



Center *for* Rural Health

Blue Cross Blue Shield of North Dakota Rural Grant Program Years 1-11 (2001-2017)

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Total Funding Per Year

Grant Cycle	Grant Year	Total Awards Made	Total Funding
Year 1	2001-2002	9	\$325,000
Year 2	2002-2003	8	\$325,000
Year 3	2003-2004	10	\$325,000
Year 4	2005-2007	6	\$321,200
Year 5	2006-2008	6	\$325,000
Year 6	2007-2009	9	\$445,000
Year 7	2009-2010	11	\$375,000
Year 8	2010-2011	7	\$375,000
Year 9	2013	16	\$294,400
Year 10	2015-2016	7	\$20,000
Year 11	2016-2017	17	\$40,510

Rural Grant Total Years 1-3	\$ 975,000
Technology Rural Grant Total Years 4-8	\$ 1,841,200
<u>Recess Grants Total Years 9-11</u>	<u>\$ 354,910</u>

TOTAL BCBSND Rural Health Grants Years 1-11 \$ 3,171,110

Blue Cross Blue Shield of North Dakota Rural Grant Awards

Year 11 Projects 2016-2017

St. Andrew's Health Center, Bottineau

St. Andrew's Health Center and Bottineau Public School will collaborate to enhance the special education program with the purchase of adaptive equipment.

Cooperstown Medical Center, Cooperstown

Cooperstown Medical Center and Cooperstown Community Activities Authority will use these funds to purchase supplies and equipment needed to host various activities and events.

St. Luke's Hospital, Crosby

St. Luke's Hospital will host a family 5K fun run/walk event with the proceeds from the 5K being donated to the community daycare center to purchase indoor and outdoor playground equipment.

Jacobson Memorial Hospital Care Center, Elgin

Jacobson Memorial Hospital Care Center is partnering with Elgin/New Leipzig Public School to establish a community fitness center in Elgin. They will purchase equipment with these funds.

Community Health Service Inc, Grafton

Community Health Service Inc. will use these funds to host monthly "lunch and learns" for the community and purchase standing desks as part of its worksite wellness program.

Altru Health Foundation, Grand Forks

Altru Health System will partner with Midway Public School to conduct Outreach Prevention Education.

St. Aloisius Medical Center, Harvey

St. Aloisius Medical Center and the Harvey Kiwanis are partnering to use these funds to purchase new playground equipment.

Central Valley Health District, Jamestown

Central Valley Health District to purchase signage and people counters to establish a signed walking route in downtown Jamestown.

Sanford Medical Center, Mayville

Sanford Medical Center Mayville will establish a walk/bike trail in Mayville-Portland and Finley.

Milnor Clinic, Milnor

Milnor Clinic will purchase cardiovascular exercise equipment for the Milnor Area Community Center.

UND Center for Family Medicine, Minot

The UND Center for Family Medicine – Minot and the Mid-Dakota Education Cooperative and its member school districts will develop and implement training for quality recess programs, develop indoor recess kits with corresponding activities, and showcase recess for the community.

Oakes Community Hospital Foundation, Oakes

Oakes Community Hospital Foundation will use these funds to host a 5K Fun Run.

First Care Health Center, Park River

First District Health Center will purchase supplies to host a 5K Color Dash and a Bike Rodeo.

Rolette Community Care Center, Rolette

Rolette Community Care Center will purchase outdoor play equipment for licensed child care in Rolette.

Heart of America Medical Center, Rugby

Heart of America Medical Center will purchase supplies and equipment to teach the importance of daily physical activity in diabetes self-management workshops and purchase supplies to host a 5K run/walk event.

Northland Community Health Center, Turtle Lake

Northland Community Health Center will use these funds to create a year-long employee wellness program.

CHI St. Alexius Health Williston Medical Center, Williston

Mercy Medical Center will use these funds to purchase supplies to host a 5K.

***Year 10 Projects
2015-2016***

Ashley Medical Center, Ashley

Ashley Medical Center used the funds to host a 5K Color Run and to purchase equipment and supplies to update their weight room at the fitness center which is housed in the Ashley Public School.

St. Andrew's Health Center, Bottineau

St. Andrew's Health Center and Bottineau County Economic Development Corporation partnered to use these funds to purchase playground equipment for the Building Blocks Day Care, LLC.

Carrington Health Center, Carrington

Carrington Health Center (CHC) and its medical staff partnered with seven additional healthcare providers in Carrington, the Foster County Fairgrounds, and SuperValu Foods to implement a worksite wellness program at CHC. Activities included nutritional food preparation classes and grocery store tours, a 12-week Walk with a Doc Program, and the purchase of additional exercise equipment for the CHC Wellness Center.

Jacobson Memorial Hospital Care Center, Elgin

Jacobson Memorial Hospital Care Center implemented a *Fitness for Life* program by offering free health screenings to the public during a health fair and providing multiple fitness-related activities. These activities included, 1) establishing fitness routes in the community, 2) providing free family swim nights each Sunday for three months, 3) hosting a community-wide family bike ride night with free distribution of bicycle helmets for children, 4) hosting a series of weight training classes and lessons on how to use the equipment, and 5) providing lessons at each senior meal site in Grant County for the elderly on chair stretching" and light exercises.

Sakakawea Medical Center, Hazen

Sakakawea Medical Center partnered with Coal Country Community Health Center, Knife River Care Center, Custer Health District, and Mercer County Ambulance to host a Jump Start to Wellness program that began with a workshop in May and presented *Jumping Jack* as a community mascot promoting exercise, fitness, and healthy lifestyle choices. They focused on public events through the summer that were already being held in their community where they promoted physical activity through demonstrations and distributed small gifts as incentives to the public. Each partner hosted one fun activity/program throughout the summer in an effort to provide additional education opportunities for the community. They concluded the summer promotion by sponsoring a community Color Run.

Heart of America Medical Center, Rugby

The purpose of the project was to acquire different equipment and items that promoted physical activity for kids at their employee daycare center, "Kids Next Door." Through the grant, they purchased various things to keep kids active both during the beautiful summer days and indoors throughout the winter.

City-County Health District, Valley City

City-County Health District, through its *Let's Walk Valley City: Healthier People-Building Communities* project, helped people become aware of the expanding multi-use path system in Valley City via a free multi-use trail event where participants received a map and were encouraged to walk/skateboard/run/jog/bike the paths and visit fun booths along the route.

Year 9 Projects 2013

Ashley Medical Center, Ashley

Through a three-part project, the “Recess Across the Lifespan” project utilized the current infrastructure of the City of Ashley as well as the facilities of the Ashley Public School to increase the potential and accessibility to a unique and dynamic fitness program for the community.

They developed ten sites in Ashley on publicly owned property that each have a bench and two metal signs with three varying degrees of difficult exercises at each site. Each site is 1/10 to 3/10 of a mile from each other. The central locations are the two parks in town. These main sites have a map on the sign with all ten of the sites around town that the walker, biker, or runner can use to complete their program. Ashley Public School is used to allow exercise beginning in November when the weather is no longer favorable outside. Within the school, pictures of exercises are posted in different difficulty levels (these are different from the ten that are posted outside around the community). They also posted the distances of the commonly walked areas in the school and added two pieces of equipment to their fitness center.

The final part of the project was to educate. They accomplished this by advertising in the local newspaper about how the project can be incorporated into the community members’ lives. Monthly meetings of various community organizations and the school were attended and used as a venue to educate. In the school, students and members were given pamphlets to take home to share with their family and others. A kickoff walk was hosted on April 21st and they also hosted a walk on the first Saturday in June and July. At the end of June, a 5K bike-walk-run was hosted.

