TMF Health Quality Institute

QI Snapshot

Brief #12

Meeting Patient Needs Through Community Partnerships

A pilot program addressing food insecurity, medication adherence and management of chronic disease to improve hospital readmissions.

Project Overview

The TMF Quality Innovation Network Quality Improvement Organization (QIN-QIO), under contract with the Centers for Medicare & Medicaid Services, developed the Fort Worth Care Coordination Community Coalition in Fort Worth, Texas, with stakeholders including Meals on Wheels of Tarrant County (MOWTC) and the United Way. This group of stakeholders developed an innovative model designed to improve services provided to at-risk seniors to decrease avoidable hospital readmissions. MOWTC, funded by the United Way, collaborated with the TMF QIN-QIO to develop and test a program to improve malnutrition, medication management, medication adherence and management of chronic disease in high-risk seniors in an effort to support patient transitional needs and avoid hospital readmission.

Intervention

MOWTC, a community-based not-for-profit, provides home-delivered meals, professional case management and other needed items or services to homebound, elderly and disabled clients, enabling them to remain living independently. MOWTC identified the need to address both food insecurity and early intervention in the elderly at-risk and/or diabetic population to minimize avoidable hospital readmissions. In the Fort Worth community, 40 percent of individuals discharged home from the hospital return to an acute care setting within the first seven days of discharge. To address this return rate, MOWTC partnered with Health Aging and Independent Living (HAIL) and HomeMeds to expand their services to proactively address food insecurity and provide nutritional counseling and medication reconciliation in this at-risk population.

Healthy Aging and Independent Living (HAIL): HAIL provides screening and risk stratification of patients as high, moderate or low risk for developing diabetes. Based on the risk level, a registered dietitian provides a full nutritional assessment and education and works with the client to establish a shared plan for behavioral goals. Nutrition students from Texas Christian University make phone calls to clients to follow up with nutritional education, revisiting behavioral goals and encouraging positive outcomes.

HomeMeds Medication Safety Program: HomeMeds is an evidence-based home medication management system that screens for common medication-related problems, such as the inappropriate use of over-the-counter drugs and adverse effects like falls. A comprehensive in-home assessment is conducted with the patient using HomeMeds software to screen medications for potentially harmful problems. Medications are reviewed by a consulting pharmacist, who brings significant problems to the attention of the physician and provides education and advice to patients and staff.

Pilot Program Methodology

With the strong network, trust and relationships already established by MOWTC in the community, discussions evolved with managed care organizations to develop a pilot readmission reduction program to keep at-risk individuals out of acute care hospitals. The pilot program tested the combined services of the MOWTC home-delivered meals, HomeMeds and HAIL programs to reach patients at home, providing timely assessments and establishing a care plan to support immediate transitional needs.

MOWTC developed a six-month bundled service pilot program to target high-risk individuals using acute care services unnecessarily. The total cost of services for six months per individual is $2,500. The upfront cost to start the client on services is $800 and includes case management, client services, nutrition/diabetes counseling and one month of meals. Thereafter, meals are billed monthly at the cost of $77 a week. The pilot clients are assessed through the MOWTC home meals, HAIL and HomeMeds programs. The processes for clients going through this program are outlined below.

MOWTC Process

For this care coordination pilot initiative, MOWTC's case managers screen individuals enrolled in these three programs for diabetes and malnutrition. The screenings take place in the home setting, with annual screening for continued program qualification. The pilot program includes case management, client services, nutrition/diabetes counseling and one month's worth of meals. Referrals for the MOWTC home meal delivery (care coordination pilot) program are initiated by hospital case management, post-acute partners, family members and caregivers via the MOWTC website or by phone. These services are available for those elderly who are homebound for any length of time, are physically or mentally unable to prepare nutritious meals for themselves and have no one to help them on a regular basis, regardless of age and socioeconomic background.

HomeMeds Process

Clients or patients are followed for 90 days, and every patient is provided a medication list on pink paper, instructed to attach it to their refrigerator and take it to every medical appointment. If MOWTC is made aware of a medication change, they update the system and create a new reconciled medication list. After patients in the pilot program became familiar with the process, they call MOWTC and request an updated pink medication sheet following provider appointments. In the Dallas/Fort Worth communities, 68 percent of MOWTC clients had a medication alert triggered (a top reason for hospital readmissions). Those critical alerts are reviewed by the pharmacist, who verifies the information with the client, updates the system and resolves the medication alert.

HAIL Process

Referrals for HAIL the program are initiated through the home meals referral, as individuals are screened by case management for diabetes. Individuals are screened using the DETERMINE and diabetes risk tool, with a possible risk score ranging from 0 to 20 (high risk). A score greater than 9 identifies a risk for those without a prior diagnosis. In addition to the diabetes and intake screen, all individuals are screened for malnutrition using the DETERMINE checklist. Scores range from 0 to 21 (high risk), with a score greater than 6 indicating the client is at risk for malnutrition. It is rare that individuals over 65 do not meet the program requirements, as most MOWTC clients are at risk for malnutrition.

The first HAIL appointment takes place with a registered dietitian following the case management screening and lasts about 1.5 hours. Next, the dietitian conducts a comprehensive nutrition assessment to identify areas of risk, including an environmental assessment for food safety, sanitation and fall risks. A nutrition-focused physical exam is performed to address and document a baseline for wounds and muscle wasting. Dietitians and case management focus on two to three top assessment priorities and provide in-person, one-on-one education. This is not standardized, as each person is treated as a unique individual with individual needs. The documentation is updated in the customized electronic care plan created by MOWTC. Dietitians perform at least one in-person

follow-up with clients at highest risk. At the six-month mark, MOWTC documents outcomes and collects final data using the Environmental Quality Standards Directive and Healthy Days best practice. At this point, services can be continued, discontinued or changed based on need, but the goal of keeping clients safe in the home and out of acute care settings remains.

Assessment and Outcomes

From September 2017 to February 2018, 16 patients were referred to the MOWTC care coordination pilot program. Individuals were identified based on the presence of a chronic condition and homebound status, and all but one had at least one hospital stay in the past six months. Five individuals in the study moved or were relocated from home status and one mortality occurred. The 10 high-risk individuals who completed the program did so without any readmissions, resulting in a zero percent 30-day readmission rate. One individual visited the emergency department but returned home to the program without hospitalization.

Discussion

The outcomes of this project support development of collaborative programs involving multiple community organizations producing a synergistic effect to improve the health of at-risk patients and reduce readmissions. An individual's neighborhood, housing, financial security and transportation are all social variables affecting health. The work of MOWTC is vital to addressing these social variables to not only improve health outcomes, but foster the heart of the health care community.

To proactively infuse our current health system with innovative, synergistic programs like this, MOWTC does need financial support. The cost of healthy food must be taken into consideration, and MOWTC can provide nutritious home-delivered meals for just $6.55 due to the more than 250,000 hours donated by the 5,815 volunteers annually. For the pilot program, including the HomeMeds and HAIL interventions, to be sustainable, funding will need to be allocated for broad improvement.

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