Exemplary Professional Practice: Interprofessional Care

EP12 Nurses assume leadership roles in collaborative interprofessional activities to improve the quality of care.

EP12a: Provide an example, with supporting evidence, of a nurse-led (or nurse co-led) collaborative interprofessional quality improvement activity.

Introduction

According to the Institute for Healthcare Improvement (IHI):

“A substantial fraction of all hospitalizations are patients returning to the hospital soon after their previous stay. These re-hospitalizations are costly, potentially harmful, and often avoidable. Evidence suggests that the rate of avoidable re-hospitalizations can be reduced by improving core discharge planning and transition processes out of the hospital; improving transitions and care coordination at the interfaces between care settings; and enhancing coaching, education, and support for patient self-management.”

The IHI’s statement sets a goal for health care institutions to improve the care of patients being discharged. This goal is in the best interest of patients in that it prevents them from being at repeated risk of health care associated infections and allows them to maintain focus on recovery. It is also in the best interest of hospitals to avoid penalties for readmissions deemed to be preventable.

Readmissions at Massachusetts General Hospital

Many efforts have addressed the issue of hospital readmissions and have been episodically successful in population- or disease-specific initiatives, but sustained systemic change has been difficult to achieve. As a result, the goal of reducing avoidable readmissions was integrated into the 10-year Strategic Plan of the Massachusetts General Hospital (MGH)/Massachusetts General Physicians Organization (MGPO) as a strategy for improving patient outcomes and maintaining financial stability (attachment EP12.a).

Hospital readmissions are frequently cited as a contributing factor to capacity issues (i.e., not enough beds to accommodate the need for admissions). In early January 2016, the MGH Capacity Task Force was convened and led by Peter Slavin, MD, President of MGH, to address a number of issues that were creating capacity challenges (attachment EP12.b). At that time, a review of readmission data for the previous six months (June to December 2015) revealed an overall MGH readmission rate of 12.5 percent. However, the readmission rate for patients discharged from three units in the Medicine service was nearly 30 percent higher at 16 percent. These findings, in addition to the realization that prior readmission efforts had not had a lasting
or systemic impact, led Slavin to dedicate one of three key task forces to preventing readmissions. This task force was aptly named the Preventable Readmissions Task Force and was further divided into two subcommittees, one for the High Risk Population and one for the Heart Failure/Acute Myocardial Infarction Populations.

**High Risk Population Subcommittee**

The High Risk Population Subcommittee (attachment EP12.b) of the Preventable Readmissions Task Force is co-led by Jessica Smith Yang, RN, MS, ACNS-BC, Clinical Nurse Specialist (CNS), General Surgery Unit (Phillips House 22), Nancy Sullivan, Executive Director of Case Management, Ryan Thompson, MD, MPH, Attending Physician and Director of Quality Improvement for Medicine, and Maryellen O’Dea, MBA, Senior Process Improvement Consultant from the MGH/MGPO Center for Quality and Safety. Although Yang is the CNS on a surgical unit, her previous experience as an Attending Registered Nurse (ARN) on General Medicine Unit (Ellison 16) made her an ideal co-leader for nursing. (An ARN is a unit-based clinical nurse who, through leadership and coordination, ensures continuity from admission to discharge, by facilitating the plan of care with the nurse caring for the patient, the patient and family, and the interdisciplinary team.) O’Dea was specifically invited to join this group because of her extensive experience with process and quality improvement. The subcommittee began meeting formally in late January 2016 with an interdisciplinary team of clinical nurse case managers, physicians, pharmacists, social workers, and process improvement consultants to plan their work. The subcommittee group was charged with addressing the high rate of readmissions in the Medicine service.

**Literature Review**

The High Risk Population Subcommittee began their work with a review of the literature, and they found that numerous studies identified causative and preventive factors to readmissions that were consistent with those suggested in the IHI statement. The studies recommended intensive and comprehensive discharge planning for those at high risk of readmission and key interventions to reduce the likelihood of readmission such as attention to medication teaching, ensuring that follow-up appointments are scheduled prior to discharge and in close proximity to the discharge, and having a plan in place to escalate services after discharge.

The group believed that the recommendations and strategies in the literature were conducive to a quality improvement project, and they used them to guide the development of the bundle of interventions for the new Stay Connected Program (SCP) in the Medicine service and appointed members to the Stay Connected Program Operations Team (attachment EP12.b). The work plan for the development of the SCP and four slides that address key aspects of the initiative and that were part of several presentations are included in attachment EP12.c. The primary goal of the SCP initiative was to reduce the rate of readmissions of high risk medical patients to approximately the same as the overall MGH readmission rate of 12 percent.
Stay Connected Program Bundle of Interventions

The SCP bundle of interventions was developed by the High Risk Population Task Force to provide pre- and post-discharge care that is comprehensive, offers alternatives to readmission, and reduces the likelihood of readmission. The bundle would be implemented on all patients on select units who were identified as being at high-risk of readmission. The interventions in the bundle are:

- Schedule post-discharge follow-up appointments prior to discharge:
  - The Inpatient Administrative Coordinator (IAC), a new position specific to the SCP, meets with the patient and family to determine best days/times, transportation needs, and other factors that would impact ability to be compliant with appointments.
  - The appointments are scheduled by the IAC, ideally to occur within seven days of discharge.

