Strategies for Reducing Readmissions – The Time is Now

INFORMATION ABOUT THE AUTHORS

Diane Bradley. Regional Chief Clinical Officer
Credentials include over 30 years of managerial experience in acute and long term care and behavioral health settings, in a variety of leadership positions to include a Chief Nurse in a multihospital system. Experience includes a wealth of administrative experience from serving in the U. S. Army, advancing to a Chief Nurse of a 400-bed field hospital. Bradley’s basic diploma nursing education is from The Nightingale School of Nursing, and Bachelor of Science degree in nursing from Alfred University, Bachelor of Science degree in Psychology from the University of Rochester, Master’s degree in Public Administration from the SUNY at Brockport, Master’s degree in Nursing Administration from St. John Fisher College, and a Ph.D. in Health Care Administration. A diploma in Health Care Administration from Baylor University was earned while in the U.S. Army. Added to formal education is Board Certification in Nursing Administration, Advanced (NEA-BC) through the American Nurses Credentialing Center, and Health Care Quality (CPHQ) through the Healthcare Quality Certification Commission, and a Baldrige Examiner. She is a Fellow of the American College of Healthcare Executives.

Carolyn St.Charles, Regional Chief Clinical Officer
Carolyn St. Charles brings over 30 years experience to her role at HealthTech Management Services. As Regional Chief Clinical Officer, St. Charles provides consultation and resources that promote evidence-based care, quality and patient safety, and operating efficiencies. Previously, she held progressively more responsible positions at Overlake Hospital in Bellevue, Washington, including Director of Medical-Surgical Nursing, Senior Vice President of Patient Care and Vice President of Strategic Services. St. Charles earned her Master’s degree in Business Administration from the University of Washington and a Bachelor’s degree in Nursing from Northern Arizona University. She is also a member of the American Organization of Nurse Executives and The Case Management Society of America.
Background

The Hospital Readmission Reduction Program (HRRP) was established by a provision in the Affordable Care Act (ACA) requiring Medicare to reduce payments to hospitals that have high readmission rates for patients in traditional Medicare. Under the HRRP, hospitals with readmission rates that exceed the national average are penalized by a reduction in payments across all of their Medicare admissions—not just those which resulted in readmissions. CMS defines readmissions as an admission to a hospital within 30 days of a discharge from the same or another hospital.

CMS began imposing readmission penalties in fiscal year 2013 at 1 percent, increasing to 2 percent for fiscal year 2014 and 3 percent for fiscal year 2015 and beyond. Penalties for 2013 and 2014 focused on readmissions for heart attack, heart failure, and pneumonia. In 2015, CMS included additional diagnoses: chronic obstructive pulmonary disease (COPD), and elective hip or knee replacement. CMS has indicated that it plans to continue with all these diagnoses and, for 2017, will also assess performance following initial diagnosis of coronary artery bypass graft (CABG) surgery to the list. Penalties are calculated based on the preceding 3-year measurement period. CMS estimates that total penalties at $428 million for fiscal year 2015.

From 2007 through 2011, the national 30-day, all-cause, hospital readmission rate averaged 19 percent. During calendar year 2012, the readmission rate averaged 18.4 percent. Readmission rates at hospitals participating in the Partnership for Patients (PfP) program have been, on average, consistently lower than the rates at non-participating hospitals within all size categories except for the very smallest and largest hospitals, but rates at both participant and non-participant hospitals fell in 2012.

Although penalties are currently not applicable to Critical Access Hospitals, data is collected and available to the public on the Hospital Compare web site along with other quality data.

Data Analytics

Analytics are increasingly becoming not just a luxury but a requirement in managing high-risk populations and preventing readmissions. Calculating and analyzing the readmission rate for all patients as well as those with specific diagnosis, provides information about common factors that can be used to develop and strengthen clinical protocols, transitions of care and outcomes.

Currently, 80% of electronic health data collected is said to be unstructured; only 33% of health care organizations use business intelligence tools; and 30% of U.S. hospitals use a clinical data warehousing or mining tool, according to data pulled from HIMSS Analytics -- the research arm of the Healthcare Information and Management Systems Society (Pennic, HIT Consultant, 5/16).

The report acknowledged that there is "no single roadmap to achieving analytics excellence" but cited several critical steps for the success of health data analytics, including:

- Building partnerships with health plans to obtain claims data;
- Identifying the care gaps of all patients and providing steps to close them;
- Categorizing patients based on their health risks so care teams can intervene with high-risk patients who generate the majority of health costs; and
- Preparing physicians for big changes in how they practice.

