

The Rural Health Care Coordination Network Partnership Program: Avera St. Mary's *Completing the Circle* Project

This practice brief is part of a series developed by the NORC Walsh Center for Rural Health Analysis and the University of Minnesota Rural Health Research Center to highlight findings from the Evaluation of the Rural Health Care Coordination Network Partnership Program. The Health Resources and Services Administration's Federal Office of Rural Health Policy provided funding support for the program and its evaluation.

RURAL HEALTH CARE COORDINATION NETWORK PARTNERSHIP PROGRAM

Over 50 million people live in rural areas in the United States and are at higher risk for developing chronic illnesses than their urban peers.¹⁻³ The increasing prevalence of chronic diseases in rural areas coupled with the high cost of health care contribute to the need for high-quality, cost-effective coordinated services that meet physical and behavioral health needs.

Despite certain barriers (e.g., incompatible electronic health record systems across providers), redesigning health care systems in order to better coordinate patients' care is important.⁴ Individuals with complex health conditions often require care from both primary care and specialty providers, and may be unsure how to access or navigate these services. In addition, providers may not always communicate with each other regarding test results, treatment plans, and other aspects of a patient's care.

In response to these concerns, the Federal Office of Rural Health Policy (FORHP) developed the Rural Health Care Coordination Network Partnership Program (Care Coordination Program). Under this program, eight grantees received funding to support the development or expansion of formal rural health networks that focus on coordinating care for three chronic conditions: type 2 diabetes, congestive heart failure, and chronic obstructive pulmonary disease. Grantees are encouraged to develop innovative approaches, demonstrate improved health outcomes, and employ evidence-based care coordination strategies that address the prevalence and management of at least one of the three chronic conditions. The three-year grant program began in September 2015.

The NORC Walsh Center for Rural Health Analysis (NORC), in partnership with the University of Minnesota Rural Health Research Center, is contracted by FORHP to serve as the Care Coordination Program's external evaluator. The evaluation focuses on the implementation, impact,

context, and sustainability of the Care Coordination Program. The focus of this brief is the *Completing the Circle* Project developed by Avera St. Mary's located in Pierre, South Dakota.

Grantee Program Area Served

- Located in Central South Dakota, 'Completing the Circle' serves patients in 13 central SD counties: Brule, Buffalo, Charles Mix, Gregory, Hand, Hughes, Hyde, Jones, Lyman, Potter, Stanley, Sully, and Tripp.
- Eleven of these counties are designated as "frontier" by the U.S. Census Bureau.
- Most of the service area is a Health Professional Shortage Area and a Medically Underserved Area.

GRANTEE BACKGROUND

The *Completing the Circle* project is a collaboration between Avera St. Mary's hospital, South Dakota Urban Indian Health (SDUIH), and Vilas Pharmacy. Avera St. Mary's, located in Pierre, SD, is the largest hospital in the area and offers access to a number of health care providers and specialists. SDUIH is a part of the Indian Health Service, and provides health care services to local American Indians, particularly those living outside of tribal lands. Vilas Pharmacy, also located in Pierre, is an independent pharmacy that operates multiple locations in the region and offers customer education, medication review, and assistance with identifying discounts to make prescriptions more affordable.

Prior to the *Completing the Circle* project, each of the three partnering entities recognized the high rates of uncontrolled type 2 diabetes among their patient populations, particularly among American Indians. According to the Avera St. Mary's Community Health Needs assessment, which is completed every three years, diabetes is one of the top three health concerns facing communities in central South Dakota. *Completing the Circle* was created to improve the care coordination of patients with diabetes in the region by utilizing each partner's

strengths and existing services to provide more comprehensive and beneficial coordinated care for enrolled individuals.

HOW IS THE PROGRAM STRUCTURED?

Target Population

The population in central South Dakota is, on average, 40 years of age or older and includes a large American Indian population (about 1 out of 5 people are American Indian). In 11 of the 13 targeted counties, more than 10% of the population is below the Federal Poverty Level. A large portion of the population (over 16%) is also underinsured. Low income, low education attainment, and lack of access to transportation are seen as the most common barriers to access to care and patient health in the region.

Completing the Circle aimed to enroll 20 adults with a diagnosis of type 2 diabetes in year one of the grant, 10 more patients in year two, and 10 more patients in year three, for a total of 40 enrolled patients. The grantee ultimately enrolled 53 individuals, although 13 (25%) patients were lost to follow-up or discharged. Almost one third (31%) of patients were American Indian. The average age of patients was 55, and most (59%) were female.