Friends of Annie’s House Foundation, Portland/St. Andrew’s Health Center, Bottineau

The Independent Living Center (ILC), for students with disabilities, in Portland, North Dakota challenged people from all over the United States to walk 250 miles (the distance it would be for the ILC students to walk to Bottineau, North Dakota). Their destination was “Annie’s House,” a newly built adaptive ski and other year-round adaptive sports resort in the Turtle Mountains. They recruited approximately 200 people to engage in daily physical activities leading to a healthy lifestyle by walking 250 miles and also raised funds to purchase adaptive ski/recreation equipment for “Friends of Annie’s House Foundation.” The Portland ILC students were also interested in hosting other students with disabilities in North Dakota to meet them for a variety of skiing retreats at “Annie’s House.” They raised funds that supported individuals with disabilities in accessing the recreational facilities at “Annie’s House” and brought awareness of the new outdoor adaptive recreation facility in Bottineau, North Dakota.

St. Andrew’s Health Center, Bottineau

St. Andrew’s Health Center (SAHC) and the Bottineau Community Prevention Coalition offered quarterly wellness/prevention programs focused on heart health/weight, men’s health, family

health, and women's health. Demonstrations on the correct way to use car seats and education on the importance of wearing bicycle helmets were provided and car seats and bike helmets were distributed to the general public. In addition, free fitness classes three days per week for three months, wellness profiles which included cholesterol information, and preventive screenings for both men and women were offered. Finally, funds from the grant were used to support the already established Metigoshe Turtle Trot, a 5K fun run/walk and 10K race.

Carrington Health Center, Carrington

Nutrition classes taught by Carrington Health Center's (CHC) dietician were offered to the Foster County employee wellness group, CHC employees, and Carrington Public School employees, students, and their parents. Presentations were offered to employees of Foster County, CHC, and Carrington Public School to explain insurance wellness benefits and how those benefits can be applied to existing community resources; information on preventive services, evidence-based best practices for chronic diseases, and other wellness benefits were also provided. A "Fitness on Request" kiosk at Carrington Fitness Center was available, and individuals participating in the nutrition classes used the kiosk at no charge during their appropriate timeslot. Finally, an industrial grade treadmill was purchased for CHC's employee fitness room, which opened in January 2013.

Prince of Peace Care Center, Ellendale

A one-quarter mile long surfaced walking path was built around Prince of Peace Care Center. The path has garden areas around it where residents, employees, and fellow community members can garden and find serenity during spring, summer, and fall. During winter months, a partnership with facilities allows walkers to use hallways, gymnasiums, and exercise facilities with recordable distance.

Wells County District Health Unit, Fessenden

New playground equipment which is handicap accessible and safety approved was purchased for the Fessenden-Bowdon Public School.

Grenora Ambulance, Grenora

Grenora Ambulance and Grenora Public School rebuilt the community's outdoor basketball court and purchased updated playground equipment.

Sakakawea Medical Center, Hazen

Sakakawea Medical Center established a Worksite Wellness Program that included management and employee surveys; individual and group health programs; health risk assessments and personalized wellness profiles; incentive programs, group challenges, and family focused wellness activities; onsite health screenings; and Worksite Wellness evaluation plans/methods.

Central Valley Health District, Jamestown

The Napoleon Community Center used funds to make some physical improvements to the facility, establish Zumba classes, and make overall enhancements that made the Center a safe

place for people of all ages to walk, play basketball, and exercise. A climbing wall was built in the Napoleon High School gymnasium to be utilized by physical education classes at Napoleon Public School. Finally, a Frisbee golf course was built at the Napoleon Park.

Jamestown Regional Medical Center, Jamestown

Jamestown Regional Medical Center's "Community on the Go" initiative supports physical activity for youth, general workforce, and senior populations in Stutsman County to overcome barriers to physical activity. They installed and implemented Fitness on Demand, an innovative video system providing fitness classes at a "click of a button." The James River Family YMCA also made their fitness programs accessible to people at all income levels by awarding scholarships to youth and seniors needing assistance and providing senior transportation. They also provided incentives to individuals participating in "New Year, New You," a worksite wellness program designed to challenge participants to exercise and make healthy lifestyle changes.

LaMoure County Health Department, LaMoure

The LaMoure County Health Department supported a project to assist and engage community members in a five-month session of physical activity events and programs. They offered a personal trainer to work individually with community members, provided memberships to the Community Fitness Center, conducted health risk assessments of community members, hosted the opportunity to experiment with various types of group fitness classes, and hosted monthly community events that engage all ages of community members in physical activity.

Lisbon Area Health Services, Lisbon

Lisbon Area Health Services partnered with the Lisbon Civic and Commerce to help plan, promote, and host a 5K run/walk in Lisbon.

Northwood Deaconess Health Center, Northwood

Northwood Deaconess Health Center proposed to implement a Weight Management Program that offers comprehensive evaluation, detailed exercise prescription, dietary/eating recommendations, and monitoring of health measures, three months of fitness center membership, online website recording/logging of efforts, follow-up phone calls by a registered nurse, and routine rechecks. Four family-orientated community events (volleyball in March, softball in June, nature trail/geocaching in October, and ice skating in December) were hosted in addition to a healthy eating cooking demonstration event.

Presentation Medical Center, Rolla

Presentation Medical Center partnered with the Rolla Chamber and Rolla 125th Centennial Committee to host a Run/Walk events for adults and kids for the 125th Rolla Centennial, July 3-6, 2013.

City-County Health District, Valley City

The Barnes County Worksite Recess Project developed 15-minute daily guided physical "recess" activities at the worksite, provided clinical screenings and follow-up for participants, and

promoted other worksite wellness opportunities. The initial pilot project was for City-County Health District (CCHD) employees, then it was expanded to include all county employees working in the courthouse where CCHD is housed, then it was expanded to include all Barnes County employees, and finally it was extended to the whole community.

Pembilier Nursing Home, Walhalla

Pembilier Nursing Home in Walhalla partnered with Border Health and Fitness to provide a program of health assessments for their employees plus provided activities and equipment to support improvements recommended by a physical fitness assessment program. Border Health and Fitness leased an Internet-based fitness assessment software tool. The Visual Fitness Planner technology is a tool to help individuals create healthy lifestyle changes. The tool recommends lifestyle changes users should make and show how those changes will decrease their health risks over time, creating the motivation to begin an exercise program.

Year 8 Projects 2010-2011

St. Alexius Foundation, Bismarck

The purpose of this project was to improve the efficiency and effectiveness of home healthcare delivery to rural patients for chronic disease management through a Telehealth Home Care-Coordinated Disease Management project. This project addressed the need to improve healthcare outcomes for rural patients with congestive heart failure, chronic obstructive pulmonary disease, or diabetes through telecommunications technology and a coordinated care model. The project was designed to develop a coordinated care model that prevents unnecessary health complications, improves health outcomes, and reduces healthcare costs for chronically ill patients in rural areas. The goals included improving health outcomes by creating an effective and efficient method of chronic disease management for rural patients in their homes utilizing telehealth technology; decreasing the number of hospital readmissions of rural home health patients; and developing a network of partners to provide a collaborative system of care that integrates quality and efficiency data to address the needs of home health patients. Objectives for the project were to provide telehealth chronic disease management services for 80 patients the first year, decrease the acute hospitalization rate of home care patients 10% each year, and develop a model for rural providers to share data and adopt a system of quality improvement that can be replicated to expand the project to other counties. Partners included two critical access hospitals (Garrison Memorial Hospital and Community Memorial Hospital in Turtle Lake), two rural clinics, two community health centers (Northland Community Health Centers in McClusky and Turtle Lake), and a home health and hospice program coordinated by a tertiary.

St. Andrew's Health Center, Bottineau

Northwest Alliance for Information Technology (NWAIT), a network of 10 rural hospitals, purchased and installed additional Storage Area Network (SAN storage) and expand the Unitrends Data Protection Unit (DPU). With this project, they continued to improve our efficiency and improve the coordination of care. The network members were able to

participate in any Health Information Exchange that was developed for North Dakota. This proposal addressed two focus areas: providing efficient healthcare and improving care coordination. The development of the shared Data Center has allowed the network members to share in the cost of computer hardware and the cost of the ongoing maintenance. The members have increased their use of Healthland software modules with the cost savings experience from the shared Data Center. The purchase of the additional SAN storage allowed the network members to save all the data that was developed for the electronic medical record. The electronic medical record of each network member now has the ability to continue to expand and the members met requirements of “meaningful use.” The Data Center allowed the network members to immediately participate in any data exchange that was developed for North Dakota and the region.

