

Title:

Clinical Practice Protocol to Decrease Hospital Readmissions After CABG Surgery: Implications for Clinical Leadership

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Session Title:

Improving Clinical Practice and Patient Satisfaction to Decrease Readmissions

Slot:

J 04: Monday, 19 September 2016: 10:15 AM-11:00 AM

Scheduled Time:

10:15 AM

Purpose:

The purpose of this presentation is to describe the implementation of a Clinical Practice Protocol that involved the redesign of processes that were started prior to the patient's admission and extended to 30 days after discharge from CABG surgery.

Keywords:

clinical practice protocols, hospital readmissions and quality initiatives

References:

Center for Medicare & Medicaid Services. (2016). Readmissions reduction program. Retrieved from <https://www.cms.gov/medicare/medicare-fee-for-service-payment/acuteinpatientpps/readmissions-reduction-program.html> Hubbard, T., & McNeil, N. (2012). Improving medication adherence and reducing readmissions. National Health Policy Institute. Retrieved from http://www.nehi.net/publications/76/thinking_outside_the_pillbox_improving_medication_adherence_and_reducing_readmissions Kim, C. S., & Flanders, S. A. (2013). In the clinic: Transitions of care. Annals of Internal Medicine. Retrieved from <http://annals.org/>. Society of Thoracic Surgeons. (2016). Home page. Retrieved from <http://www.sts.org>. Sevin, C., Evdokimoff, M., Sobolewski, S., Taylor, J., Rutherford, P., & Coleman, E.A. (2013). How-to Guide: Improving transitions from the hospital to home health care to reduce avoidable rehospitalizations. Institute for Healthcare Improvement. Cambridge, MA. Titler, M. G., Kleiber, C., Steelman, V., Rakel, B. A., Budreau, G., Everett, L. Q...Goode, T. (2001). The Iowa model of evidence-based practice to promote quality care. Critical Care Nursing Clinics of North America, 13, 497-509.

Abstract Summary:

Hospital readmission rates for CABG patients ranged from 8 - 20%. During the timeframe of December 2013 - 2014, when the protocol was instituted, the readmission rate (14%) continued to be above the national benchmark of 10%. Further revisions were implemented, with the CY 2014 readmission rate being 5 %.

Learning Activity:

| LEARNING OBJECTIVES | EXPANDED CONTENT OUTLINE |
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| The learner will be able to examine the key elements of the clinical practice protocol designed to prevent hospital readmissions after CABG surgery. | Redesign of processes from pre-admission to 30 days after CABG surgery. Preadmission: History and physical, patient/family/support system education, identification of a home care agency. Course of Hospital Stay: optimization of the patient's clinical status and |

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| | <p>preparation for discharge; discharge education. The Day Before Discharge: collaboration with home care liason/case manager for discharge needs. Day of Discharge: validate teaching using tech back method; schedule follow up appointments, hand off at discharge from nurse practitioner to home care nurse; dictation summary to the electronic medical record. Days after Discharge: home care visit within 24 hours; open communication with the home care nurse for any change in clinical status, expedited office visit if warranted; collaboration with emergency department physicians and clinical decision unit physicians for notification of the patient's encounter so as to streamline care and avoid hospital readmission; recent collaboration with extended care facilities to recognize early indications for readmission.</p> |
| <p>The learner will be able to describe the role of interprofessional team leaders needed to decrease hospital readmissions.</p> | <p>The Cardiovascular Nurse Practitioners designed and implemented the protocol. The Director of the Cardiovascular Service Line as well as the Chief of Cardiovascular Surgery were appraised of any barriers to the clinical practice protocol throughout the initial phase of implementation as well as when revisions were made. The Data Manager for the practice site collected and analyzed the data. Interprofessional collaboration was essential to ensure best practice and positive patient outcomes.</p> |

Abstract Text:

Background The healthcare industry has been called to critically analyze issues that impact the quality and safety of patients and families. A quality and patient safety issue that affects the nation's healthcare system today is hospital readmissions. The definition of a hospital readmission for patients undergoing coronary artery bypass surgery (CABG), according to the Society of Thoracic Surgeons (STS) (2016), is an inpatient readmission within 30 days from the date of surgery (DOS) for any reason. The Centers for Medicare and Medicaid Services (CMS) have extended the 30-day readmission criteria to include readmissions from the date of discharge (DOD), not the DOS (CMS, 2016).

Hospital readmissions are costly and potentially avoidable. The cost of readmissions have a ripple effect on the patient, family, support system, health care providers, hospital care system, and ultimately the nation's budget (Kim & Flanders, 2013; Sevin, et al., 2013). From a patient and family perspective, hospital readmissions adversely affect these beneficiaries' physical, psychological, and social functional status as well as the quality of life.

According to Kim and Flanders (2013), “a hospital readmission is viewed as one of the more undesired post-discharge events by patients, providers, and health systems. Patients are frustrated over the need for a readmission and providers fear that hospital based treatments and interventions were ineffective” (p.2). For health systems, readmissions are an inefficient and costly solution to problems often better managed in an alternative venue such as an outpatient clinic or prevented entirely through improved systems of care. Hospital readmissions have significant implications for payment under the Hospital Readmissions Reduction Program (HRRP) as defined by CMS and outlined in The Affordable Care Act, section 3025. This program was initially implemented in 2012 with statutes focused on congestive heart failure (CHF), acute myocardial infarction (AMI), and pneumonia at a one percent reduction in payment. Maximum payment reductions increased to three percent of hospital payments by 2015. Recently, CMS expanded the penalty to other conditions such as CABG surgery for 2017 (Hubbard & McNeill, 2012; CMS 2016).