Partners and Approach

Avera St. Mary's hospital serves as the lead partner for *Completing the Circle*. This leadership role includes managing the project timeline and grant requirements, hosting governing board meetings on a quarterly basis, and monthly work-group calls for staff providing direct care. The Diabetes Care Management program at SDUIH's Pierre clinic provided a Certified Diabetic Educator (CDE) and a model of care to the Avera Medical Group-Pierre's (AMG-P) existing Coordinated Care team. In years two and three, AMG-P obtained their own CDE and developed an in-house diabetic self-management program, while activities also expanded to the AMG-Gregory clinic. Vilas Pharmacy provides patient-level pharmaceutical support, consultation, and education for the project.

Completing the Circle utilizes the Patient Centered Medical Home (PCMH) model as the foundation of their project. This approach incorporates teamwork, care management, medication management, health information technology, health promotion, transitional care/follow-up, and social support for patients. The goal is to connect every patient with a coordinated care representative who can identify and assist with a patient's specific health care needs. The coordinated care team includes a

Registered Nurse (RN) Coordinator, Coordinated Care Specialist, Social Worker, Diabetic Care Manager and/or CDE. The care team connects each patient to resources and coordinates the patient's primary care providers, medications, specialists, other health care services, and a variety of social services. This includes access to the Avera eConsult platform, which enables telehealth connections with specialty providers in Sioux Falls, SD -- a 3-4 hour drive from Pierre in good weather.

Each enrolled patient receives three educational visits with a CDE. These visits include education on diabetes management, a grocery store tour in the patient's local community, and a cooking class. Patients are also given items to help improve healthy behaviors, such as a foot care kit, crock pot, diabetic cookbooks, and exercise bands. If a patient requires additional assistance beyond the first three visits, they can access a CDE through the AveraNOW telehealth platform.

Enrolled patients are also offered medication consultations with a pharmacist at Vilas Pharmacy. Pharmacists provide medicine reconciliation, patient education, and assistance with pricing and discounts for medication and diabetes supplies.

The grantee reported that all activities are overseen by the Network Governing Board, which meets quarterly and includes representation from Vilas Pharmacy, SDUIH and Avera Health administration, including the Director of Tribal Relations.

WHAT IS THE PROGRAM'S IMPACT?

Participant Service Utilization and Health

Based on *Completing the Circle's* internal assessment of enrolled patients' health care utilization, inpatient hospital admissions have been reduced by 50% and emergency department visits have been reduced by 46%.

These findings are based on a 'pre-post' assessment in which patients reported their health care utilization prior to enrollment. The grantee also reported that patients are seeing their primary care providers on a regular basis and are getting the needed care to improve clinical outcomes. For example, enrolled patients had a 34% increase in dilated eye exams and a 65% increase in diabetic foot exams. Furthermore, an increase in the attendance rate of follow-up primary care appointments among enrolled American Indian patients visiting their primary care providers was described.

In addition, *Completing the Circle* reported that metrics on A1C and blood pressure readings showed continual improvement across the three year period of the grant. Grantee clinical outcome data also showed an average 2 percentage point decrease in A1C values after patients enrolled in the program.

Participant Education

Beyond positive changes in health care service utilization and improvements in health outcomes that occurred during the grant period, *Completing the Circle* stated that they expect the positive changes for the enrollees and their family members will extend beyond the grant period. Patients were empowered through education and tools, such as learning about healthy food choices when shopping and cooking, to enhance diabetes self-management.

Improved Capacity to Offer Care Coordination

As a result of the grant, participating partners expanded and refined their approach to providing care for patients with type 2 diabetes. A CDE was added to the Avera teams in year two of the grant; a CDE was in place at SDUIH prior to the grant. As the grantee reported, having a CDE provide each new enrollee with three educational sessions, a grocery store tour, a cooking class, and additional educational sessions through Avera's telehealth application AveraNow, has provided the support that enrollees need to make improvements in their health.

Expanded Cultural Awareness

In addition, with the goal of improving care and health outcomes for American Indian patients, *Completing the Circle* team members completed two cultural sensitivity training sessions provided by SDUIH. The sessions included discussion of American Indian history, the evolution of the culture, and best approaches for caring for American Indian patients in a culturally competent manner. *Completing the Circle* also purchased American Indian diabetic food models to demonstrate appropriate portion size in a way which is accessible to American Indian patients. These activities have increased team members' understanding and awareness of health behaviors among the American Indian population.

Sharing their Story

The grantee reported that the local newspaper, the *Capital Journal*, ran a front page story on September 25, 2015 announcing a description of the *Completing the Circle* project. *Completing the Circle*

was also featured in the 'Fall Home & Health' section of the *Capital Journal* on September 30, 2015. More recently, the work was showcased during the U.S. Human Resources and Services Administration Tribal call on December 12, 2017.