Hospice of Red River Valley, Fargo

Hospice of the Red River Valley applied the funds toward the cost of software. Their goals and objectives with this project included: 1) Existing collaborative partnerships were enhanced as new software and real time access made communication with healthcare professionals more effective and efficient. Prescription changes and level of care changes were initiated at the bedside, e-faxed to primary physicians, pharmacy and other patient care staff. The intuitive software instantaneously communicated across the entire range of patient care providers, such as primary providers, clinics, tribal health providers, hospitals, skilled nursing facilities, assisted living facilities, group homes, pharmacists, and others; 2) Cell phone based internet applications improved efficiency of certified nursing assistants. Schedule changes were sent via cell phones, documentation was completed via cell phones, and mileage was tracked via cell phone GPS systems; 3) The entire system of software, laptops and wireless broadband cards, and cell phones for the certified nursing assistants brought efficiencies and enhanced effectiveness across the entire patient care experience from admission to grief support, strengthening them to move confidently into other rural areas when requested. 4) Cost efficiencies gained enabled them to pursue other new healthcare technologies as they became available.

Catholic Health Initiatives, Fargo

The purpose of this project was to improve the quality and safety of patient care provided in four rural critical access hospitals (Carrington, Lisbon, Valley City and Devils Lake) through the full integration of telemedicine technology in emergency rooms, thereby providing round-the-clock access to emergency care specialists and neurologists to ensure timely, high quality care specific to the emergent need and to reduce unnecessary transfers that placed the patient at risk for adverse outcomes. This grant supported the cost of equipment to expand tele-ER to increase the speed and efficiency of diagnosis, treatment and transfers, while decreasing duplicative testing and patients’ out-of-pocket expenses for travel. By integrating two-way video support and immediate access to emergency physicians, eER care through a connection with Avera, in South Dakota, provided staff at smaller rural hospitals with support, essentially doubling the number of healthcare team members available to patients with emergent needs. The service also included eStroke, linking neurologists to eER hospitals for treatment of emergent strokes. The goal of the project was to provide high quality emergency care through

round-the-clock electronic access. The objectives were to expand eER telehealth connectivity to improve emergency and consultative services to rural communities and reduce unnecessary transfers; and build upon an established network of care, as well as telehealth connectivity at other facilities within the state in rural North Dakota, and expand connectivity to support the safe transition among healthcare settings, when needed.

Garrison Memorial Hospital, Garrison

This grant was used to purchase and place wireless ECG units at the four facilities, install software at the four facilities, and provide training to the users. This software allowed our providers and the cardiologists to view the test results electronically and was able to transmit data over a wireless connection to the repository housed at their tertiary. This information was available for viewing at all four sites on the ClinAssist program, making results available to the providers. With the wireless technology, the ECG is transmitted instantly into the system so that in an emergency the results can be viewed by the cardiologist immediately. Their providers and the on-call cardiologist are able to look at the same ECG at the same time and make a determination on patient status and care required. The information was also available to providers at the tertiary should the patient require transfer to their facility. The providers there were able to view the patient's initial ECG and compare it to additional ECGs if they were warranted. This technology provided them with an additional tool to make this possible as well as added to their emerging electronic health records.

Ye Olde Medicine Center, Park River

This grant expanded the Park River telepharmacy services to a Drayton, North Dakota which recently lost pharmacy services due the retirement of the longtime pharmacist. This was a cost effective and efficient way to ensure continuing pharmacy services to the community and to support the medical providers serving the population.

Wishek Hospital Clinic Association, Wishek

Two critical access hospitals (Wishek and Ashley) collaborated to develop and implement an electronic medical record. These funds supported a portion of the cost of the servers and IT support required for this project. In order for optimal capabilities of electronic medical records, both facilities ensured that sufficient hardware support was present to prevent any disruptions in service.

Year 7 Projects 2009-2010

St. Andrew's Health Center, Bottineau

This grant helped with the purchase and installation of computed radiography (CR) for the Radiology Department that allowed films to be obtained in a digital format. CR technology significantly improved the availability of Radiologist's reports so that providers could proceed with appropriate patient treatment. The technology allowed this Critical Access Hospital to improve the quality of care to their patients and to improve the cost efficiency of providing that care.

Southwest Healthcare Services, Bowman

This grant helped with the purchase and installation of computed radiography (CR). The intent for this grant project was to improve the care for their patients and increase operational efficiencies while lowering the financial burden of implementing new and improved technology. By improving access to the images that were taken at their facility and also allowing them to see images that are taken at other facilities that are part of the network of the computed radiography (CR) system and the picture archiving and communication (PACS) system, patient care improved. They increased the efficiency and the effectiveness on how they took images, how they were able to report final results of these images to practitioners, to their patients, and also to tertiary facilities that patients may be transferred to or from. This change resulted in an improvement in the amount of time it took to receive a final report after an exam was done from days to hours.

Altru Health System, Grand Forks

The grant funds went toward implementing a Regional PACS Network between the Altru Health System and two Critical Access Hospitals: Northwood Deaconess in Northwood and Nelson County Health System in McVie. Involvement in the PACS Network concept gave both the tertiary and the CAH “value added” components such as: back up with a failsafe option should the internet VPN become dysfunctional; Local systems and connections provided faster transmission with fewer bridges; Security was established at a variety of levels determined by the local needs and comfort level; Facilities enjoyed local availability of images; Images were immediately delivered to the tertiary’s PACS system and were made available on a work list of physicians as identified in the Clinical Workstation (CW) patient management software, such as the ER physician list at the tertiary; a partnership was formalized which becomes the foundation for a regional patient referral process fostering enhanced efficiencies and timeliness of services for the rural patient; this system was a building block in the Electronic Medical Record; this relationship provided an opportunity to establish a link for future remote consultation capability; customized Provider training on the Amicas system was included and the tertiary’s PACS administrator was experienced in equipment, software and the “resistive user” syndrome that challenges new processes and system acceptance; the tertiary’s Information Systems personnel provided history and experience in the teleradiology area. Personnel was available for problem solving and systems set-up with information on future upgrades, as well.

Kenmare Community Hospital, Kenmare

This grant was used to implement a telepharmacy project. Like many other rural healthcare facilities, Kenmare Hospital was challenged with the inability to provide pharmaceutical care to patients due to the shortage of licensed pharmacists available in the state. This vital loss of a healthcare service had caused great concerns with patient safety and access to care for this community and the rural patients they serve. The intent of the telepharmacy project was to provide an alternative solution to restore and retain pharmacy services that produced the same quality as the traditional method of pharmacy practice. This led to improved access, improved patient safety/quality, improved efficiency, and improved effectiveness.

Nelson County Health System, McVille

This grant was used to implement a Computed Radiography (CR) and Picture Archiving and Communication Systems (PACS). Planning for the implementation of Computed Radiography (CR) and Picture Archiving and Communication Systems (PACS) began over three years prior, with discussions between CAH providers across the state. Several facilities received funding during Year 5 to implement these systems, and this health system has benefited by their experience. They then attended the conference presentation provided during the 2007 Dakota Conference on Rural and Public Health to understand the capabilities and implementation of CR/PACS in a tertiary facility, and the need to collaboratively work with a variety of facilities and providers in order to provide patient satisfaction and quality of care throughout the referral process. A tour of their projects, along with their implementation processes, provided the education and the realities needed to effectively and efficiently plan not only for this project, but to implement other IT projects and collaborations to ensure efficiencies, provide quality, be cost effective and subsequently improve care in our rural areas. Successful implementation of a central server to facilitate the sharing of all information was then started. In January 2008, a meeting was held to discuss the project, and included meetings with the appropriate county health system providers and staff, along with radiologists and our tertiary facilities. Onsite tertiary facility visits were completed, and the process for increasing the collaborative efforts between facilities continued. Hospitals from throughout North Dakota provided a list of their vendors, and a comparison of products being utilized in other rural facilities was developed, which outlined their recommendations, experiences, and financial comparisons. A discussion and demonstration with another CR/PACS tertiary and CAH network in the western part of the state was completed in March 2008. Additional onsite reviews were completed at both the tertiary facilities, as well as onsite at the county health system. A review of service utilization, implementation costs, and staff efficiencies was identified. Finally, vendors were contacted and cost estimates were obtained and systems implemented.

