The Rural Health Care Coordination Network Partnership Program: Worcester County Health Department

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 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 Care Coordination Program developed by the Worcester County Health Department located on the Eastern Shore of Maryland.

Grantee Program Area Served

- *Located in the Eastern Shore of Maryland*
- *Residents in the region are older, have lower incomes, are more likely to be uninsured, and are more likely to have a chronic disease than the overall Maryland population*
- *Designated a Health Professional Shortage Area and Medically Underserved Population by the Health Resources and Services Administration*

GRANTEE BACKGROUND

The Worcester County Health Department (WCHD) provides a range of behavioral and physical health services in eastern Maryland. The WCHD provides the majority of behavioral health and substance abuse treatment services for the county, and is experienced in providing chronic care management and care coordination to vulnerable populations, including the developmentally disabled, those with serious mental illness, the aging poor, and those with HIV. WCHD is accredited by the Joint Commission in Behavioral Health and Ambulatory Care, and is one of approximately 70 local health departments in the nation accredited by the Public Health Accreditation Board (PHAB; http://www.phaboard.org/).

WCHD has a long-standing collaboration with two local hospitals, one regional medical center and three local health departments across Maryland's Lower Eastern Shore. This network of partners has demonstrated success in coordinating care to improve the health of local residents, including the establishment of a home visiting outreach team and a primary care and behavioral health home for Worcester County residents with serious behavioral health diagnoses.

Prior to FORHP's Care Coordination Grant opportunity, WCHD joined with their health partner network, the regional Federally Qualified Health Center (FQHC), and pharmacies, to implement a one year, tri-county (Somerset, Wicomico and Worcester) care coordination pilot program focused on reducing diabetes-related emergency department (ED) visits among high-utilizers. Using data from the two local hospitals, WCHD showed an 85% reduction in total diabetes related ED visits among enrolled patients. Additionally, they found an 89% reduction in ED visits for the highest ED users, defined as those with three or more ED visits in one year.

WCHD and their partners applied for the Care Coordination Grant with the goal of enhancing the pilot program and expanding care coordination services beyond residents with type 2 diabetes to also include residents with congestive heart failure (CHF), and/or chronic obstructive pulmonary disease (COPD).

HOW IS THE PROGRAM STRUCTURED?

Target Population

WCHD defines the Care Coordination Program target population as Worcester County adult residents with a diagnosis of diabetes, COPD, or CHF, who are in need of care coordination activities extending beyond those offered by existing discharge planning programs or office/phone based care coordination. The target caseload is 75 patients. Patients range in age; however, the majority of patients are older adult Medicare beneficiaries.

WCHD's program enrollees are identified by local hospital and primary care providers based on a pattern of frequent ED use, frequent hospital readmissions, and lack of consistent and appropriate use of primary care. In addition, the program is co-located with multiple adult service programs as well as the Maryland Access Point (MAP) for Worcester County, a "one-stop shop, no wrong door" program that provides information, assistance, and referrals to any adult in Worcester County. WCHD has implemented a universal referral form and disseminated it throughout the health care community to streamline referrals from these programs.

Partners and Approach

WCHD is part of the Tri-County Health Planning Board (Board), whose mission is to improve the health of residents in the tri-county area through increased accessibility, continuity and availability of quality, cost-effective health services. Membership of this long-standing board includes representation from public health departments, area hospitals, an FQHC, long-term care, Managed Care Organizations, Area Health Education Centers (AHECs), and primary care providers.

The Care Coordination Program was intended to be a tri-county initiative guided by the Board. However, funding challenges required a scope reduction after the first year, and the program now operates solely in Worcester County. Despite this change, the Board continues to provide input, feedback, and modifications to project goals as needed. The Board meets once per quarter and provides input from acute and office based service perspectives.

WCHD's program utilizes the Guided Care® model of care coordination. In this model, a trained nurse works closely with patients, primary care providers, and others to provide coordinated, patient-centered care. This model was successfully implemented in WCHD's pilot project for diabetes specific ED utilization. WCHD established their team with a Register Nurse (RN), a masters-level social worker (MSW), and community health worker (CHW), who work in collaboration with primary care providers. Every enrolled patient receives a home visit and selects services depending on their unique needs (see Exhibit 1).