Sustainability

The *Completing the Circle* approach to care for patients with type 2 diabetes will be sustained within the Avera Coordinated Care teams involved in the grant program. AMG's Chief Medical Officer has committed to providing the resources necessary to carry on the work of the grant, specifically the grocery store tours and teaching kitchens. The AMG-Gregory clinic plans to modify the approach to include an additional three educational sessions for a total of six sessions. Furthermore, the grantee stated that the Avera Medical Group Director of Care Coordination programs has referenced the *Completing the Circle* project as a promising practice that may be replicated in the other nine coordinated care sites within Avera.

SDUIH will similarly continue to provide grocery store tours and cooking education through their CDE. Vilas Pharmacy is also replicating the educational model and tools used in *Completing the Circle* for use in other sites, including a pharmacy site in a non-Avera tribal community.

The grantee also reported that the AveraNow platform will continue to be available to schedule three educational visits and on-going support as needed with the CDE in Sioux Falls for those patients who need the additional support to manage their disease, but may not be able to travel to an appointment. The grantee expects CDE visits will be billable to insurance.

WHAT CHALLENGES HAS THE PROGRAM FACED AND WHAT LESSONS HAVE BEEN LEARNED?

Telehealth

Initially, *Completing the Circle* planned to provide a smart phone to enrollees for accessing the application. However, during the first year of the project, the network discovered that most of the patients enrolled in the program already had smart phones, and they did not want to use their phones to access to AveraNow. Team members learned that the AveraNow platform is most effectively used to connect patients in their local clinic with a remote CDE.

Staffing

Completing the Circle encountered staff changes through the course of the grant program. When the CDE at one partner clinic left her position, the network quickly determined how that role could be filled within the clinic. It was decided that the clinic would not enroll any new patients, but would continue to track enrolled patients and continue to provide cultural sensitivity training to providers.

Tracking and Using Data

Completing the Circle collects clinical measures, and patient and provider satisfaction data. This includes Emergency Department utilization, hospital admissions, specialty care visits, depression scores, and tobacco cessation. Non-clinical measures includes the number of patients enrolled in the program each year, patient goal attainment, and patient satisfaction. These data are reviewed at quarterly Network Governing Board meetings.

Technology was an initial challenge to data collection for the grantee because the three partners all used different electronic health records or reporting tools. To address this issue, the grantee developed a spreadsheet that was accessible to those within the Avera system for reporting on enrolled patients. Anyone without access to the spreadsheet would forward pertinent information to a central contact for inclusion. This information was entered on a quarterly basis to ensure consistent data tracking for the enrollees.

Special interest was paid to comparisons between American Indian and non- American Indian patients with the goal of identifying possible discrepancies in outcomes and, if needed, further developing staff capacity through cultural competency training and adjusting processes to better reflect cultural differences and/or preferences.

CONCLUSION

Completing the Circle successfully leveraged the strengths of each of the three partners to enhance the care coordination services in the region for individuals with type 2 diabetes. *Completing the Circle* leadership identified the following best practices for serving this population in a rural setting: have a consistent RN Case Manager communicating with the patient; provide access to a CDE for initial and follow-up education; and offer diabetic education including grocery store tours at patients' 'home' stores and cooking tips that everyone in the household can utilize. To be successful, care coordination efforts must be

individualized to meet each patient's unique culture and environment.

REFERENCES

1. Downey, L.H. (2013). Rural Populations and Health: Determinants, Disparities, and Solutions [book review]. Preventing Chronic Disease; 10:130097. Available at: http://www.cdc.gov/pcd/issues/2013/13_0097.htm
2. Dallas, M.E. (2012). COPD Deaths Highest in Rural, Poor Areas: CDC. HealthDay News. Available at: <http://consumer.healthday.com/diseases-and-conditions-information-37/misc-diseases-and-conditions-news-203/copd-deaths-highest-in-rural-poor-areas-cdc-669692.html>
3. American College of Chest Physicians. (2012). Poverty, rural living linked to increased COPD mortality in the US. Science Daily. Available at: <http://www.sciencedaily.com/releases/2012/10/121022080655.htm>

For More Information:

FORHP Care Coordination Grant Funding Announcement:

<https://www.hrsa.gov/ruralhealth/programopportunities/fundingopportunities/default.aspx?id=e3af9abe-a716-4a40-be96-b8273fac43f6>

Rural Health Information Hub Rural Care Coordination Toolkit:

<https://www.ruralhealthinfo.org/community-health/care-coordination>

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