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The report listed several recommendations for health care providers, including:

- Constructing a data warehouse that is the single source for all information aggregated at the organization;
- Tracking process data, such as patient outreach efforts;
- Changing the analytic perspective from episode-based or procedure-based analyses to patient-based and population-based analyses;
- Ensuring that data are accurate and available in real time;
- Integrating claims and administrative data with clinical data from electronic health records to provide a complete view of patient care; and
- Realizing the process of integrating data analytics will take time (Walsh, Clinical Innovation & Technology, 5/15).

**LACE Index**

The LACE index is a tool to predict the risk of unplanned readmission or death within 30 days after hospital discharge in both medical and surgical patients. Dr Carl van Walraven et al., developed the index by looking at 48 patient-level and admission level variables for 4812 patients discharged from 11 hospitals in Ontario. Four variables were independently associated with unplanned readmissions within 30 days. The variables include the length of hospitalization stay (“L”), acuity of the admission (“A”), comorbidities of patients (“C”), and emergency department use of patients (“E”).

Ronald Kreilkamp RN, MSW, at Chinese Hospital, proposed modifications for two of the LACE indicators. Specifically,

- Acuity of the admission was modified so that patients admitted as inpatients are given 3 points, patients placed in observation status were given 0 points.
- The third attribute, the Charlson comorbidity Index, was modified to include renal disease, diabetes and peptic ulcer disease.

One study found a significant association between pneumonia readmissions and time period \(\chi^2 (n = 126), P = .05\) where readmissions decreased over time. No significant associations were found between AMI readmissions and time period \(\chi^2 (n = 145), P = .07\) or between HF readmissions and time period \(\chi^2 (n = 170), P = .29\). However, they found that readmissions according to these 2 diagnostic criteria also decreased over time.

The LACE Index is an easy to use tool, and although not 100% predictive, provides a resource in the arsenal of strategies to prevent readmissions.

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**Population Management**

Healthcare organizations are becoming increasingly aware that financial viability and quality initiatives and outcomes must be aligned. As a result, a robust information technology infrastructure must be available that supports data analytics and population health management.

The leveraging of clinical data analytics that provides current decision support is essential to managing patient populations proactively. Availability of data at the point-of-care drives appropriate decision making for the patient, helps to identify gaps, and keeps the financial implications in mind. This can only be accomplished with data that provides timely and meaningful information where it is needed.

Many of the current IT initiatives are related to population health in one way or another; for example, electronic health records, meaningful use, interoperability, accountable care organizations, disease state management, pay-for-performance and patient-centered medical home which suggest a much broader approach to managing patients in cohorts.

**Care Transitions**

The Agency for Healthcare Research (AHRQ) Project RED (Re-Engineered Discharge) identifies 12 “mutually reinforcing actions” to ensure a smooth and effective transition at discharge.

1. Ascertain need for and obtain language assistance.
2. Make appointments for follow-up care (e.g., medical appointments, post-discharge tests/labs).
3. Plan for the follow-up of results from tests or labs that are pending at discharge.
4. Organize post-discharge outpatient services and medical equipment.
5. Identify the correct medicines and a plan for the patient to obtain them.
6. Reconcile the discharge plan with national guidelines.
7. Teach a written discharge plan the patient can understand.
8. Educate the patient about his or her diagnosis and medicines.
9. Review with the patient what to do if a problem arises.
10. Assess the degree of the patient's understanding of the discharge plan.
11. Expedite transmission of the discharge summary to clinicians accepting care of the patient.
12. Provide telephone reinforcement of the discharge plan.\(^5\)

Researchers at the Boston University Medical Center (BUMC) who developed and tested the Re-Engineered Discharge (RED) showed that the RED tool was effective at reducing readmissions and post-hospital emergency department (ED) visits.

Data & Analytics Platform

Our proprietary data mining software provides accurate and reliable data to help your organization reduce preventable readmission including:

- Readmission rate (all causes) by payor
- Readmission rate by primary diagnoses (DRG)
- Readmission rate by secondary diagnoses
- Readmission rate by primary care provider
- Length of stay for previous admission(s)
- Discharge disposition for previous admission(s)
- Emergency department visits prior to current admission
- Resource utilization
- LACE Index for predicting readmissions

HTMS partners with GAFFEY Healthcare for Data & Analytics Technology.

Reducing Readmissions – A Multi-faceted Strategy

Utilizing evidence based strategies such as Project RED in conjunction with Data Analytics are essential for reducing readmissions and preventing penalties from CMS, now or in the future.

For information about our Readmission Reduction Consulting Services and our Analytics product, please contact:

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