

Medication Management: Improving Transitions of Care

TMF Health Quality Institute, the Medicare Quality Innovation Network Quality Improvement Organization (QIN-QIO), under contract with the Centers for Medicare & Medicaid Services, partnering with the Arkansas Foundation for Medical Care, engaged communities of practitioners and other community stakeholders to develop communication and coordination of clinical decisions in order to improve the quality of care for Medicare beneficiaries in Arkansas. Effective medication management during transitions of care (TOC) can have a significant positive effect on clinical outcomes. A rural health clinic that is a recognized Patient Centered Medical Home in rural Arkansas implemented a multidisciplinary approach to medication management via a TOC intervention. To determine the primary impact of this intervention, the TMF QIN-QIO tracked 30-day readmission rates for the clinic’s patients and possible secondary 30-day readmission rates for two affiliated hospitals. Overall, the clinic experienced a 9 percent drop in patient hospital admissions and a 33 percent drop in hospital readmission rates.

Project Overview

Intervention

The purpose of the TOC program was to improve the overall coordination of care for complex patients focusing on effective medication management. This includes identifying patients with hospital admissions and emergency department (ED) visits; sharing and exchanging clinical information with admitting facilities and EDs; and providing electronic summaries of care for patients transitioning to and from the clinic. One of the key elements of this program includes using a clinical pharmacist to provide effective medication reconciliation for patients within 48 hours of discharge. Key practitioners in this multidisciplinary effort included physicians, pharmacists, case managers and nurses in the hospital setting and physicians, advance practice registered nurses, pharmacists, quality improvement (QI) coordinators, care coordinators, nurses, behavioral therapists and health educators in the clinic setting. In reviewing the unplanned readmissions, the clinic hypothesized that patients with complex medical or socioeconomic needs could benefit from clinical pharmacist intervention. These populations are described in Table 1.

Table 1: Patient populations with unplanned readmissions who could benefit from the pharmacist-driven medication reconciliation intervention

Southwest Arkansas Readmission Themes	Clinical Pharmacist Intervention
Three or more chronic medical conditions	Chronic disease management
Use of five or more prescription medications	Medication review (medication therapy management (MTM), medication reconciliation)
Use of narcotic, anticoagulant or antidiabetic medications	Medication review (MTM, medication reconciliation)
Inadequate access to resources	Collaboration with health care providers, insurances, services, etc.
Limited social contact and/or limited or no home care	Phone calls and home visits
Incomplete discharge instructions and/or did not have a point of contact for post discharge questions	Provide a point of contact for patients

The clinical pharmacist’s involvement throughout the inpatient stay, continuously through discharge, has led to successful improvements in TOC, resulting in reduced readmissions and subsequent admissions. The process flow includes the following key steps:

Inpatient Stay

- The clinical pharmacist (or student) rounds with the medical team, which includes the attending physician, medical residents, students and a scribe. The clinical pharmacist assists in medication selection, duration and dosing and focuses on any medication discrepancies. The multi-disciplinary team discusses the inpatient stay and plans for discharge.
- During the discharge process, the identified patient undergoes brief discharge counseling and verification of information by the clinical pharmacist.
- The discharging nurse provides an updated medication list to the patient and preferred community pharmacy and schedules a follow-up clinic visit.

Post Discharge

- Follow-up calls are led by the clinical pharmacist (or student) within 48 hours of discharge and include a call to the patient’s community pharmacist and a call to the patient or patient caregiver. Two attempts are made to reach the patient or caregiver.
- The discussion is then documented in the electronic health record (EHR) and updated to reflect any changes to medications, with a note sent to the primary care physician to review before the follow-up clinic visit.

Primary Care Follow-Up

- During the follow-up visit with the primary care physician (seven to ten days after discharge), the clinical pharmacist performs medication education, verifies adherence and addresses concerns.
- A follow-up appointment is then scheduled for one to three months.

Assessment and Outcomes

The TOC intervention was assessed with data from the EHR and Medicare claims readmission data obtained quarterly from the TMF QIN-QIO. Hospital admissions, discharges per month and readmission rates were tracked for all facilities. The outcomes are included below.

Since September 2015, when the clinic began this intervention, the following data was collected:

- On average, there were two patient discharges per week.
- Staff completed 102 TOC phone calls.
- Staff successfully billed Medicare for 14 TOC claims.
- QI measures were met for Medicaid Shared Savings and Meaningful Use requirements.

As seen in Table 2, the average hospital admissions per month dropped slightly in the second year of the intervention from 35 to 32 average admissions per month (a 9 percent decrease), and the hospital readmission rate decreased from 4.5 to 3 percent (a 33 percent rate change).

Table 2: Clinic Patient Statistics

Date Range	Admissions Per Month (Average)	Discharges Per Month	30-Day Readmissions	Readmission Rate
Baseline (Oct. 1, 2014–Sept. 20, 2015)	35	419	19	4.5%
Oct. 1, 2015–Aug. 31, 2016	32	360	11	3%

**Source: Internal data, extracted from EHR, Oct. 2014–Aug. 2016*

Discussion

As health systems acquire smaller hospitals, a pharmacist's role may need to be redefined and reinvented. The responsibilities of a pharmacist in a large academic hospital may be different than those of a pharmacist with the same skill set in a community hospital. However, despite the difference in practice setting, the same core pharmacy services around medication use can still be deployed. Participation in TOC activities is a relatively new concept for many pharmacists, as residency training programs traditionally focused on caring for patients within a defined setting, such as the intensive care unit or ambulatory care. The pharmacy profession should define the role of the clinical pharmacist to more easily incorporate TOC responsibilities into job expectations. This Arkansas clinic has recognized the importance of implementing a TOC program and including clinical pharmacists in key roles. As a result, a reduction in readmissions has been achieved.

The intervention team has some key recommendations for those implementing this type of program in terms of coordination of care post hospital discharge between facilities. First, discharge notifications need to be relayed across teams for patients being discharged to long-term acute care (LTAC), skilled nursing facility (SNF) and inpatient rehabilitation. The clinic currently does not receive notifications from these facilities when their patients are discharged home. The clinic is increasing the use of the state electronic health exchange to track these discharges, but it requires the individual LTAC, SNF or rehab facility to be enrolled in SHARE and pay a yearly fee. Unfortunately, patients can be readmitted to the hospital before their primary care physician's office is alerted of their discharge from an LTAC or SNF. These patients are at high risk for hospital readmissions, as they usually have multiple disease states and medications.

Second, more follow-up may be needed for patients beyond the 30-day readmission window. The intervention team recommends considering a second follow-up phone call or primary care visit past the 30-day window, such as 60 or 90 days post-discharge. Hospital readmissions past 30 days may not be financially penalized, but they are still costly at any point in a patient's care.

Next steps for the TOC program include faxing discharge medication lists to community pharmacists in the area, expanding the use of the discharge form to other hospitals in South Arkansas and including the inpatient pharmacist in the admission medication reconciliation process. The team also plans to implement a Meds-to-Beds program (delivering medication to patient bedside in the hospital prior to discharge) as well as TOC billing to Blue Cross Blue Shield patients and face-to-face follow-up visits by the clinical pharmacist in the patient's home.