions
- Diabetes education
- Medication Education
- Depression Screening
- Care coordination

**Education on Health care interventions:** As a part of the grant, the outreach nurse developed a method to distribute educational material to the elderly citizens.

**Methodology:** The outreach nurse met with housing managers, senior center directors and the Shenandoah Free Medical Clinic staff to establish a relationship and discuss the purpose of educational packets. Many of the packets were given to individuals through the housing managers. The managers agreed to help make packets available to individuals and schedule presentations if possible. A signup sheet was provided for interested diabetic patients who needed more resources. Managers were receptive of the idea and provided an area for packets and other educational resources to be displayed. Presentations were given to distribute packets and explain contents and how to obtain further resources. The outreach
nurse is also working on establishing contacts within the local churches to distribute educational materials.

**Diabetes Education:** a total of 2156 encounters were made by the outreach nurse to provide diabetes education. These encounters included personal visit and phone calls. 67 patients were served in this for education in areas such as sharps use and disposal, blood level monitoring, Glucose dietary level, insulin use, nutrition education and wound care. The nurse outreach nurse spent an estimated 1567 hours for this purpose.

**Medication Education:** A total of 3139 encounters were made by the outreach nurse for providing medication education. These encounters included dosage instruction, side effects, interactions, precautions to be used and the compliance issues. An estimated 168 patients received benefit and the nurse spent approximately 1567 hours on this service.

**Care coordination:** a total of 4245 coordination of care encounters were made for 178 patients during this period. This component of the service included referrals to health care providers, social and human services and behavioral health services.

Referrals were made to a range of service providers that include, for example, Neurology, Behavioral Health, Social Services, Adult Protective Services, Podiatry, Ophthalmology, Primary Care, Virginia Insurance Counselor Assistance Program, pharmaceutical medication assistance plans, SMH wound clinic, Valley Home Care, Occupational Therapy, Physical Therapy and the acquisition of assistive devices

### Table 3: Summary of Case Manager’s Activities

<table>
<thead>
<tr>
<th>Definition of Data Collected</th>
<th>Intended Benefit for recipient</th>
<th>Outcome intended to support Required Grant Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Work (SW)- face to face contact (FTF) by referral from clinic or other agencies</td>
<td>SW assessment will identify additional service needs and MH status</td>
<td>Reduce emergency room visits or crisis contacts through other agencies by developing an intervention system</td>
</tr>
<tr>
<td>SW assessment for health providers</td>
<td>Connect recipient to a primary care physician (referrals)</td>
<td>Reduction in ER visits and increase in the overall quality of life of the recipient</td>
</tr>
<tr>
<td>SW assessment of the Global Assessment of Functioning</td>
<td>Identify needs and establish a plan to develop additional training and skills to remain independent (referrals)</td>
<td>Reduce ER visits &amp; reduce the strain on nursing home admissions / bed availability</td>
</tr>
<tr>
<td>SW follow up contacts with clients</td>
<td>To assure compliance with established SW plan</td>
<td>Reduce ER, crisis, nursing home &amp; admissions. Educate and assess if the SW intervention is effective in maintaining or increasing the greatest possible level of independent living</td>
</tr>
<tr>
<td>SW collect data on cancelled appointments by recipient</td>
<td>Identify levels of compliance</td>
<td>To establish a baseline of how to adjust the approach of the SW program thus improving the reduction rate of mental &amp; medical health ER interventions</td>
</tr>
<tr>
<td>Transportation trips for recipients to service providers</td>
<td>Can show a correlation of recipients being connected to new providers (referrals)</td>
<td>Directly correlates to reduction of crisis visits to other providers such as the ER, Northwestern CSB and Mental Hospital Admissions</td>
</tr>
</tbody>
</table>
Table 4. Case Management Tracking

