
Improving Transitions to Reduce Readmissions

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SUMMARY • Delivering high quality healthcare requires crucial contributions from many parts of the care continuum. However, as healthcare becomes increasingly specialized, coordination between providers and between settings is too often not conducted as a team effort. In the hospital setting, poor coordination of care often results in hospital readmissions, many of which are avoidable. In this article, we describe processes that hospitals can implement immediately to dramatically improve care transitions and reduce re-hospitalization rates. Readmission rates are a focus of interest for payers and policy-makers seeking to promote efficiency and quality. Hospital executives may want to prepare their organization to excel on this performance metric in anticipation of payment, policy, and/or other forecasted changes in the market.

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In a recent conversation with the chief medical officer at a large health system in the United States, the physician executive relayed stories about his own recent hospitalization for an emergency surgical procedure. He was mostly delighted with the care he received, but, when asked if he had experienced any surprises, he responded this way: “The pain was a surprise—mostly because each nurse seemed to have his or her own theory of pain management. Some predicted and managed pain aggressively, and others ‘followed the orders’ to the letter, even when I was in severe pain, without consulting the surgeon. The biggest surprise was at home. I was alone, fearful, uninformed, and disconnected. I had no real education on how to care for myself and no way to reach out for information, guidance, consolation, and care. I thought maybe it was because I am a physician, but now that I am sensitive to this, I see this failure happening everywhere.”

In a December 2000 speech, Don Berwick, president and CEO of the Institute for Healthcare Improvement, labeled “discharge” a dirty word—associated generally with unpleasant ideas and images. A large majority of patients discharged from the hospital fail to receive the basic and necessary planning and preparation. One study found that 81 percent of patients requiring assistance with basic functional needs failed to receive a home care referral, and 65 percent said no one at the hospital talked to them about managing their care at home.¹ These gaps lead to readmission in a surprisingly large number of cases. The costs associated with hospitalization consume nearly one-third of the total dollars spent on healthcare in the United States.² A large body of experience and evidence suggests that,

among the population of individuals who are hospitalized and re-hospitalized with high frequency, many hospitalizations are avoidable.³

Our experience suggests that by improving care transitions, hospitals can achieve lower readmission rates. In this article, we will outline the broad categories of failures in transitions, describe the Institute for Healthcare Improvement’s (IHI) approach to reducing 30-day re-hospitalization rates, and describe our experience coaching teams working to reduce re-hospitalizations. We believe that hospital executives—through direct influence on institutional procedures and processes—can have a significant influence on re-hospitalization rates.

WHY FOCUS ON READMISSION RATES?

Readmissions represent, in some cases, a defect in hospitals’ planning and care processes, or in the ambulatory support system, or in the community. By focusing improvement effort on the crucial transitions between different care settings, leaders can improve the care they provide to a large number of patients.

The increasing cost of healthcare is prompting payers and purchasers to focus scrutiny on high-cost areas that yield low quality. Attention is heightened in the current economic climate, because the search for potential savings is a high priority. Therefore, for economic and fiscal reasons alone, readmission rates are increasingly a focus of attention for healthcare executives, payers, and policymakers.

The focus on readmission rates has already been demonstrated in the marketplace. Some commercial payers currently require the reporting of hospital- or physician-specific 30-day readmission rates. A

small handful of hospitals have engaged in demonstration projects with Medicare to manage high-cost beneficiaries with the aim of reducing readmission rates. The Medicare Payment Advisory Commission (MedPAC) has strongly recommended that Congress implement differential payment policies for hospitals with high readmission rates. In some states, hospital-specific 30-day readmission rates are being confidentially or publicly reported by state data agencies. (See Box 1)⁴

WHAT DO WE KNOW ABOUT CURRENT READMISSION RATES?

Hospital-specific readmission rates vary widely. We do not have good data on the range of hospital-specific readmission rates for several reasons. First, some hospitals do not measure or track their 30-day readmission rates. Second, some hospitals track only service-line-specific or disease-specific readmission rates. Third, even among hospitals that track readmission rates, there is great variation in the operational definition of readmission rates. Definitions vary with regard to time interval, conditions included, and conditions excluded.