Northwood Deaconess Health Center, Northwood

This grant was used to implement a Computed Radiography (CR) and Picture Archiving and Communication Systems (PACS). By implementing CR/PACS, they were able to provide support and improve quality diagnostic services and efficiencies of care and service; improve and expand collaboration of rural health services and patient care between a variety of healthcare providers; increase utilization of existing services and programs; decrease healthcare risks related to patients, personnel, and the environment. Planning for the implementation of Computed Radiography (CR) and Picture Archiving and Communication Systems (PACS) began several years prior, with discussions between CAH providers across the state. Several facilities received funding during Year 5 to implement these systems, and this health system has benefited by their experience. They had a tertiary and its rural providers present on how their version of a very similar venture has worked. Both parties were extremely pleased with the outcomes. Over 10 rural providers were part of this network. They toured two Critical Access Hospitals in the area to see how their systems worked. This provided the education and the realities needed to effectively and efficiently plan not only for this project, but to implement other IT projects and collaborations to ensure efficiencies, provide quality, be cost effective and subsequently improve care in rural areas. This Critical Access Hospital was implementing an

electronic health record and had it in place at the end of 2008. The Critical Access Hospital was in a data center arrangement with two other Critical Access Hospitals. The three facilities' information was stored on a central server, hosted by a tertiary. This demonstrated some collaborative efforts that were underway. Vendors were contacted and cost estimates were obtained and systems implemented.

Presentation Medical Center, Rolla

This grant helped with the purchase and installation of computed radiography (CR) for the Radiology Department that allowed films to be obtained in a digital format. CR technology significantly improved the availability of Radiologist's reports so that providers could proceed with appropriate patient treatment. The technology allowed this Critical Access Hospital to improve the quality of care to their patients and improved the cost efficiency of providing that care.

Heart of America Medical Center, Rugby

This grant helped with the purchase and installation of computed radiography (CR) for the Radiology Department to allow films to be obtained in a digital format. CR technology significantly improved the availability of Radiologist's reports so that providers can proceed with appropriate patient treatment. The technology allowed this Critical Access Hospital to improve the quality of care to their patients and to improve the cost efficiency of providing that care.

Mountrail County Health Center, Stanley

This grant helped with the purchase and installation of computed radiography (CR) for the Radiology Department to allow films to be obtained in a digital format. CR technology significantly improved the availability of Radiologist's reports so that providers could proceed with appropriate patient treatment. The technology allowed this Critical Access Hospital to improve the quality of care to their patients and to improve the cost efficiency of providing that care.

Tioga Medical Center, Tioga

This grant assisted in the implementation of a computed radiography (CR) system to replace their analog x-ray machine that was purchased new in 1980. This machine was still in place at the time, but they had been advised to look at replacing this machine due to its age and the unavailability of replacement parts.

McKenzie County Health System, Inc., Watford City

This grant helped with the purchase and installation of computed radiography (CR) for the Radiology Department to allow films to be obtained in a digital format. CR technology significantly improved the availability of Radiologist's reports so that providers could proceed with appropriate patient treatment. The technology allowed this Critical Access Hospital to improve the quality of care to their patients and to improve the cost efficiency of providing that care.

Year 6 Projects 2007-2009

Beulah – Coal Country Community Health Center

This project was used to support the initial cost of the digital radiology imaging system. The project aimed to improve quality of imaging, timeliness of reading of imaging, and quality of the initial reads, thus improving the quality of patient care. It was the intent to enhance quality, reduce errors, allow for increased exchange of health information, reduce duplicative and unnecessary testing and services, and complete one step in building an electronic health record system.

Elgin – Jacobson Memorial Hospital Care Center Inc.

This project purchased a computed radiography (CR) system. Computed radiography provided the opportunity to work with radiologists from the tertiary hospital in a more efficient manner. When there was an emergency at times they have had to send people to a larger facility due to not knowing what is on the x-ray just in case it is a situation they could not handle. Implementing digital radiology in the facility allowed them to keep the patient locally and get an accurate and timely reading.

Hazen – Sakakawea Medical Center

This project was a collaborative effort between Sakakawea Medical Center, four clinics, a Community Health Center, and two tertiaries to create an electronic medical records system that is used to share information with other healthcare facilities, providers, and the patients they serve in their rural area. The rural hospital built on the electronic medical records (EMR) system that they had already implemented by purchasing a Picture Archiving and Communication System (PACS) with the intent of improved patient safety, higher patient satisfaction, reduction in duplication, and be a single source of patient information. With the PACS the hospital can now transmit and receive radiology results in minutes.

Hillsboro – Hillsboro Medical Center (HMC)/Hillsboro Medical Center Foundation

This project developed an Integrated Health Information Technology System (wired and wireless network infrastructure) which includes the local hospital, nursing home, ancillary services and the future assisted living facility. The intent of this project was to have a fully integrated IT system that resulted in providing clinicians with accurate and timely patient data, thus improving the care they provide to our patients and residents. A further result was being able to effectively meet federal mandates for Electronic Patient Records.

Kenmare – Kenmare Community Hospital

This project allowed the purchase of a digital radiology system for the hospital to access and network the Picture Archiving and Communication System (PAC) system with the Rural Outreach PACS Initiative. At the time of the grant application, medical radiology images were driven over 50 miles to the tertiary on a daily basis to be read and interpreted. The turn-around time of the final interpretation was averaged between two and four days. The intent was to

improve the overall care of patients, increase operational efficiencies, and lower the financial burden of delivering quality care.

Linton – Linton Hospital

This project allowed the purchase and implementation of a computed (digital) radiography(CR) system for the hospital and associated clinics. Expected outcomes of this project were: enhanced networking with radiologist services, referral physicians and tertiary hospitals; reduction in the number of repeat x-rays; faster turnaround time for radiologist reading of x-ray and CT; reduction of operating cost associated with purchase, handling and storage of film. Decreased turnaround time for radiologist reading of x-ray and CT provided more accurate and timely diagnostic and treatment of patients and reduced the unnecessary transfer of patients to a large tertiary for care and service.

Northwood – Northwood Deaconess Health Center

Northwood was the lead applicant for a group of seven hospitals which, through this project, built a centralized data center that is shared between the hospitals. By sharing a server, they were better able to address and support technology issues in a more cost effective manner, for all members. This met the federal requirement of an electronic health record. This server provided the backbone for the network of hospitals and in time, has the potential to support implementation of telemedicine, telepharmacy, and a PACS system, etc.

Turtle Lake – Community Memorial Hospital

This project assisted the hospital, two clinics and one tertiary in purchasing and implementing hardware and software for Computed Radiography (CR). At the time of the grant application, it took a day or longer to get the x-rays back from the tertiary that they are sent to. The CR resulted in less patients having to be sent away to a tertiary or choosing to go to the tertiary immediately if an x-ray was needed. The images are stored within the tertiary's PACS. The images are also able to be sent to two area clinics for viewing, and eventually to any facility for viewing.

Wishek – Wishek Community Hospital & Clinics

This project purchased a computed radiography (CR) system which provided the community and service area with immediate electronic submission of digital x-rays, CAT scans, and ultrasound images to be read and diagnosed by a radiologist in the tertiary. The project allowed greater quality of care as well as efficiency and cost savings by increased health information sharing between facilities. Unnecessary duplication of testing became nonexistent and patient care was able to be tracked from the rural to urban setting when needed and without delay.

