Success Stories from North Dakota

The integration of public health and primary care can result in both improved quality of care for a population and lowered health costs. Both components of the health system share a common goal of health improvement, have similar funding streams and resources, and share many partnerships. If aligned, public health and primary care could achieve lasting and substantial improvements in individual and population health in the United States.[i]

The following two case studies provide examples of how one state has taken significant steps toward primary care and public health integration and demonstrate the benefits and impact this integration has had on communities in North Dakota. According to the 2010 U.S. Census, North Dakota has a population of 672,591.The majority of the population is white (90 percent), with 5.4 percent American Indian. North Dakota also has an aging population (14 percent are 65 years and older).[ii] A large portion (40.1 percent) of the population lives in rural areas with limited access to providers.[iii] Moreover, 92 percent of North Dakota counties have full or partial designations as medically underserved areas or populations.[iv] Public-private partnerships in two areas of North Dakota have taken steps toward increasing access to providers and services.

Tri-County Chronic Disease Management Program

Overview

Barnes, Stutsman, and Logan counties in North Dakota piloted a successful chronic disease management program through collaboration between public health and primary care. The tri-county area's population is primarily low-income and Caucasian, with a high proportion of elderly residents. A needs assessment helped determine the importance of chronic disease management and resulted in deliberate coordination. An employee from one of the local public health units with a background in chronic disease management, with support from an administrative leader from another local public health unit, convened private and public stakeholders to design a comprehensive chronic disease program. The Tri-County Chronic Disease Management program is built on the evidence-based Chronic Care Model[v] (CCM) and was implemented in conjunction with the Health Sciences Institute's Chronic Disease Management Professional Certification.[vi] To meet the needs of this particular program, staff modified the CCM by creating and adding hard-copy patient-education handouts and other tools using evidence-based information from sources such as the American Heart Association, American Lung Association, the National Guideline Clearinghouse, the American Thoracic Society, and the American Diabetes Association.

One hundred and forty-four individuals with chronic diseases (i.e., hypertension, diabetes, congestive heart failure, chronic obstructive pulmonary disease (COPD), coronary artery disease, asthma, Alzheimer's) took part in the program, with individuals participating for one year on average. Public health nurses provided home visitation, while private practice clinicians provided protocols and clinical followup for the patients. Clinician followup and the number of visits needed were determined on a case-by-case basis, depending on provider and client needs, as well as how long the client had been

dealing with chronic disease. The nurses had frequent contact with the providers between client visits, either by phone or through fax reports. A Health Resources and Services Administration Outreach Grant from the Office of Rural Health Policy provided funding for the first three years of the project.

Benefits

Preliminary analyses show that chronic disease management parameters—total cholesterol, LDL cholesterol, BMI, hemoglobin A1C, weight, blood pressure, and triglycerides—improved among program participants.[vii] According to the Center for Health Care Strategies Return on Investment Forecasting Calculator, the tri-county area will experience a five year decrease of about $800,000 in medical spending on heart disease, diabetes, and hypertension by providing this program.[viii]

Sustainability

Due to expiration of the grant funding, the chronic disease management program is currently being offered in a much less robust fashion as a self-pay public health home visit option. Program staff recognize that the partnership between public health and local providers has demonstrated significant health outcomes and return on investment and continue to seek options to move this program forward. The success of the program captured the attention of Blue Cross Blue Shield, which insures 69 percent of the state.[ix] Staff are currently in discussions with the insurance provider about potentially supporting this public health and primary care model across the entire state of North Dakota.

Spirit Lake Nation Public-Private Partnerships

Background

The Spirit Lake Tribe located in east-central North Dakota had an estimated 6,700 members in 2005.[x] Terry Dwelle, MD, MPH, the current state health officer of North Dakota, worked as the clinical director in Spirit Lake Nation from 1977 to 1980 and has maintained a relationship with the tribe over the past 30 years. He continues to provide continuity of care for children with chronic conditions in Spirit Lake and facilitated a partnership between the tribal entity (as the clinical partner) and the state health agency (as the public health partner).

Overview

In the early 1980s, the Spirit Lake Tribe started an Early Childhood Tracking Program. This program, separate from the tribal clinic, follows children from birth to age 6 and provides vision, hearing, and developmental screening, as well as immunizations. Staff are able to identify developmental delays before children reach the classroom and refer them to specialists. In 2004, when the tracking program noted an increase in childhood asthma, leadership decided a chronic disease management asthma clinic for children would be desirable. With support from the state health agency, the tribal health clinic, used standardized protocols to design the program, wrote a basic disease management electronic health record, and started seeing patients. “This is an integration of a public health and primary care model utilizing the basic concept of *bridging* to change risky behaviors of smoking, obesity, and other environmental risks,” says Dwelle. The clinic now sees more than 400 children, representing approximately 80 percent of children with asthma at Spirit Lake. The clinic was so successful that adult patients with COPD wanted to attend, and clinic staff decided to expand their services by contracting with a private physician. The asthma clinic serves primarily a Medicaid population (97%), and, due to its

efficiency, is self-sustainable on a fee for service basis. At the request of tribal health leadership, the state health agency also provides staffing support in oral health program services, asthma education, tobacco quitline services, children with special health needs services support, and immunization registration.

The Early Childhood Tracking Program has another partnership opportunity as well. In need of additional staff, particularly a speech therapist, the program director is in the final stages of solidifying a contract with the University of North Dakota School of Medicine's Family Medicine department to provide instructors, residents, and students to continue the MD portion of this clinical program. With the addition of clinical staff, program staff are interested in adding a much-needed diabetes chronic disease management program.

> *"The prime motivator was tribal people who owned the community and saw a perceived need."*
> - Terry Dwelle, North Dakota State Health Officer

Benefits

Thanks to public-private partnerships, the Spirit Lake Clinic has been able to expand to provide services related to fetal alcohol syndrome, pediatric cardiology, genetic diseases, developmental screening, and more. The tribal clinic/state health agency partnership has enabled a population lacking research and public health expertise to provide public health services to their community and opened doors for future projects together.

Sustainability

The North Dakota health department has been careful to foster local and tribal ownership in Spirit Lake. They encouraged the community to work with existing resources when possible and to maintain engagement when external grant funds were utilized. While the state health department provided support in many areas of health promotion and disease prevention, the success of Spirit Lake would not have occurred without community engagement and tribal ownership.

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