Exhibit 1: WCHD Care Coordination Services

Core Care Coordinator Services

- Medication reconciliation
- Facilitated referrals into primary care
- Diabetes care and education
- Social support resources
- Assistance with insurance coverage

WHAT IS THE PROGRAM'S IMPACT?

Enhancements in Care

By October 2018, the WCHD supported a caseload of 85 active care coordination patients. Program staff reported that patients varied widely in age and often had multiple co-occurring issues, including substance-use disorders and other behavioral health challenges. Patients, partners, and program staff shared multiple examples of ways the program has improved care and patients' health outcomes because of grant-related services.

Medication reconciliation is an essential program service. During home visits, the RN verifies that any medications, vitamins, supplements or over the counter drugs are in agreement with clinicians'

recommendations and will work with the patient, clinician, or pharmacist to clarify any medications or dosage questions. This process often reveals uninsured or underinsured patients rationing medication in an attempt to reduce out of pocket expenses. In one example, the program worked with a patient diagnosed with type 2 diabetes and CHF. The patient would often skip medications or take them incorrectly. The program was able to provide training about what pills to take and how frequently to take them. In addition, the program helped the patient identify an insurance plan that covered his medications. The patient has now quit smoking, is regularly visiting the senior center, and is enjoying improved health.

In another example, the WCHD team assisted a patient diagnosed with type 2 diabetes, COPD, and schizophrenia. The patient was on insulin and had frequent issues with hypoglycemia resulting in multiple calls to 911. The WCHD team coordinated transportation for the patient to go to primary care appointments and facilitated communication with her providers. As a result, the patient's blood sugar has been stable and she is actively participating in her community.

Transportation was another unmet patient need identified by the WCHD program staff. WCHD's community health worker (CHW) has been providing transportation for clients to their multiple appointments. Beyond assistance in getting to labs, pharmacies, and health care appointments, the time the CHW spends with patients allows for the identification of any additional areas of need. In addition, the CHW can provide valuable updates to the RN and MSW on patient status.

The team brings a holistic approach to care coordination, connecting patients with services beyond those directly related to health care services, which positively affect health and well-being. For example, the MSW linked one patient with a program for veterans that helped the patient purchase a new refrigerator to store his insulin at the correct temperature. In another example, the WCHD linked a diabetic patient with limited mobility to a program that installed a ramp to the patient's house, making it easier for the patient to go to medical appointments.

Improved Capacity to Offer Care Coordination

Care Coordination Community

The WCHD program also plays a unique and important part in the provider community in Worcester County. While a number of office-based care coordination programs operate in the area, WCHD is the only program with an emphasis on home visits. WCHD collaborates with other care coordinators, particularly from the local hospital, to ensure that communication regarding patients is complete and up-to-date throughout the entire continuum of care.

> *"Partnership with the Health Department has been integral to ensuring that we have resources that get as close to the patient as possible."*
> - Hospital Care Coordination Team Administrator

Training

All of the WCHD program staff members have received extensive training. The CHW completed 82 hours of CHW training through the Area Health Education Center. The RN is completing requirements to become a Certified Diabetes Educator, and the MSW attends care coordination conferences and meetings. In addition, WCHD hosted several training sessions on using the Electronic Health Record (EHR).

Increased Visibility

The WCHD program team has been invited to present at various symposiums and meetings regarding their expertise on care coordination in rural settings. These presentations included a statewide Diabetes Educator symposium, the regional hospital's care coordinator meeting, the Maryland Action Coalition Summit, and the National Rural Health Association's Annual Rural Health Conference, among others. These presentations provide WCHD leadership an opportunity share their care coordination experience with other stakeholders considering similar programs.

Unique Approach

Multi-Disciplinary Team

While training has been valuable in developing and refining care coordination skills, the WCHD program benefits greatly from their team approach. The strength of the team builds on extensive clinical experience and the long-term working relationships of the RN, MSW, and program director. In addition, these team members are very knowledgeable about Worcester County's community resources. The CHW also adds an important perspective of providing direct patient support, such as transportation to health care appointments.

"We find that the mix of the disciplines (registered nurse, social worker and community health worker) provide the combination of medical, social and support that is needed for the very complex clients that are referred to our program."