Year 5 Projects 2006-2008

Bowman- Southwest Healthcare Services

This project implemented an Electronic Medical Records (EMR) system to improve the communication between professional healthcare staff and increase patient information for visiting specialists that travel to the facility. The facility goal was to significantly enhance quality of care by eliminating communication errors between physicians and staff and increase the availability of information to the patient's caregivers.

Garrison- Garrison Memorial Hospital

This project purchased a computed radiography or CR system, which allowed images to be transmitted digitally to the radiologists in Bismarck. Patients now have final radiologist reading within hours, rather than weeks. This not only minimized the patient's waiting time, but the physicians had the ability to diagnose and treat the patient closer to home, thereby ensuring patients had access to quality care and offer continuity of care.

Hettinger- West River Health Services

The project focused on access to, and timely transmission of client health information of home bound individuals through the use of telehealth technology. This organization purchased home telehealth units and notebook computers to monitor home care clients. The goal was to enhance and expand current telehealth usage to provide cost-effective comprehensive home care services in a frontier region.

Langdon- Cavalier County Memorial Hospital

This project purchased a Picture Archiving and Communications System (PACS) which allowed the facility to communicate all radiology results to St. Paul Radiology, in St. Paul, Minnesota, and other provider systems. The facility now has radiologist interpretation within hours at most and minutes at best. Patients have the ability to take a CD ROM or DVD with their own images to a facility of their choosing for additional care or a second opinion.

Park River - First Care Health Center

This project focused on the purchase and implementation of a computed radiography system or CR, which allowed images to be transmitted digitally offsite via a T-1 line and can be read 24 hours a day, 365 days a year. The individual patient images remain in the rural facility for access by their local physician. The CR provides immediate access to information improving the quality of patient care.

Rolla - Presentation Medical Center

This project includes Presentation Medical Center, Rolla and St. Andrew's Health Center in Bottineau, facilities that continued building an electronic medical record (EMR) by implementing order communications, specifically Computerized Physician Order Entry (CPOE) in

each facility. The implementation of CPOE improved quality of care and provided cost effective healthcare.

Year 4 Projects 2005-2007

Dickinson- St. Joseph's Hospital and Health Center

This project initiated an information and communications technology (ICT) web-based patient maintenance project which targeted patients diagnosed with diabetes as a prototype -- with the idea that the web-based approach would be extended to other chronic conditions. The goal was to create a unique web interface model that allowed rural patients with diabetes to receive ongoing diabetes care. Not only was the patient's care administered via the web between in-person visits, the project also allowed them to begin to develop an electronic medical records system that helped physicians' access patient information from a single electronic, web-based source.

Fargo- Prairieland Home Care

The Prairieland Home Care is a not-for-profit homecare agency. This agency purchased additional telehealth units which supplemented the existing telehealth program located in Bottineau and now serves Harvey, Rugby, Carrington, and Rolla. These units use a simple telephone line to connect the technology which can monitor daily a variety of patient conditions such as diabetes and heart disease. Illnesses can be managed and controlled in the comfort of ones' home using high-tech disease management, without having a nurse drive to the patient's home.

Hettinger - West River Health Services

The project used funds to further develop electronic health records for the ambulatory and outpatient service areas including rural health clinics in Bowman, New England, Mott, Scranton, Lemmon, Buffalo. The project goal was to improve decision making and quality care for patients in the service area, through the use of EMR which improved the timely transmission and access to healthcare information.

Lisbon- Lisbon Area Health Services

This facility purchased a computed radiography or CR, and a Digital Subscriber Line (DSL) line which allowed images to be transmitted digitally to the radiologists in Fargo. Patients now have final radiologist readings within hours, rather than a week, sent to their personal physician. The patient's films also remain in the facility for availability to local physicians. Local physicians have immediate access to information improving the quality of patient care.

Rolla- Presentation Medical Center

The project included Presentation Medical Center in Rolla and St. Andrew's Health Center in Bottineau working together to research, analyze and select a Laboratory Information System (LIS). These facilities now share equipment and supplies in an effort to maintain access to services and reduce costs. This project expanded quality improvement and the peer review

process by sharing procedures and information.

Williston- Mercy Medical Center

Mercy Medical Center partnered with nine smaller rural communities. They requested funding to create a regional Picture Archiving Communication System (PACS) that assists rural communities in maintaining radiological access and services to ensure access to adequate care in their communities that is cost-effective and increases the quality of patient care.

Year 3 Projects 2003-2004

Ashley- Ashley Medical Center--Community School and Wellness Program

This community consortium, comprised of the Ashley Medical Center, Ashley Public Schools, and Ashley Park District, developed a community and county wide physical activity and wellness program. This intergenerational community process identified the local school as the “Community Hub” for physical fitness and social interaction for all age groups. McIntosh County hosts the highest percentage of elderly of any county in the state but had chosen to address community fitness in the institution associated with its youngest citizens – the school. Citing Healthy People 2010 national objectives and relying on local health data, Ashley Medical Center and its school and park district partners developed a truly “community” focus on fitness and health. A recreational therapist was hired to work with the medical center, park district, and the school as the Community School Coordinator to develop and promote activity programs, wellness and prevention, and to conduct community education. The Community School and Wellness Program of Ashley exemplifies how rural communities can address a common need through the maximization of physical resources and collaboration. Special attention was focused on the conditions of obesity, heart disease, diabetes, and cancer. These are conditions that were identified by the applicant as four major causes of illness in McIntosh County.

Carrington- Carrington Health Center Ambulance- Pediatric Pre-Hospital Care in Rural ND

The Carrington Health Center Ambulance along with its ambulance partners in Bowdon, Fessenden, McHenry, and New Rockford targeted pediatric pre-hospital care in this EMS consortium. These independent ambulance services aligned and collaborated under a new coordinated model to address an important issue for a vulnerable population. The ambulances cover the counties of Eddy, Foster, and Wells and worked together to improve the quality of emergency care for the pediatric patient. This new EMS consortium helped to standardize ambulance protocols; standardize equipment (facilitating patient transfers and maintaining quality control); develop common protocols for advanced life support intercept dispatch; provide uniform training on CPR and First Aid to area schools, certified daycare centers, and parents of newborns; obtain State Instructor’s Licensure for Pediatric Advanced Life Support (PALS); obtain Instructor’s Licensure for Pediatric Education Pre-Hospital Professional (PEPP); and purchase an emergency dispatch radio.

Cavalier- Faith in Action Health Coalition- Transition Plan to New Models of Rural Healthcare Delivery

This faith based coalition operates in the northeast corner of North Dakota in Pembina County. Organized to improve both access and quality of care, this broad-based network includes eight churches, Pembina County Memorial Hospital (Cavalier), Wedgewood Manor Nursing Home, Pembina County Board of Commissioners, Pembina County Meals and Transportation, Cavalier Senior Center, Options Resource Center for Independent Living, and the Cavalier Public School. Initially established through a grant from the Robert Wood Johnson Foundation, the Faith in Action Coalition utilized the Blue Cross Blue Shield of North Dakota Rural Health grant to establish a network of Parish Nurses and trained volunteers to provide holistic healthcare services for individuals through home based services. In addition, the Coalition developed an organizational structure to oversee the activities of the Parish Nurses and volunteers, monitor and implement the health data collection system, identify appropriate responses, and build community awareness of the Faith In Action program and health services.

