

# Approaches to Reducing Avoidable Hospital Readmissions

**Everyone has an interest in preventing avoidable hospital readmissions. These events are expensive, disruptive to patients and their families, and put a hospital at risk on quality measures that can affect reimbursement.**

At least one in five Medicare patients have a hospital readmission within 30 days of admission,<sup>1</sup> costing the system about \$26 billion annually. In 2016, 2,597 U.S. hospitals were penalized for more than \$528 million Medicare dollars, an increase of \$108 million from 2015.<sup>2</sup>

To address this issue, Medicare evaluated 3,241 hospitals under Medicare's Hospitals Readmissions Reduction Program (HRRP) from October 2017 to September 2018. Eighty percent of hospitals – 2,573 to be exact – were penalized for excess readmissions.<sup>3</sup>

While some readmissions can't be avoided, there are many correctable errors that can reduce their number. Among the different kinds of health plans, the causes for readmission vary considerably.

## Medical Causes for Readmissions

All health plan and payer types face readmissions issues and related costs; however, the medical causes contributing to these events depend greatly on the populations being served.

According to the Agency for Healthcare Research and Quality (AHRQ), a total of 3.3 million readmissions within 30 days of discharge during 2011 cost the system \$41 billion in hospital costs.<sup>4</sup>

**Fifty-five percent of readmissions were for Medicare patients, with the following listed as the most common causes:**

- Cardiac dysrhythmias
- Pneumonia
- Congestive heart failure
- Septicemia
- COPD and bronchiectasis

**Medicaid patients accounted for 20.6 percent of all readmissions and the most common causes were:**

- Schizophrenia and other psychotic disorders
- Mood disorders
- Diabetes mellitus with complications
- Alcohol-related disorders
- Complications of pregnancy, not including early or threatened labor

**Of all readmissions, 18.6 percent involved privately insured patients. The top five causes were:**

- Septicemia, except in labor
- Maintenance of chemotherapy or radiotherapy
- Mood disorders
- Complications of surgical procedures or medical care
- Complications of device, implant or graft

**Uninsured patients represented just 4.9 percent of readmissions with the following causes:**

- Alcohol-related disorders
- Mood disorders
- Pancreatic disorders, not diabetes
- Diabetes mellitus with complications
- Skin and subcutaneous tissue infections

## Care Coordination and Communication Keys to Risk Reduction

While some hospital readmissions appear unavoidable, others can be alleviated by addressing poor quality of care during the initial hospitalization, inadequate care coordination, a lack of discharge planning and poor transitional care. Communication between providers, patients and their caregivers strongly impact success. It's critical to recognize and address the factors that create risk in post-discharge outcomes. Following are six ways stakeholders can reduce the rate of readmissions:

### 1. Identify patients at high risk for readmission

The most prevalent risk factors associated with readmissions include healthcare-acquired infections; recent admissions for conditions like COPD, cancer, stroke, diabetes, heart failure, dialysis, respiratory failure and intubation history; vascular ulcers, positive screening for depression or substance use, as well as polypharmacy and a need for palliative care.

Other indicators for risk are patient limitations on activities of daily living (ADLs) and instrumental activities of daily living (IADLs); age over 80 years, ESRD, more than five chronic conditions, high-risk diagnoses-related groups, previous admissions, lack of patient/family education at initial discharge, lack of primary care follow-up within 30 days, adverse drug events, medication errors and medication non-adherence.

### 2. Improve care team communication

Providers and an interdisciplinary care team, including a pharmacist, should properly document an admission episode. The team needs to be on the alert for a poor transition between facilities, medication reconciliation, non-specific post-discharge instructions, and the presence of family as influential to success.

### 3. Ensure patients understand care instructions

It is important to educate patients at the time of discharge about medications, follow-up appointments, and warning signs and symptoms that signal readmission risk.

### 4. Follow up post-discharge

A phone call to high-risk patients within 48 to 72 hours post-discharge can reduce readmissions. Research has shown education interventions by a transitions coach during the first 30 days can significantly reduce readmissions.<sup>5</sup>

### 5. Target patients with limited English proficiency

Patients with better English proficiency have fewer readmissions; even with a translator to explain post-discharge care, language barriers create additional risk.

### 6. Ensure patients schedule a seven-day follow-up

Patients who have a follow-up visit within seven days of discharge have fewer readmissions.