Readmission rates are analyzed at different time intervals. Seven-, 14-, 30-, and 90-day, and 1-year are common choices. The shorter time intervals (7 to 30 days) are more useful for evaluating the effectiveness of the discharge and post-acute period, whereas longer intervals (90+ days) reflect the effectiveness of community-based, chronic monitoring and maintenance systems. The 30-day readmission rate is a standard interval of analysis.

Thirty-day readmission rates vary by geography, setting, and condition. Data published in the 2007 Commonwealth Fund State Scorecard on Health System

BOX 1: Why Readmissions? Why Now?

MedPAC June 2008 recommendations:

1. Confidentially report to hospitals and physicians readmission and resource utilization rates to allow risk-adjusted performance comparison with peers for 2 years and then make data publicly available.
2. Reduce payment to hospitals with high readmission rates for a set of conditions; allow hospitals and physicians to share in savings gained from improved processes (gainsharing, or shared accountability).
3. Conduct a voluntary pilot to test bundled payments for hospitalization for a set of conditions.

Performance⁵ revealed a two-fold variation in readmission rates from state to state; Vermont had the lowest rate at 13 percent statewide average, while Louisiana had the highest rate at 24 percent statewide average. The same report cited a three-fold national difference in the rate of 30-day readmissions from nursing homes; Utah had the lowest rate at 8 percent statewide average, while Louisiana had the highest rate at 25 percent.⁶

A national analysis of Medicare claims found that one out of five Medicare patients is re-hospitalized within 30 days; one-third experienced re-hospitalization within three months; and at one year, fully two-thirds of the Medicare patients who were discharged from a hospital in 2006 were either deceased or experienced a re-hospitalization. The same analysis found that half of patients re-hospitalized at 30 days had no intervening physician visit,

and 70 percent of the surgical patients readmitted at 30 days were readmitted with a medical (*not* surgical) diagnosis.⁷

A MedPAC analysis of Medicare data found that 17.6 percent of all Medicare hospital admissions are readmissions, and that these account for \$15 billion annually in expenditures. Of the \$15 billion in readmission costs, they found that

\$12 billion were potentially preventable.⁸

Gaps in planning for the transition, failures in communication, and delays in scheduling post-hospitalization care all contribute to the readmissions.

In addition, there is a large body of evidence documenting the high rates of readmissions for patients with certain conditions, such as heart failure, chronic obstructive pulmonary disease, and depression. From this literature, we know that, at least among populations studied, congestive heart failure (CHF) 30-day readmission rates are particularly high: approximately 20 to 24 percent.⁹ Our informal conversations with colleagues across the United States suggest similar rates of CHF readmissions at a variety of community hospitals, academic medical centers, and integrated delivery systems.

Because readmission rates for these conditions are particularly high, the potential to reduce readmission rates for patients with these conditions is promising. As we will describe, individual delivery systems and health services researchers have demonstrated dramatic reductions in 30-day readmission rates for specific patient populations.

WHAT ARE THE CAUSES OF AVOIDABLE RE-HOSPITALIZATIONS?

Numerous factors contribute to hospital readmissions. Much of the peer-reviewed

literature focuses on defects in the care of specific conditions, such as heart failure. Although patients with heart failure are particularly vulnerable to recurrent hospitalizations, the root causes of heart failure readmissions are in no way unique to these patients. Gaps in planning for the transition, failures in communication, and delays in scheduling post-hospitalization care all contribute to the readmissions. Medication discrepancies at times of transition are frequent, and cited as a top cause of re-hospitalization. Up to 70 percent of patients have a problem with medications when seen the first week after discharge by a home registered nurse.¹⁰

In addition, studies evaluating hospital discharge have found an association between the risk of readmission and deficiencies in health literacy, patient education, communication among healthcare providers within and between sites of care, and appropriate medical follow-up.¹¹

WHAT CAN BE DONE TO REDUCE RE-HOSPITALIZATIONS?