Cooperstown- Mid-Valley Health Alliance- Preventive Outreach Service Program

The Mid-Valley Health Alliance is comprised of four eastern rural hospitals that have collaborated on a number of programs and activities over the years. Cooperstown Medical Center, Cooperstown; Hillsboro Medical Center, Hillsboro; Union Hospital, Mayville; and Northwood Deaconess Health Center, Northwood developed, through Blue Cross Blue Shield of North Dakota funding, a collaborative prevention program for the four facilities last year. With this grant, they expanded the model to include four other rural communities: Unity Medical Center, Grafton; First Care Health Center, Park River; Cavalier County Memorial Hospital, Langdon; and Pembina County Memorial Hospital, Cavalier. All eight hospitals maintain their autonomy but work together utilizing the Blue Cross Blue Shield of North Dakota grant to improve organizational efficiencies, enhance quality of services, and to improve access to preventive services. The eight hospitals are members of the Valley Rural Health Cooperative, a 14-member organization representing North Dakota and Minnesota hospitals in the Red River Valley. The hospitals targeted their program to adolescents in grades 5-12 and adults. Program goals included: enhancing school based programs designed to meet the needs of children grades 5-12 who have, or are at-risk of developing diabetes (e.g., nutritional and exercise programs); expanding respiratory therapy programs; expanding educational programs (e.g. for community and staff by pooling professional staff resources from the eight hospitals and achieving connectivity for educational purposes through Polycom Video Conferencing); enhancing school STD educational programming (with grade 7); and providing community wellness activities by targeting obesity, hypercholesterolemia, high blood pressure, colon cancer, and respiratory problems.

Dickinson- St. Joseph's Hospital and Health Center- Diabetes Self-Management Education Program

Three Dickinson health organizations – St. Joseph's Hospital and Health Center, Great Plains Clinic, and Southwestern District Health Unit -- collaborated to address diabetes issues in southwestern North Dakota. In addition to Dickinson, the communities of Beach, Bowman, Killdeer, and Richardton were impacted by the alliance. Under this initiative, dietitians, diabetes

educators, and community health nurses conducted pre-assessments with each class participant to identify areas of diabetes management and to identify learning needs. Participants attended a nine-hour diabetes class that focused on the disease process, nutritional management, physical activity, medications, acute and chronic complications, foot care, lifestyle changes, available resources, and a post test to determine understanding. This coalition brought quality diabetes education and self-management to rural citizens in the region. Participants continue to receive the follow-up services of a community health nurse.

Dickinson- Roughrider Education Services- Feasibility Study on the Use of Public School Transportation for Healthcare Access in Southwestern North Dakota

Roughrider Education Services Program, a school cooperative organization, along with its partners Dickinson State University and the Roosevelt-Custer Regional Council conducted a feasibility study to determine the viability of using school transportation (i.e., buses, vans, etc.) systems for healthcare transportation for rural residents. In rural North Dakota, transportation is an emerging issue, particularly as it relates to healthcare access. Rural residents in southwestern North Dakota must deal with a numerically smaller and aging population spread over a large geographical area. All of the counties in the study area, with the exception of Stark, are classified as frontier counties having six or less people per square mile. This innovative and timely approach measured a variety of factors including, but not limited to, the following: community and citizen needs for healthcare transportation, attitudes toward using school vehicles for healthcare, transportation provider input, existing transportation plans and studies, healthcare provider attitudes, existing inventory, funding options, and safety and driver education needs. Healthcare providers in the five communities of Bowman, Dickinson, Hettinger, Killdeer, and Richardton now also participate in the partnership. Educational systems that cooperate within Roughrider include the school districts of Beach, Belfield, Billings County, Bowman, Dickinson, Glen Ullin, Halliday, Hebron, Hettinger, Killdeer, Lone Tree (Golva), Mott-Regent, New England, Richardton-Taylor, Scranton, Slope County, South Heart, and Dickinson Catholic Schools.

New Town- Mandan, Hidatsa & Arikara Nations of the Three Affiliated Tribes of the Fort Berthold Federal Indian Reservation- Home Healthcare Delivery System

The focus of this project was to provide training/education to 24 certified nurse assistant candidates and to provide direct services to the elderly, the diabetic, disabled or otherwise homebound patient. Direct services include health surveillance, tracking, and personal care assistance. The Fort Berthold Indian Reservation is one of the most isolated areas in North Dakota. Geographically dispersed into four distinct regions by Lake Sakakawea, most of the reservation is isolated from the main clinic system in New Town. This project sought to bring more healthcare directly to the citizens as opposed to them trying to travel the great distances to New Town. For example, Twin Buttes is a 200 mile round trip. The 24 trained CNAs now live in their home towns throughout the reservation providing necessary health services to an isolated population. Special focus continues to be on diabetics. Approximately ten percent of the tribal population is diabetic in comparison to approximately four percent of North Dakota's population. The consortium for this project included the Tribal Health Program; Community

Health Nursing Staff; Clinical Nursing Staff; Tribal Social Services; Mandan, Hidatsa, & Arikara Elder's Association; and the Kidney Dialysis Unit.

Rolla- Presentation Medical Center- Protect Our Children

The Protect Our Children coalition, in north central North Dakota, addressed evidence-based teen wellness screenings and pediatric advanced life support education. The coalition consists of Presentation Medical Center, Rolla; Rolette County Public Health District; Northland Community Health Center, Rolette; Rolla Clinic, PC; Rolla Community Ambulance; Dunseith Public School; St. John Public School; Mount Pleasant Public School; Turtle Mountain Public School; and Rolette Public School. Under the first priority – evidence-based teen wellness screenings – healthcare providers entered the five participating Rolette County schools to offer the Wellsource Teen Edition personal wellness profile to 10th grade students. This is a national program used throughout the country. The teen wellness profile is written in an upbeat, easy to understand language that appeals to teens. The Wellsource process produces an individual report for the student, a health provider summary for the wellness counselor or physician, a progress report for the student and health provider, an executive summary that compares Rolette County with national averages, and a group summary for final review and planning. Topics covered in this phase of the project included pregnancy, extreme dieting, teen suicide, substance abuse, and violence. The second priority under the Protect Our Children program relates to pediatric advanced life support education (PALS). Two staff members became certified PALS Instructors. This local faculty then provided PALS education to 80 percent of the nursing and medical staff.

Rugby- Golden Heart Services- Rural Advanced Pre-Hospital Education Program

A voluntary coalition of professional educators, rural EMS educators, healthcare facilities, and rural ambulance services forged a partnership to offer high quality paramedic programs to rural areas. Heart of America Medical Center and Golden Heart Paramedics, both of Rugby, along with the F-M Ambulance Service of Fargo/Moorhead brought advanced EMS training to rural EMS personnel who wanted to remain in their communities providing advanced level emergency care. At the time of the grant application, the most common way for a rural EMT to receive advanced training as a paramedic is to travel to Bismarck or Fargo to complete the required 700 hours of clinical education. This entails three days a week in classroom activity outside of the home community making it very difficult to simultaneously travel and to hold a full time job. The solution offered by this coalition was to employ interactive video conferencing with the EMT remaining in the rural community for class work and the education being broadcast from the F-M Ambulance Service. A local paramedic or nurse proctor supervised the education at the rural site. The clinical aspect of the training occurred in both Fargo and the rural site. Through video conferencing the travel requirements for the rural EMT was significantly reduced. The program is also accredited through Bismarck State College and the students can also earn an associate degree.

Trenton Indian Service Area- Program Development Specialist

The Trenton Indian Service Area is the only congressionally approved and classified Indian Service Area in the country. It is not organized as a reservation or urban area. The Service Area

covers six counties in north western North Dakota and north eastern Montana serving the needs of the area members of the Turtle Mountain Band of Chippewa Indians. A case management system was created and funded during the previous cycle through Blue Cross Blue Shield of North Dakota grant funding. The case management system has facilitated a more seamless system of assisting tribal patients making their way through tribal, IHS, public, and private health infrastructures and at the same time it has assisted the various provider groups by monitoring payment streams, tracking patient data (computerized clinical outcomes and administrative information), and fostering collaborative relationships built around the needs of the client. Both the patient and the provider groups experienced more coordination and the payment process was maintained and even streamlined. In the first year, the partners consisted of the Trenton Indian Service Area, Mercy Medical Center of Williston, and Northwest Human Service Center also of Williston. For this second round, the three core partners remain but have been joined by Williams County Social Services. The goals of the Case Management Program were to improve and facilitate access to appropriate services, to provide and facilitate continuity of care, to improve coordination of services, to provide alternate care sites, to contain and/or decrease costs (while improving access) and to ensure appropriate utilization of the entire spectrum of services.