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawse Health &amp; Dental</td>
<td>51</td>
</tr>
<tr>
<td>Dept of Social Services</td>
<td>121</td>
</tr>
<tr>
<td>Wells Fargo/Reverse mortgage</td>
<td>10</td>
</tr>
<tr>
<td>Salvation Army Thrift Store</td>
<td>17</td>
</tr>
<tr>
<td>Referrals to DSS for food stamps</td>
<td>57</td>
</tr>
<tr>
<td>Referrals to DSS for FAMIS</td>
<td>14</td>
</tr>
<tr>
<td>Referrals for Department of Rehabilitation Services</td>
<td>12</td>
</tr>
<tr>
<td>Referrals for pregnancy center, or health dept for OB services</td>
<td>18</td>
</tr>
<tr>
<td>Basic toiletries, money to do laundry, laundry supplies</td>
<td>28</td>
</tr>
<tr>
<td>Case management cases</td>
<td>16</td>
</tr>
<tr>
<td>Follow up phone calls</td>
<td>113</td>
</tr>
<tr>
<td>Referrals to Shenandoah Alliance for Shelter</td>
<td>110</td>
</tr>
<tr>
<td>Referral to clothes closet</td>
<td>111</td>
</tr>
<tr>
<td>Referrals for SSDI</td>
<td>13</td>
</tr>
<tr>
<td>Referrals for Medicare</td>
<td>24</td>
</tr>
<tr>
<td>Referrals to Medicaid</td>
<td>12</td>
</tr>
<tr>
<td>Lion’s Club referrals for eye exams and glasses</td>
<td>10</td>
</tr>
</tbody>
</table>

The Outreach grant proved to be a huge success at the Free Clinic. The case manager was able to serve approximately 300 clients on a regular/extended basis along with approximately 40 clients per week on a short term or one time service basis. The case manager was able to help clients obtain services they would not otherwise have been aware of or otherwise been able to obtain.

Potential for Replication

Rural Healthcare Outreach Grant can be replicated, all or in part, by other rural communities. What has been accomplished by our consortium is neither complex nor magically better than the efforts of others. What we have done has been based on the desire to make a difference in the lives of people in need in our community, the patience to work together with other partners toward a common objective, the
tenacity to see things through to completion and the humility to see life through the eyes of the person in need that we hope to serve!

**After the Grant**

The programs of the Rural Healthcare Outreach Grant, “Community Healthcare Connections” will be sustained into the future! The healthcare outreach program of the Shenandoah Area on Aging, now called “At Home” has acquired new funding sufficient to continue the position of the outreach nurse. The Shenandoah County Free Clinic, recognizing the importance of the case management component to their services, has been able to realize savings in their own budget, sufficient to continue funding the case manager position on a part-time basis. Faith In Action will continue its efforts to develop a volunteer transportation system for elderly and disabled persons in Shenandoah County, at least for the foreseeable future.

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Community Characteristics

In Okanogan County, an agriculturally-based economy, migrant workers are a key portion of the labor force. 14.4% of the county’s resident self-identify as being Latino. This number swells during summer and the fall, with transient migrant workers who come to harvest fruits, nuts and berries. Within Family Health Centers’ (FHC’s) patient population nearly 50% are Latino and 7% are Migrant and Seasonal Farmworkers. Providing culturally and linguistically appropriate healthcare to Latino patients is an ongoing challenge for local health care providers, because the community has a different language, cultural and religious beliefs that affect willingness to access care and, there are immigration issues that prevent this population from seeking care. This project is designed to address these challenges.

Services Offered

We will: (1) Develop and implement a promoter(a) (lay educators) program so that health education can be taken to the orchards, agricultural camps, and other community events and locations. (2) Develop and broadcast education programs through a local Spanish language radio station. (3) Provide childbirth education by a bilingual certified Lamaze instructor; and (4) Train health care providers and others in the community about cultural competency and the practice of medicine. During this Program we anticipate providing services to 1,939 clients.

Innovative Solutions to Problems

The most significant problem encountered in this grant was lack of consistent attendance at the Spanish language child birth education classes. Many Hispanic women from Mexico have never attended a child birth class and this is not part of the Mexican culture. In Mexico women go to the doctor for routine prenatal care and rely on “comadres”, trusted family member women to support the pregnant woman. When the time comes for their delivery they either go to the hospital or they have a mid-wife come to their house and deliver the baby for them.

Results

FHC contracted with Health Outreach Partners (HOP) to serve as the external evaluator for the Rural Health Care Services Outreach Program Grant. HOP agreed to assist in the development of the outreach and evaluation plan, provide consultation and feedback on data collection tools, collect and analyze evaluation data, as well as write evaluation reports. HOP conducted three on-site visits over the course of the grant (July 2007, December 2008, and March 2010). This grant project provided health education sessions, childbirth education classes, Spanish-language radio programming, cultural competency training, various community events such as health fairs and other activities that promoted health in the community.