Avoidable re-hospitalizations are symptomatic of defects in the delivery of care during hospitalization and/or the transition out of the hospital. Interventions that address these defects include error-free, high-quality inpatient care; accurate medication reconciliation; effective patient education; patient-centered discharge planning; post-acute patient/caregiver support; referral for appropriate intensity of post-acute follow-up; communication of a clear understanding of clinical prognosis to patients/caregivers; and proactive end-of-life care planning.

A large body of evidence outlines effective interventions to reduce re-hospitalizations among patients with heart failure. Such interventions include:

- Early assessment of discharge needs
- Enhanced patient and care-giver education, specifically focused on understanding the management of the patient's condition
- Timely and complete communication between clinicians at the time of transfer
- Early post-acute follow up within 48–72 hours for high-risk patients with either a physician or nurse
- Early post-discharge nurse phone calls to confirm understanding of follow-up plan
- Appropriate referral for home care services when needed
- Appropriate advanced care planning
- Remote monitoring
- Improved transfer processes between facilities
- Effective medication management

Excellent research and experience of innovators highlight the effectiveness of enhanced care delivery during transitions. Some examples of this research and models drawn from it are detailed below:

- Care Transition Model¹²
 - Dr. Eric Coleman's program improves quality and safety during care hand-offs by supporting patients and families; increasing skills among healthcare providers; enhancing health information exchange across care settings; implementing system-level interventions; developing performance measures; and influencing health policy at the national level.
- Advanced nurse practitioner care coordination¹³
 - A transitional care nurse conducts a comprehensive assessment of

patient and family caregiver needs; coordinates and implements the patient's discharge plan; assists the patient with care management; and facilitates communication and the transition to community providers and services.

- Evercare Care Model¹⁴
 - Nurse practitioners and care managers develop and manage personalized care plans for members who are placed in one of four care levels based on a health risk analysis for each individual.
- Enhanced primary care coordination with home health¹⁵
 - Home health aides (HHA) were integrated into healthcare teams by increasing clinician support of HHAs; improving communication among clinicians, HHAs, and patients; and educating HHAs to promote patient self-care and to be proactive members of the team.

WHAT ARE THE HIGH-LEVERAGE OPPORTUNITIES FOR IMPROVEMENT?

The opportunities for improving the process of transition from the hospital are numerous. How can you select the most effective ones for your organization? As part of the IHI-Robert Wood Johnson Foundation (RWJF) Transforming Care at the Bedside (TCAB) project, participating teams from medical and surgical units created the ideal transition out of the hospital for patients with congestive heart failure.¹⁶ Teams achieved very promising results by working to improve the four elements of the process of care and discharge. While the details contained in the table below are tailored to patients

with heart failure, the four core elements of the Ideal Transition Home Model (Box 2) are widely applicable and currently being tested for patients with other conditions:

1. Enhanced admission assessment of post-discharge needs;
2. Enhanced teaching and learning;
3. Enhanced communication at discharge; and
4. Timely post-acute care follow up.

EXPERIENCE FROM THE FIELD

The Ideal Transition Home recommendations were tested and implemented by organizations participating in the IHI-RWJF TCAB project. A member of the Iowa Health System (an integrated health-care delivery system of 21 hospitals and 71 group practices and clinics), St. Luke's Hospital in Cedar Rapids, Iowa, successfully implemented the four elements of the Ideal Transition Home. During the project period, work on the transition