Year 2 Projects 2002-2003

Cooperstown - Cooperstown Medical Center- Coordinated Health Program

Four rural hospitals worked together to reduce service duplication, create administrative and clinical efficiencies, enhance technological connectivity, and improve the overall quality of life in the area. Cooperstown Medical Center, Cooperstown; Union Hospital, Mayville; Hillsboro Medical Center, Hillsboro; and Northwood Deaconess Health Center, Northwood banded together to establish a Coordinated Health Program (CHP) model that involved screening for childhood diseases, addressed categorical health problems, and expanded collaborative staff education and training. The Coordinated Health Program, relying on goals identified from the Healthy People 2010 objectives, addressed the following conditions: childhood obesity and exercise, diabetes, asthma, and sexually transmitted diseases. In addition to the focus on children and adolescent health status, the CHP provided community wellness activities including a free wellness screening in four towns served by the four hospitals. The education coordinator (shared by the four hospitals) combined professional staff resources from the respective organizations to conduct community education and staff training. The four hospitals used Polycom Video Conferencing, purchased through the grant, to link the facilities for training and education. The four hospitals are members of the Valley Rural Health Cooperative, a rural hospital based network, located in the Red River Valley of North Dakota and Minnesota. Three of the four hospitals are Critical Access Hospitals (CAHs).

Fort Totten - Spirit Lake Health Tracks Program- Comprehensive Respiratory Therapy

A coalition of health programs and education systems of the Spirit Lake Nation collaborated to offer a comprehensive respiratory therapy initiative that included individualized baseline data,

asthma care, management, treatment, and home-based follow-up care. The partners included the Spirit Lake Health Tracks Program, Maternal & Child Health Program, Indian Health Service, and Four Winds Community School. The incidence rate of Native American children in North Dakota requiring an emergency response for breathing difficulties is three times the rate of Caucasian children (7.2/1000 compared to 2.3/1000), based on state health department statistics. The Spirit Lake Nation rate is also influenced by the on-going flooding and high water table associated with Devils Lake causing molds and fungus to grow. In response, this tribal coalition worked to improve access to care and the quality of care for children and their families on or near the Spirit Lake Reservation. Staff provided on-going training in the diagnosis, care, and management of asthma according to the American Academy of Pediatrics-Pediatric Clinical Practice Guidelines. The coalition used the BCBSND grant to enhance the capacity for data collection, needs assessment, performance monitoring, and surveillance. At the time of the grant application, the Health Tracks Program used an electronic filing database that includes asthma clinic data. The program investigated the possibility of establishing a wireless system to connect all the clinic sites on the reservation.

Garrison - Garrison Memorial Hospital - Community Education on Heart Disease, Osteoporosis, and Spinal Injuries

A McLean County coalition addressed heart disease, osteoporosis, and spinal injuries through the combined efforts of the Garrison Memorial Hospital and Nursing Facility, the Community Memorial Hospital in Turtle Lake, and the Washburn Clinic. The coalition sought to spur on a public commitment to healthy lifestyles, through a series of community education interventions. The coalition, working closely with area school systems and businesses, worked to improve the awareness of risk factors, prevention, management, and cost reduction. The county-wide coalition used a strategic planning technique to identify area issues and to map out a strategy. For example, studies indicated that 90 percent of the population was concerned about heart disease but 70 percent were afraid ask their physicians about their risks or prevention. The conclusion was to initiate a process to educate the public, including school children, about risks, life style issues, and to foster more interaction between the public and providers thus lessening some of the fear and apprehension. The process began with health professionals gaining more specialized education on the three diseases. This was followed by community-based education through lectures and presentations. The stated goal was to improve participant awareness of risk factors, prevention strategies, and condition management by 20-25 percent. Participants were pre-tested and post-tested on knowledge. The two hospitals are licensed as CAH facilities.

Minot - North Dakota Emergency Medical Services (EMS) Association- Forge a Communications Network

A significant member of the rural health safety net is the rural ambulance system. North Dakota has over 140 ground ambulance services. Over 90 percent of the pre-hospital EMS workforce is volunteers. Many of the services are in very small towns and do not have access to the resources necessary to establish communication systems that can facilitate access to training, reimbursement, program and service information, and other valuable information. The North Dakota EMS Association along with the state Division of Emergency Health Services, and rural

health ambulance systems worked together to forge a communications network. This communications program provided computers and software to 70 rural ambulance services; developed an EMS web page; developed local communication tools (e.g., recruitment/retention, EMS awareness program for publication in local media); and training and other workshops (e.g., educational tools for local instructors, quality assurance programs, billing processes, record keeping, and other workshops).

Tower City and Buffalo - Parish Nurse Program

The two small communities of Buffalo and Tower City formed an area-wide coalition sponsoring a Parish Nurse program. Initiated through a faith-based coalition in 1998 that included Buffalo Lutheran and St. Thomas Catholic Church, the Community Health Ministry coalition now includes St. Paul Lutheran Church of Tower City; First Presbyterian Church, Buffalo; Meritcare Health System; First State Bank of North Dakota/Buffalo; Maple Valley School District and FCCLA; Senior Citizens of both Buffalo and Tower City; Buffalo Community Club; First Responders; and the city councils of both Buffalo and Tower City. From 2000 to the summer of 2002, the Parish Nurse program had approximately 1,500 encounters and made approximately 475 referrals to physicians and other providers. In addition to providing patient follow-up care, the parish nurse teaches womens groups about breast self-examination, Sunday school students about dental hygiene, administers blood pressure readings at senior centers and churches, assists the Faithfully Fit Forever exercise program, and facilitates a variety of other education programs.

Rolla - Presentation Medical Center- Advanced Cardiac Live Support Program

In an effort to improve quality of care and access to essential services, coalitions of health providers in north-central North Dakota developed an Advanced Cardiac Life Support (ACLS) program. Presentation Medical Center with the Presentation Care Center, Presentation Clinic, and the Rolla Community Ambulance worked to train and upgrade the skill level of 79 staff members (55 nursing, seven medical and 17 emergency medical technicians/first responders). Presentation Medical Center had three certified ACLS instructors. At the time of the grant application, approximately 16 percent of North Dakota's EMTs had ACLS certification. The need for such training was significant as approximately 40 percent of North Dakota's deaths are related to heart disease. The Rolla area providers sought to expand on existing programming which included CPR training and access to Automatic External Defibrillators. Rolette County does not have 911 access so the Presentation Medical Center and its partners worked together to improve vital emergency services. Presentation Medical Center is licensed as a CAH.

Trenton Indian Service Area - Case Management Program

A coalition in northwestern North Dakota, Trenton Indian Service Area, Mercy Medical Center, Williston and Northwest Human Service Center, Williston, worked together to organize and develop a case manager system. The program addressed the coordination of health services, benefits, and community resources. The Trenton Indian Service refers approximately 2,400 clients annually and approximately 31 percent of the clients are denied funding for services annually. Issues revolve around scheduling, travel, information management, and service fragmentation. The case manager system worked to improve access to appropriate services by

initiating and maintaining patient records and file data; to facilitate the continuum of care by computerized information tracking; to improve the coordination of services by data collection before, during, and after the referral; and to contain or decrease costs by providing case management referrals generated from pre-certification, concurrent review, employers, physicians, and others. The coalition made use of a nationally recognized tracking system called Referred Care Information System.

Hettinger - West River Health Services- Disease Management Program

With arthritis being the top disability in the United States and with 31 percent of North Dakotans stating they have arthritis (state health department data), a coalition in West River developed a disease management program to address the condition. The coalition was comprised of West River Health Services of Hettinger, the Hettinger Public School, and the Southwest District Health Unit of Dickinson. Two community health needs assessments, performed over the previous five years, had found arthritis to be the number one health condition in southwestern North Dakota. The program involved individualized nutrition counseling by a dietician, individualized physical activity program designed and supervised by registered physical and occupational therapists, mental health counseling for stress and depression, and assistance with medication management by a doctor of pharmacy. Certified instructors provided various exercise classes including yoga, aquatics, and water exercises for seniors. The initiative monitored ambulatory data and studied behavior modification and referral patterns. The arthritis program was the only program of this nature in southwestern North Dakota at the time.