## National Programs Seek Better Outcomes

A number of private and publicly funded national programs have emerged in recent years to help hospitals reduce preventable readmissions. For example, the **Re-Engineered Discharge (RED)** program at Boston University features a toolkit and templates to improve the discharge process. An initial study showed these services or considerations reduced hospital utilization in the first 30 days post-discharge:

1. Medication reconciliation
2. Reconciliation of discharge plan with national guidelines
3. Follow-up appointments
4. Outstanding tests
5. Post-discharge services
6. Written discharge plan
7. Instruction on handling problems that may arise
8. Patient education
9. Assessment of patient understanding
10. Discharge summary to PCP
11. Telephone reinforcement

Addressing these variables showed a 30% reduction in emergency room visits and readmissions, as well as a 39% reduction in the cost of care.<sup>6</sup>

The Society of Hospital Medicine conducted a project they called **BOOST (Better Outcomes for Older Adults through Safe Transitions)**, to test five tools in interventions. Project BOOST lowered readmissions by an annual rate of 14.7% to an annual rate of 12.7%, representing a 13.6% reduction.<sup>7,8</sup> Among the highlights of BOOST is the 8P tool for addressing problem medications, psychological factors, principal diagnoses with a high risk, polypharmacy, poor health literacy, patient support by caregivers, prior hospitalizations and (the presence of) palliative care. Other BOOST factors were a risk-specific intervention plan, a universal checklist of expectations for discharge, and a general assessment of preparedness on the part of providers, patients and caregivers with written discharge instructions.

## Assessments Reduce Risk in Transitions of Care

Altruista Health's GuidingCare® application incorporates four transition-of-care (TOC) assessments into its Population Health module. Pre-discharge, post-discharge, home visit and follow-up assessments are administered to members who have had a recent hospital admission. These assessments foster member engagement and address coordination and continuity of services such as transportation, ordering durable medical equipment, scheduling PCP appointments, and so forth, to ensure smooth transitions. Such assessments also help strengthen the member's awareness of self-management techniques and use of medication, and warning/alert signs. They create educational interventions for members and caregivers about maintaining a personal health record and emphasize follow-up appointments with primary care physicians. The TOC model supports better communication among healthcare professionals involved in a member's transition within and between hospitals, skilled nursing/long-term care/assisted living facilities, and the member's home. This reduces readmission rates.

## Tools for Predicting Readmission Risk

Providers are not always able to predict which patients are at the greatest risk of readmission. Risk assessment can help target the delivery of interventions where they will do the most good. Risk prediction tools include the LACE Index, Hospital score, 8Ps and the Probability of Repeated Admission (PraPlus). The LACE Index for Readmissions predicts a 30-day readmission based on the length of stay, acute admissions, the Charlson comorbidity index and the number of ED visits within last six months.<sup>9</sup>

The LACE Index, along with the Charlson's comorbidity index tool on GuidingCare's assessments platform, can help identify members with increased readmission risk. The care coordination functions in GuidingCare can help users create a readmission reduction care management program for members in the risk-stratified list that is generated by these tools.

The odds of Medicare patients 65 years and older with chronic conditions like congestive heart failure being readmitted within 30 days is one in four.<sup>10</sup> Researchers have designed quality-of-life questionnaires for people with heart disease that can be used to predict readmissions. The MacNew Questionnaire is one such cognitive tool for predicting unplanned rehospitalization after coronary revascularization.<sup>11</sup> An Altruista assessment based on the MacNew questionnaire can be used to identify psychological problems in members who have heart disease, offering another indicator of rehospitalization risk.

GuidingCare has exclusive use as a care manager of the CDPS (Chronic Illness and Disability Payment System),<sup>12</sup> that was created by University of California San Diego. This predictive risk model is embedded in the platform as part of GuidingSigns® Analytics. CDPS is an automated risk-stratification tool that calculates a risk score from a member's diagnosis, medication data and demographic details. The CDPS tool reveals who may become the next highest-cost patient and analyzes costs and complications in a holistic fashion. Health plans can leverage CDPS to address its highest-risk members with tailored, evidence-based interventions and care programs. This applies whether the identified risks impact readmissions or influence costs in other ways.

With insight into the causes of avoidable hospital readmissions, good coordination and communication, risks can be lowered. It's in the interest of all healthcare stakeholders to work together to prevent readmissions, which are expensive and wasteful. Being prepared with the right information and tools can make a difference in meeting compliance targets, reducing costs and improving health outcomes.▲

## References

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