Box 2: Ideal Transition Home Model

1. Enhanced Admission Assessment of Post-Discharge Needs
 - a. Include family caregivers and community providers (e.g., home health nurses, primary care physicians, HF clinic nurses, etc.) as full partners in standardized assessment, discharge planning, and predicting home-going needs.
 - b. Reconcile medications upon admission.
 - c. Initiate a standard plan of care based on the results of the assessment.
2. Enhanced Teaching and Learning
 - a. Identify the learner(s) on admission (i.e., the patient and family caregivers).
 - b. Redesign the patient education process to improve patient and family caregiver understanding of self-care.
 - c. Use Teach-Back daily in the hospital and during follow-up calls to assess the patient's and family caregivers' understanding of discharge instructions and ability to do self-care.
3. Patient and Family-Centered Handoff Communication
 - a. Reconcile medications for discharge.
 - b. Provide customized, real-time critical information to the next care provider(s) that: (a) accompanies the patient to the next institution; and/or (b) is transmitted to the receiving physician and/or home health agency or other care providers at time of discharge.
4. Post-Acute Care Follow Up
 - a. High-risk patients: Prior to discharge, schedule a face-to-face follow-up visit (home care visit, care coordination visit, or physician office visit) to occur within 48 hours after discharge.
 - b. Moderate-risk patients: Prior to discharge, schedule a follow-up phone call within 48 hours and schedule a physician office visit within 5 days.

home focused specifically on patients with heart failure. St. Luke's baseline 30-day all-cause readmission rate for patients with heart failure started at just 12 percent; the team's aim was to cut this rate by 50 percent. We note that aggressive leader-led aims, even when performance already excels, can often drive substantial further gains. This "raise the bar" philosophy is often found at the best-performing organizations.

The team focused on ensuring that the patient and caregivers fully understood the diagnosis, plan of care, and plans for follow-up care. The team implemented Teach-Back¹⁷—a method of presenting information and requesting the patients or caregivers to restate in their own words what they understood at the bedside—and partnered with the Visiting Nurses Association (VNA) to standardize the teaching points and Teach-Back questions. As part of this work, the team revised patient education processes and materials to incorporate health literacy concepts and provide the framework needed to prompt the use of Teach-Back methods. The Teach-Back questions used by the hospital staff and reinforced by VNA are:

- What is the name of your "water pill"?
- What weight gain should you report to your doctor?
- What foods should you avoid?
- Do you know what symptoms to report to your doctor?

The St. Luke's team tracked their all-cause 30-day readmission rates for all patients with heart failure who were re-admitted. Once the team reached a 9 percent rate on this metric, they assessed case reviews and learned that the patients who were recurrently hospitalized were

near the end of life. Some of these individuals were simply not prepared or willing to engage in end-of-life discussions or palliative care options until after numerous hospitalizations and re-hospitalizations. From May to July 2008, the St. Luke's team readmission rates ranged from 3 percent to 9 percent, and their work continues.

As discussed earlier, readmission rates are high and highly variable. It is reasonable to start working on readmission rates by segmenting patients by condition (focusing on heart failure, for example), yet disease-specific conditions require effort spent on case identification, which can be inefficient. The four processes we have tested in our work to date are processes which every patient, regardless of diagnosis, should receive when transitioning out of the hospital. We encourage organizations to improve the discharge process for all patients, and attend specifically to the following:

- Assess the real reason the patient is in the hospital this time;
- Proactively plan for the care needs in order to succeed in the next care setting;
- Ensure patients or caregivers understand their self-care and plan of care;
- Schedule early post-acute follow up as routine care (do not leave follow up to chance); and
- Make same-day, meaningful clinical hand-offs a standard of care.

CONCLUSION

As the economy softens and hospitalization rates for elective procedures drop, it may seem counterintuitive for senior leaders to combat readmissions, but a confluence of circumstances requires this

focused action now. Readmission rates across the United States are high and vary significantly from state to state. As we come to understand the extent and causes of re-hospitalizations, and as data become increasingly available to payers and the public, pressure on senior teams for improvement and action will accelerate and intensify. Just as CMS and other payers began to classify “complications” such as hospital-acquired infections and decubitus ulcers as “preventable defects,” these unnecessary re-hospitalizations will soon become viewed as errors to be eliminated. As such, they will exact a considerable financial toll on hospitals and a human toll on patients. Most important, health-care leaders must now see their obligations for care as extending through the continuum of need, and must manage for more patient-centered care and better clinical outcomes.

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