- Enroll patient in “Meds to Beds” program:
  - The unit-based pharmacist provides bedside medication reconciliation and counseling with the patient and family.
  - Discharge medications prescriptions ordered by the medical provider are filled in the MGH Out-Patient Pharmacy and delivered to the patient/family prior to discharge.

- Activate the Skilled Nursing Facilities (SNF) Transitions of Care aspect of the bundle for patients being discharged to a SNF within the Mini SNF Collaborative (i.e., a group of SNFs routinely used by Partners facilities, including MGH):
  - A Nurse Practitioner (NP) from the SNF reviews the patient’s clinical status, provides a warm handover with a SNF clinician, and communicates transition details with the patient’s Primary Care Provider (PCP).
Request SCP Case Manager (CM) services for patient being discharged home:
- The SCP CM, also a new position specific to the SCP, provides care coordination for up to 30 days post-discharge.
- This includes assessment for unanticipated barriers to any aspect of the post-discharge plan, regular communication between all providers, and ongoing coordination of care as needed.

Request a home visit by SCP Nurse Practitioner (NP) for patients being discharged home:
- The SCP NP, another new position specific to the SCP, visits patient at home within 24 to 48 hours of discharge and collaborates with the discharge team, in-home services such as a visiting nurse or physical therapist, and the PCP.
- The SCP NP is available as needed for 30 days post-discharge to visit the patient in the home. It is suggested that this resource be tapped into if the patient’s needs are thought to be escalating during this time period.

Before the SCP could be used, it was necessary to identify patients at high-risk for readmission. This key first step was accomplished in a unique manner through the use of a natural language processing algorithm, developed by QPID Medical Company, which scans the electronic health record (EHR) in search of readmission risk factors, such as prior admissions, long lengths of stay, co-morbidities, and poor medication compliance. The QPID algorithm calculates a readmission risk score that identifies patients in need of increased support post-discharge. The QPID algorithm generates a list of high-risk patients that is sent to interdisciplinary care team members via email. This list is used during interdisciplinary rounds when comprehensive, individualized discharge plans are initiated for high-risk patients using the SCP bundle.

Stay Connected Program Pilot

Six units were targeted to pilot the SCP:
- General Medicine Unit (White 9)
- General Medicine Unit (White 8)
- General Medicine Unit (White 10)
- General Medicine Unit (Gray 9)
- General Medicine Unit (Ellison 16)
- General Medicine Unit (Ellison 12)
As soon as the pilot units were identified, Yang began communicating with key stakeholders including the unit leadership and other groups that could provide input into the development, implementation, and success of the SCP. On June 29, 2016, she met with the Nursing Directors and Clinical Nurse Specialists/Nursing Practice Specialists of the three Phase 1 units. Yang also attended the July 22, 2016 meeting of the Attending Registered Nurses for the entire hospital and presented the plan for the SCP. Attachment EP12.d includes documents from these meetings with key stakeholders, in addition to minutes from the SCP Operations meeting where Yang shares her observations from the SCP go-live on the first pilot unit. Yang provided ongoing support on each of the pilot units at the time the SCP was initiated. This included being present for daily interdisciplinary rounds and being available to unit-based staff and team members to discuss high-risk patients and plan their discharge per the SCP bundle.

Pilot Outcomes

The High Risk Population Task Force considers the program’s initial outcomes to be promising. The rate of readmissions for high-risk patients discharged from the six SCP pilot units decreased from 16 percent to 14.5 percent during the pilot period. It is estimated that 121 readmissions were prevented. Based on an average length of stay of eight days for Medicare patients, which were many of the high-risk patients, this reduction in readmissions is equivalent to 968 bed days. Additionally, of note, the QPID algorithm has identified that 30 to 35 percent of MGH Medicine patients are at high-risk of readmission.

Next Steps

The SCP pilot on six Medicine units was completed in November 2016. As determined in the planning stages, once the SCP was implemented on the six pilot units, the initiative would spread to two additional units: Cardiac Medicine Unit (Ellison 10) and Cardiac Intervention Unit (Ellison 11). The implementation of the SCP bundle is currently in process on those units. Yang and colleagues then plan to refine specific aspects of the bundle based on feedback from pilot unit staff. There is also a desire to identify a mechanism to provide more detailed information about readmissions at the
unit level. Ultimately, the goal is to explore the possibility of expanding the SCP to other inpatient services or departments.

**Compass Award**

The Affordable Care Compass Award, sponsored by the Massachusetts Hospital Association, recognizes innovative and effective quality improvement projects, including those geared toward reducing readmissions. The SCP was nominated for this award in early 2017 by the MGH Center for Quality and Safety. In the April 30, 2017 edition of “From the Desktop,” a monthly newsletter written by Dr. Slavin and distributed to all staff, he announced that the SCP earned second place for this award (attachment EP12.e).

Yang continues to provide leadership for this extensive quality improvement project that has had a significant impact on reducing readmissions for high-risk patients who are discharged from the Medicine service. This work is beneficial to patients in that it reduces their repeat risk of hospital acquired infections, delays in returning to baseline, and has the potential to have a positive impact on their perceived hospital experience. The work also provides a benefit to the hospital by reducing the negative financial impact related to readmission penalties for readmissions considered avoidable or preventable.