Hospital Readmission Following Thoracic Surgery

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KEYWORDS

• Quality • Readmission • Lobectomy • Esophagectomy

KEY POINTS

- Hospital readmission costs the health care system in excess of 1 billion dollars a year.
- The Hospital Readmission Reduction Program was instituted as part of the Affordable Care Act in 2012 and penalizes hospitals with high rates of readmission.
- Strategies exist to minimize hospital readmissions and should be implemented by thoracic surgeons.

In 2010, there were more than 35 million hospital discharges in the United States.[1] Among Medicare patients, nearly 20% who are discharged from a hospital are readmitted within 30 days.[2] Unplanned readmissions account for 17% of hospital payments from Medicare in 2004, which equates to 1.4 billion dollars a year. Although many readmissions are unavoidable, researchers have found wide variation in hospitals' readmission rates, suggesting that patients admitted to certain hospitals are more likely to experience readmissions compared with other hospitals.[3]

In an attempt to reduce preventable readmissions, the Centers for Medicare and Medicaid Services (CMS) initiated the Hospital Readmissions Reduction Program (HRRP) in 2012 authorized by the Affordable Care Act (ACA). This program reduced hospital reimbursement by up to 1% if the facility was found to have an above-average risk-adjusted readmission rates for conditions representing a high percentage of readmissions such as myocardial infarction, congestive heart failure, or pneumonia.

For 2017, 78% of Medicare patient admissions are projected to be in hospitals receiving either no readmission penalty or penalties of less than 1% of the hospital's Medicare inpatient payments. Fewer than 2% of Medicare patient admissions will be in hospitals receiving the maximum financial penalty. Total Medicare penalties assessed on hospitals for readmissions will increase to $528 million in 2017. This amount is $108 million more than seen in 2016 and is predominantly owing to more medical conditions being measured.

This review recounts the first 5 years of readmission efforts under the HRRP. Consideration is also given to the challenges of using readmissions as a surrogate metric for quality. An overview of readmission reduction strategies and resources is then outlined. Finally, a discussion of the future of the HRRP is provided.

THE HOSPITAL READMISSIONS REDUCTION PROGRAM

A hospital readmission occurs when a patient is admitted to a hospital within a specified period after being discharged from an earlier (initial) hospitalization. For Medicare, this period is defined as 30 days and includes hospital readmissions to

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any hospital, not just the hospital at which the patient was originally hospitalized. Medicare uses an all-cause definition of readmission. This definition means that hospital stays within 30 days of a discharge from an initial hospitalization are considered readmissions regardless of the reason for the readmission. This all-cause definition is used in calculating both the national average readmission rate and each hospital's specific readmission rate. Starting in 2014, CMS began making an exception for planned hospitalizations (such as a scheduled coronary angioplasty) within the 30-day window.

The HRRP was established by a provision in the ACA requiring Medicare to reduce payments to hospitals with relatively high readmission rates for patients in non–managed care Medicare. Starting in 2013, as a permanent component of Medicare's inpatient hospital payment system, the HRRP was applied to most acute care hospitals. Hospitals excluded were psychiatric, rehabilitation, long-term care, children's, cancer, and critical access hospitals. 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.

Before comparing a hospital's readmission rate with the national average, CMS adjusts for demographic characteristics of both the patients being readmitted and each hospital's patient population such as age and illness severity. After these adjustments, CMS calculates a rate of excess readmissions, which links directly to the hospital's readmission penalty in a progressive fashion.[4] Each year, CMS releases each hospital's penalty for the upcoming year in the Federal Register and posts this information on its Medicare Web site.

For fiscal year 2013, the maximum penalty was 1% of the hospital's base Medicare inpatient payments. This increased to 2% for 2014 and then 3% starting in 2015.[5] When calculating each hospital's readmission rate, CMS uses 3 full years of hospital data. Accordingly, the upcoming 2017 penalties are based on hospital readmissions that occurred from July 2012 through June 2015.

For penalties levied in 2013 and 2014, CMS focused on readmissions after initial hospitalizations for 3 selected conditions; heart attack, heart failure, and pneumonia.[6] Included conditions in 2015 added chronic obstructive pulmonary disease and elective hip or knee replacement. For 2017 penalties, CMS expanded the types of pneumonia cases that were assessed and added readmission rates following coronary artery bypass graft surgery.

CMS has been posting individual hospital readmission rates on its Hospital Compare Web site, in addition to other measures of quality and patient satisfaction, since 2009. Designed for use by Medicare consumers and researchers, this Web site also provides comparisons of each hospital's Medicare readmission performance to the national average by indicating whether the hospital is "better/worse/no different" than the US National rate. In addition to readmissions following hospitalizations for selected diagnoses, the Hospital Compare Web site reports each hospital's overall Medicare readmission rates.

Analysis of this database shows that 2012 marks the first measurable declines in readmissions. Specifically, when the 3-year running average of hospital readmission rates began including data from 2012, the rates decreased across all 3 diagnosis categories. This trend has continued through subsequent measurement periods.[7]

Regardless of whether a correct deduction, the reduction in hospital readmissions following the enactment of HRRP suggests that hospitals may have initiated new interventions to lower their readmission rates during the measurement period leading up to the fines. The Department of Health and Human Services estimates 565,000 fewer Medicare patient readmissions from April 2010 through May 2015.[8,9]

CURRENT STATE OF READMISSION PENALTIES FOR HOSPITALS

Analysis of the variation in penalties by type of hospital suggests that Medicare beneficiaries who go to certain types of hospitals, especially major teaching hospitals and hospitals with relatively greater shares of low-income patients, are more likely to continue to be penalized and at a higher rate than the average.[10]

To some degree, there is overlap among these 2 types of hospitals, as major teaching hospitals often serve as safety net hospitals with higher proportions of low-income patients. Across all years, hospitals with the smallest share of low-income beneficiaries are the least likely to be assessed any penalty at all. It is predicted that for 2017, 66% of hospitals in the lowest quartile of low-income patients will be fined a readmission penalty compared with 86% among hospitals with the highest share of low-income beneficiaries. Rural hospitals also have higher rates of being penalized and higher average penalties. Variations in penalty rates by hospital characteristics have persisted across all 5 years of the program.[7]

Although the CMS readmission measures are adjusted for demographic characteristics associated with higher rates of hospital readmissions