Year 1 Projects 2001-2002

Cooperstown - Cooperstown Medical Center- Community Health Education

Emergency Medical Services (EMS), community health education, and health promotion and wellness efforts were the focus of a collaborative effort involving Cooperstown Medical Center, Cooperstown; Union Hospital, Mayville; and Hillsboro Medical Center, Hillsboro. The service area covers 25 rural North Dakota communities in Griggs, Steele, and Trail Counties in eastern North Dakota. The three rural hospitals and their medical systems worked together to provide automatic defibrillators to each county law enforcement department or first responder unit and to Mayville State University, offered training on defibrillator equipment, recruited a health education coordinator (to work with all three hospitals), developed an educational model and activities, developed and distributed health educational materials throughout the three county area, and hosted wellness screenings. The project also involves the cooperation of local/area EMS providers and law enforcement. Its primary focus is on access to services and cost effective health services. The hospitals in Cooperstown and Mayville are Critical Access Hospitals (CAHs).

Finley - Finley Ambulance Service- Address EMS from a Regional Perspective

The Finley Ambulance Service with its partners the Hope Ambulance Service, Steele County Sheriff, Steele County Public Health, and Union Hospital collaborated to address emergency

medical services from a regional perspective. Recruitment and retention of volunteers is a serious rural health problem. Healthcare providers in Steele County had selected access to EMS services and quality of care as their focus areas. Showing strong county-wide collaboration, healthcare providers in Steele County embarked on a multifaceted process that linked EMS training throughout the county, built cooperation and collaboration between rural ambulance units, combined efforts to promote 911, purchased automatic external defibrillators (AED), educated the public on the utility of AEDs, and addressed recruitment and retention issues through the development of a Service Recognition Program (squad jackets, patches, and newspaper promotion of EMTs).

Rugby - Good Samaritan Hospital Association (Heart of America Medical Center)- Address Rural EMS through an Innovative and Resourceful Effort

Good Samaritan Hospital Association of Rugby, North Dakota represented by Heart of America Medical Center and the Golden Heart Paramedics sought to address rural emergency medical services through an innovative and resourceful effort. This initiative worked to integrate emergency medical training into the high school curriculum. Heart of America and Golden Heart Paramedics worked with the rural ambulance units and high schools in Leeds, Maddock, Rolette, Rolla, Rugby, Towner, and Willow City. The High School Emergency Medical Healthcareers Program was designed to provide high school juniors and seniors with vocational education leading to an Emergency Medical Technician (EMT) license, to encourage high school students to consider a career in healthcare, and to provide a new base of volunteers for local ambulance units. Following certification, the students worked with their local ambulance units. This “grow your own” effort was meant to expose young students to healthcareers and to address an all too common problem: volunteer recruitment. The primary focus of the grant was access to services.

Jamestown - Jamestown Hospital- Disease State Management Program

Jamestown Hospital with its partners Dakota Clinic (Jamestown) and MedCenter One Clinic (Jamestown) developed a Disease State Management program that allowed pharmacists to enter into collaborative practices with physicians to assist in the management of disease. At the time of the grant application, 26 states had allowed such arrangements. North Dakota recently passed similar legislation. This innovative initiative permitted Jamestown pharmacists to meet with patients and conduct face-to-face counseling for physician specified DSM programs in the area of anticoagulation and asthma medications. Under the BCBSND grant, pharmacists educated, tested, monitored, and advised patients on specific medications following the development of physician established protocols. The program helped to decrease healthcare dollars spent on disease management, decrease adverse medication events for patients, improve patient compliance, and improve patient outcomes. The focal area for the initiative was to provide cost effective services and to improve quality of care.

Devils Lake - Lake Region State College- Nursing Workforce Shortages in Rural ND

Lake Region State College (LRSC) took the lead in addressing nursing workforce shortages in rural North Dakota. In developing and implementing a Licensed Practical Nurse (LPN) Distance Learning Program, LRSC worked with partner organizations to offer rural residents an

opportunity to become valued rural healthcare providers. Recognizing that many rural residents do not have the luxury of traveling for extended periods of time to participate in traditional education programs, LRSC targeted “place-bound” students (i.e., having family and work obligations that prevent travel). With its partners at Bismarck State College, Williston State College, and healthcare provider consortia in Langdon, Grafton-Park River, and Devils Lake, LRSC developed an innovative and rural-focused project that had four main components: distance learning development (including on-line Internet courses, video conferencing, web-based presentation applications, and video streaming); community distance learning centers (technology equipped rooms located at rural health facilities); field and technical support services (trained technicians and field counselors located at the rural sites); and, community clinical instruction (some instruction will integrate local providers with academic instruction from Lake Region, Bismarck, and Williston). This creative model focused on access to services and quality of care factors by linking academic and rural health institutions.

Maddock Drug & Gift - Develop and Implement the First Tele-pharmacy

In an effort to develop and implement the first tele-pharmacy in North Dakota, Maddock Drug & Gift in Maddock along with partner organizations -- the City of Rolette, IsoRX (a telecommunications company), and Weibe Electronics (a contracting company and developer of the Rolette mini-mall) -- collaborated to develop a remote-based pharmacy in Rolette. Maddock served as the central pharmacy connected to a new Rolette remote-site pharmacy via telecommunications. Access to necessary medications in rural North Dakota has been hindered by the closure of 26 pharmacies in recent years with the prospect of nine more in the immediate future. The Rolette pharmacy closed seven years prior to this project. This project linked access to health services with economic development to help sustain health access and community infrastructure. Tele-pharmacy, through a central pharmacy with a licensed pharmacist and a remote site pharmacy to be staffed by a licensed pharmacy technician, offered an innovative opportunity to maintain access to medical services and supplies. The pharmacist and technician communicate via video and audio links to ensure the proper dispensing of medications. The technician is under the direct supervision of the pharmacist.

Tower City and Buffalo - Parish Nurse Community Ministry Board

Churches in Tower City and Buffalo, south-central North Dakota, implemented a parish nurse program. The Buffalo Lutheran Church, Buffalo; St. Thomas Catholic Church, Buffalo; and St. Paul Lutheran Church, Tower City addressed crisis intervention for patients and families, provided follow-up medical care, and offered community health education. The partners contributed matching dollars and Meritcare Health System of Fargo provided financial support. The Parish Nurse Program concentrated on access to services, cost effective services, and improved quality of care. The initiative buildt on previous accomplishments in the area.

Richardton Committee - Keep Healthcare Services

This broad-based community group in western North Dakota selected access to services as its focus area. Richardton citizens used a community development process to identify key community needs and issues. The Committee to Keep Healthcare Services was formed from this process to address specific community and area health needs. Comprised of concerned citizens,

including representation from the five community healthcare facilities (hospital, clinic, dental clinic, ambulance, and pharmacy), the Committee was funded to address specific emergency medical service issues. This includes CPR and automatic external defibrillator training and the purchase of one defibrillator.

Grafton - Valley Rural Health Cooperative (VRHC)- Diabetes Education Program

This cooperative of rural hospitals covers the Red River Valley corridor of eastern North Dakota extending from a southern point in Hillsboro to a northern edge in Langdon. The collaborating members used the BCBSND award to increase nursing hours devoted to outpatient diabetes education, implement a diabetes data tracking system, develop an Indigent Medication Program, provide in-service diabetes education, and establish community-based diabetes healthcare networks. The eight collaborating partners included the following: Unity Medical Center, Grafton; Pembina County Memorial Hospital, Cavalier; Cavalier County Memorial Hospital, Langdon; First Care, Park River; Cooperstown Medical Center, Cooperstown; Northwood Deaconess Health Center, Northwood; Union Hospital, Mayville; and Hillsboro Community Hospital, Hillsboro. Each partner made a financial contribution to cover part of the total program costs. The Diabetes Education Program addressed access to services, cost effective services, and improved quality of care.