Potential for Replication

Yes, this program can be successful in other rural settings and FHC is sharing resources and lessons learned from this project. FHC is a member of Washington Community Health Worker/Promotor Network. This CHW network is supported by the state primary care association, Washington Association of Community and Migrant Health Centers (WACMHC) and the regional primary care association, Northwest Regional Primary Care Association (NWRPCA). Through biannual training sessions of
community health workers from community health centers, our project has been shared and used in other rural settings. FHC will continue to share this project model by such activities as presenting at the Western Migrant Stream Forum.

We developed excellent resources and activities that have been successful in reaching out to the migrant and seasonal farmworker population, and their families and other community members. This project produced excellent results and we will continue to share our resources and methods to other rural community health centers.

After the Grant
Yes, the program will be sustainable. A great deal of time, dedication, and effort by the consortium and other community partners occurred and we created the promotor/a program, the Spanish language radio spots, the cultural competency trainings, and the child-birth education classes. The systems and partnerships that have been established have produced benefits for the organizations involved and for the communities they serve. Ensuring the continuation of these efforts is a priority to many of the partners who were involved during the grant period.

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Community Characteristics

San Juan County is comprised of 173 islands. Most of the population lives on the largest four of the islands: Orcas, San Juan, Lopez, and Shaw. San Juan County provides a thumbnail snapshot of a national problem: rural, isolated, with limited income for many residents, and with substantial numbers of residents with undiagnosed or un- and ineffectively treated psychiatric illness.

To access psychiatric care, as well as other specialty services, off-island travel is required. Such travel involves several hours and a minimum ferry fare of $49.25 per round-trip for a car and driver. Many island residents either do not have the motor transportation and/or funds to be able to make such a trip. Even among those who do, the travel burden is often too great and the services are not obtained even when recommended by the individual’s primary care provider.

Services Offered

Develop and implement a videoconferencing based system of psychiatric care and technology capability to provide access to psychiatric services for residents of San Juan County; increase access and ensure sustainability, work with all health plans to make telepsychiatry a covered and reimbursable benefit; provide and evaluate psychiatric services to 125 San Juan County residents beginning May 1, 2007 through April 30, 2010; evaluate the community’s perception of mental health issues and the use of telepsychiatry to address these issues; and evaluate the medical cost-offset effect of the project services.

Innovative Solutions to Problems

In early 2007, COMPASS Health sought approval to provide telepsychiatry services to Medicaid beneficiaries in San Juan County. At that time there was strong resistance from the county’s health plans. Primary reasons for that resistance had to do with their belief that telepsychiatry services were somehow second-rate services and/or an attempt by COMPASS Health to provide services in a less than comprehensive manner. Since that time COMPASS Health has pursued a variety of formal and informal avenues to mediate the resistance. At this time the health plans are in support of the project and has written a letter attesting to that support.

A similar challenge was anticipated in securing participation and/or support from the health plans. Although willingness of health plans to pay for telepsychiatry services would be an important development, it is anticipated that availability of services to a larger segment of the county’s population is necessary. Health plans are, by nature, conservative where additional service offerings and potential cost increases are concerned. They are also under continual siege by providers and health care guilds to add more and new services to their offerings. They are also in a highly competitive business where increasing premium costs to employers or labor and trade unions by as little as pennies per member per month can put them at a competitive disadvantage.

Results

The project was evaluated by Dan Rivera. He is currently in the process of compiling all project data, and will have reports available in the near future. We focused a lot on patient satisfaction, giving the patients a pre-session questionnaire to find out their mental health needs. In addition, we gave each patient a post-session questionnaire after every telepsychiatry session. When patients excited the project
entirely, we also had them fill out a post-project questionnaire. The psychiatrist also filled out a post-session questionnaire after each patient appointment. This gave us a good idea of patient and provider satisfaction.

The project assistant took each patient’s vital signs before each appointment. This data was tracked during the three years. We also tracked patient diagnosis, provided by each PCP as well as the psychiatrist.

**Potential for Replication**

Similar projects to ours would definitely be successful in other rural settings. In rural areas, there is definitely a lack of mental health services, especially psychiatric services. Because residents of these areas generally have to travel far distances to seek mental health services, telepsychiatry becomes a service favored over face-to-face. It saves time, money, and stress. In addition, telepsychiatry is just as effective as seeing a psychiatrist in person. The majority of patients in our project thought that telepsychiatry was as good as or better than face-to-face.

**After the Grant**

Yes, the program will be sustainable. We are currently developing methods to sustain our telemedicine project. There is so much we are able to do with our LifeSize Equipment, it is going to take some time to make the right choices for our community.

**Contact:**

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