Methods Specifically, this clinical practice protocol identified best practice across the care continuum from preadmissions to 30 days after discharge. The cardiovascular surgery nurse practitioners (CVSNP) and Director of the Cardiovascular Service Line devised this protocol after an extensive review of the literature for best practice and national initiatives. The Chief of Cardiovascular Surgery approved the protocol. The data manager for the practice site collected data retrospectively using the STS data base form. The Iowa Model of Evidence Based Practice to Promote Quality Care (Titler, et al., 2001) was utilized as the conceptual framework.

Methods: Continued, Specifics of the Protocol:

Preadmission The majority of the patients entered the health care system through preadmission testing (PAT) whereby the CVSNP obtained the history and physical and began teaching on the plan of care. The CVSNP discussed with the patient and family the preference for a home care agency. If the family did not have a preference for a home care agency, the patient was followed after discharge by the home care agency affiliated with the healthcare system. Patients already admitted to the hospital who required surgery, had their history and physical done by the admitting service and preoperative teaching completed by the CVSNP. A preference for a home care agency was determined prior to surgery for these patients as well.

Course of Hospital Stay

The patient's status was managed and optimized by the CVSNP, in collaboration with the surgeon, in preparation for discharge. Throughout the course of the hospital stay, the staff nurse and CVSNP validated the patient's support system and health literacy. The staff nurse and CVSNP assessed the patient's educational needs and provide education on a daily basis to the patient and the family/support system focusing on discharge teaching and planning. Discharge teaching emphasized medication changes, diet, activity restrictions, wound care, follow up appointments, and reasons for concerns for an earlier follow up. A teach back method was used to validate patient and family/support system understanding. The Cardiovascular Surgery Discharge Instruction sheet (one page) along with the electronic medical record (EMR) generated form, Coronary Artery Bypass Surgery: Care After Surgery, was given to the patient and family.

The Day Before Discharge

The dedicated RN home care liaison and/or case manager communicated with the CVSNP regarding the impending discharge of the patient. This liaison interviewed the patient and family and confirmed the demographic data, home support, and second learner information. Additionally, the liaison/case manager assessed for the need for durable medical equipment, support services (physical therapy, occupational therapy) and/or telehealth for the patients with a comorbid condition of congestive heart failure.

Day of Discharge

The CVSNP validated the patient's discharge with the home care liaison and/or case manager. The home care (field staff) nurse's cell phone number was given to the CVSNP, which was recorded in a log for future reference. Discharge teaching was validated, using the teach-back method, as previously discussed, with written discharge instructions provided to patient and family/support system. The hospital unit clerk (HUC) made an appointment for the patient to see the cardiologist in 2 weeks, surgeon in 3 weeks, and primary care provider in 4 weeks. This follow-up information was communicated to the patient and family by the HUC as well as documented in the EMR, with a hard copy given to the patient and family. Prior to discharge, the CVSNP provided a verbal phone handoff to the home care nurse. Pertinent concerns to optimize the transitions in care were addressed at that time. Lastly, the NP dictated the discharge summary to ensure that the pertinent information can be available in the EMR for future reference.

Days After Discharge

To optimize communication among care providers, the operative note, medications list, dictated discharge summary is sent to the cardiologist and PCP using informational technology support (either by a fax transmittal or notifying the provider that this information is contained within the EMR). This information was transmitted/shared, since some cardiologists and PCPs do not have access to the hospital's EMR records. In case the patient calls the cardiologist or PCP, these providers will have access to the pertinent information to support clinical decisions. The home care nurse would make a clinical visit to the patient's home the day after discharge. If the home care nurse identifies any issues after discharge, the following decision tree will be utilized: From the hours of 0730 to 1630, the homecare nurse or patient contacts the CVSNP with changes in the patient's status using the designated (spectra link) number. The CVSNP collaborates with the surgeon on the clinical status; at that time, the surgeon, or office staff, notifies the homecare nurse to continue to monitor the clinical status, or obtain the next available expedited office appointment, or if the patient's clinical status warrants, triages the patient to the emergency department (ED)/clinical decision unit (CDU) for evaluation. From the hours of 1630 to 0730, the homecare nurse or patient contacts the surgeon via the Perfect Serve CVS service line (hospital phone system utilized for after hours). The surgeon determines if the clinical status warrants ED/CDU evaluation or if the patient can be seen in the office for an expedited visit. If the patient calls the office, the nonclinical office staff can communicate with the surgeon to redirect the patient back to home care, expedite an office visit, or direct the patients to the ED/CDU. If the patient is triaged to the ED/CDU, the surgeon and/or CVSNP will establish the differential diagnosis and resultant plan of care. Patients that are evaluated and managed in the CDU and then sent home are not considered to be a hospital readmission. In contrast, if a patient requires further inpatient management, then this patient's case would be considered a hospital readmission.

Results During the timeframe of December 2013 to December 2014, when the clinical practice protocol was instituted, the initial readmission rate (14%) continued to be above the national STS benchmark of 10%. Further revisions to the practice protocol were implemented with the latest readmission rate in calendar year (CY) 2014 being 5.26 % (N = 4 of 76 total patients), which is well below the national benchmark and a new best practice standard for the practice site. This information is publicly shared at the STS meetings, as well as reported to the Duke Clinical Research Institute.

Conclusions: An interprofessional leadership team is essential to institute best practice across the care continuum. The clinical practice protocol was provided to all patients undergoing open-heart surgery at the practice site. Data was tracked on the CABG only patients based on quality measures set by the STS database form. Quantified readmissions rates for all open-heart patients can be extrapolated from this database in the future.