-Program Director

Located in the County Health Department

Program staff cited multiple benefits being located in the WCHD. This arrangement has given the team a strong understanding of the community's health-related resources. The program is co-located with multiple adult service programs and the Maryland Access Point (MAP) for Worcester County. Co-location supports patient referrals to multiple programs, if appropriate. In addition, staff members regularly share information regarding new or changing services in the area.

Enhanced Use of Clinical and Patient Data

WCHD has been innovative in securely sharing information with providers and other care coordinators to improve communication regarding mutual patients. This includes direct communication with the providers and sharing patient information through the Chesapeake Regional Information System for our Patients (CRISP). CRISP is Maryland's health information exchange (HIE) serving Maryland and the District of Columbia. CRISP allows for the secure sharing of clinical data, including lab test results, from inpatient and some outpatient care providers.

In February 2015, WCHD entered into an Electronic Notification System (ENS) through CRISP that automatically notifies the program team once a day when one of the care coordination clients visits the ER or is admitted to the hospital. Initially, the ENS contained errors; however, WCHD worked with CRISP staff to address the errors and improve ENS functionality. The improved ENS has become a useful tool for staff. In addition, CRISP provides clinicians' discharge instructions/plans. WCHD uses this documentation to communicate with the patient regarding their care plan. WCHD reports that the RN is also able to verify that any medications, vitamins, supplements, or over the counter drugs are in agreement with clinician recommendations and can work with the patient, clinician, or pharmacist to clarify any issues.

The WCHD team views information provided through CRSIP, but has had difficulty inputting the same level of information in the system. The WCHD program is working with CRISP to populate the system with care coordination notes.

In February 2015, the WCHD team transitioned from a paper-based patient record to an EHR, which has also been adopted by other WCHD programs (e.g., behavioral health, community health, and primary care). The WCHD team also designed and implemented public health specific EHR applications that accommodate clinical, administrative (e.g., billing), and reporting patient needs.

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

Access to Care

The WCHD operates in an area that is designated a Health Professional Shortage Area by the Health Resources and Services Administration (HRSA) for having shortages in primary care, behavioral health and dental care providers. WCHD noted challenges linking patients with dentists, dieticians, dermatologists, and psychologists/psychiatrists. In addition, while transportation provided by the CHW reduces access barriers so that patients reach their local providers. The CHW does not have the resources to drive patients to specialty care providers who are located in Baltimore and Washington, DC.

Tracking and Using Data

While CRISP and a new EHR allow access to data from multiple care providers, neither system is designed to track care coordination services. WCHD staff has worked to tailor both platforms to accept care coordination-specific information, such as phone calls to assist with transitional care. However, ensuring the correct EHR fields are available and operational is an ongoing effort.

Evolving Market Forces

Because the program does not have a primary care provider on staff, WCHD is unable to bill Medicare for their care coordination services and relies on other sources of funding for sustainability. WCHD's grant application included the expectation of financial support from partnering agencies for a second (non-grant funded) team to expand the service area. However, the funding from the support partner agencies was not available. Consequently, WCHD limited the Care Coordination Program to Worcester County residents.

WCHD remains in communication with local hospitals and the FQHC regarding possible payment for the care coordination services provided by the program to their patients. WCHD also plans to use longitudinal data to demonstrate the effect of care

coordination on patients' use of health care services (e.g., decrease in ED visits) to secure funding from health care providers, health insurers and Accountable Care Organizations. In addition, WCHD is seeking community funding to continue the Care Coordination Program to support older adults' health and well-being to help them live safely in their homes.

CONCLUSION

WCHD's care coordination program uniquely draws on a number of strengths including: being housed within a health department that offers a broad array of behavioral and supportive services; an experienced and passionate multi-disciplinary team that has deep ties to the community; and, timely access to patient health information through a robust HIE (i.e., CRISP). As other rural communities explore care coordination models, WCHD's approach may provide a viable path forward. In particular, rural communities with strong local health departments may consider adopting or adapting WCHD's Care Coordination Program to support older adults safely aging in place.

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

Chesapeake Regional Information System for our Patients:
https://www.crisphealth.org/

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