Readmission Reduction as a Hospital Quality Measure
Time to Move on to More Pressing Concerns?

In a 2009 study, Jencks et al\(^1\) reported that among 11.8 million Medicare beneficiaries who were hospitalized in 2003 to 2004, 19.6% were readmitted in the first month after the hospitalization, and these readmissions accounted for an estimated cost of $41 billion annually. Researchers and policy makers inferred that if a significant proportion of readmissions was caused by failures of the health care system—whether due to inadequate treatment during the initial hospitalization or failure of care coordination after hospital discharge—then the adoption of policies designed to reduce inappropriate readmissions would be warranted, particularly because hospitals receive additional payments when patients are readmitted. These findings contributed to the development of the Hospital Readmissions Reduction Program (HRRP), enacted in 2010 as part of the Patient Protection and Affordable Care Act (ACA). Through the HRRP, in 2012 most US hospitals became “at risk” for a 0% to 3% reduction (capped at 1% during the first year) in Medicare diagnosis related group payments based on their hospital’s excess readmission ratio calculated for 3 specified conditions (acute myocardial infarction, heart failure, and pneumonia), with chronic obstructive pulmonary disease, coronary artery bypass surgery, and total joint replacement added later. The HRRP placed reducing readmissions at the center of efforts to improve the quality of care for hospitalized Medicare patients.

In this Viewpoint, we argue that the persistent focus on readmissions during the past decade, although undoubtedly leading to some improvements in care, has had minimal demonstrable benefit. Moreover, the HRRP has distracted clinicians and health system leaders from other crucial quality concerns. As with many other quality measures, the HRRP has led to gamesmanship (described below) whereby hospitals have taken predictable actions in their coding practices and admission processes and protocols in an effort to minimize the probability of receiving penalties. It is time to refocus hospital quality improvement efforts where they can be most effective and beneficial, which means deemphasizing the HRRP.

From a historical perspective and since the 1950s, clinicians, researchers, and policy makers have recognized the hazards of using hospital readmissions as a measure of quality. Systematic measurement and monetization of readmissions was forestalled for decades because of persistent concerns that readmissions were caused by medical conditions and social circumstances that hospitals could not easily influence and evidence that readmissions were only peripherally related to hospital quality, but eventually resistance faded.

After implementation of the HRRP, initial studies were encouraging. For example, in 2016, Zuckerman et al\(^2\) reported an approximately 4% absolute reduction in 30-day readmissions (21.5% to 17.8%) after the introduction of HRRP and other ACA programs; other studies were similarly positive, suggesting that HRRP might be reducing 30-day readmissions by as much as 1% annually. Gupta\(^3\) estimated that reductions in readmissions saved Medicare $620 million annually.

However, a growing body of literature now suggests that the reported reductions in readmissions may have been overstated. Wadhera et al\(^4\) found that an increasing number of patients who previously would have been readmitted instead were treated under observation status. Other investigators found that much of the purported reduction in readmissions could be explained by a concurrent change in billing standards that allowed hospitals to submit a larger number of comorbid diagnoses when submitting claims, thereby increasing the expected number of readmissions. Moreover, McWilliams et al\(^5\) found that much of the reduction in readmissions could be explained by contemporaneous reductions in the rate of hospital admissions for all Medicare beneficiaries. Several studies also reported that HRRP was associated with a small but significant increase in postdischarge mortality for patients with pneumonia and congestive heart failure, although there is disagreement on this point.

International comparisons also call into question the effectiveness of HRRP. Longitudinal studies have found that reductions in readmission rates in the US generally have been matched by reductions in other countries that did not introduce readmission reduction policies. For example, Samsky et al\(^6\) reported that reductions in 30-day readmission rates for heart failure in Canada between 2005 and 2015 were similar to those observed in the US. Cram et al\(^7\) found that reductions in readmissions for myocardial infarction observed in the US between 2011 and 2017 were matched in Canada, the Netherlands, Israel, and Taiwan.

Whatever the benefits of HRRP with respect to cost savings to the Centers for Medicare & Medicaid Services (CMS) and readmission reductions, these benefits must be weighed against the indirect costs of the program, which are likely substantial. Although difficult to quantify, these costs are incurred by hospitals when they devote personnel and resources to myriad interventions designed to reduce readmissions (some of which are likely beneficial for patients), but also in their efforts to improve coding and documentation that influence calculated observed-to-expected readmission rates through risk adjustment. A systematic review of interventions to reduce hospital readmissions found that the average per-patient-cost was $600 to $700 (in 2015 dollars).\(^8\) If such programs were extended to 50% to 100% of Medicare’s 9 million annual hospital admissions, this would equate to an estimated $3 to $6 billion annually. Regrettably, well-designed (and often quite intensive) interventions have often failed to meaningfully reduce hospital readmissions.\(^9\)
In the decade since implementation of HRRP, there has been greater understanding of why health systems have such difficulty preventing readmissions. Graham et al.\(^2\) found that less than 36% of early readmissions (within 7 days of discharge) and 23% of late ones (8-30 days after discharge) were preventable. Moreover, hospitals were identified as the ideal location to target these preventable readmissions in less than half (47%) of early readmissions and 26% of late readmissions. Alternatively, the patient’s home was identified as the ideal target in 14% of early readmissions and 19% of late ones; outpatient clinic, in 7% and 15%, respectively; and emergency department, in 4% for both. There also have been significant gains in appreciation of the critical contribution of disadvantage and adverse social determinants of health in driving hospital readmissions at both the individual and hospital level.

Given the challenge of making hospitals responsible for preventing readmissions and the limited success of HRRP, it is important to question whether health systems might be better served by directing their limited quality improvement resources, including both personnel and financial investments, toward improving aspects of care that they control more directly. Two key questions about HRRP should be answered. First, should readmissions be entirely eliminated as a quality measure? The answer is no. Readmissions are costly and some modest proportion can be prevented. Readmission reduction efforts may well reduce only a small number of readmissions, but such programs have undoubtedly improved handoffs between inpatient and outpatient care teams, as well as communication of postdischarge treatment plans and follow-up with patients and their families; the importance of these benefits should not be prematurely discounted. Rather, readmissions should continue to be measured and tracked, but the financial penalties associated with HRRP could be withdrawn. Such a strategy would maintain readmissions as a focus for hospitals and policy makers while giving hospital managers the freedom to focus resources on higher-return quality improvement projects. There is precedent for changing or sunsetting an underperforming quality measure, although, to our knowledge, no explicit processes or frameworks have been reported for systematically evaluating whether and when a quality measure might warrant withdrawal. As an example, in 2012, the metric of early antibiotic administration for patients with pneumonia was retired from the CMS Hospital Value Based Purchasing Program (HVBP) when evidence of unintended consequences emerged. An alternative approach would be to sunset HRRP as a stand-alone program and incorporate hospital readmissions into HVBP’s existing measures. Such an approach is appealing because it would decrease the outsized attention and resources hospitals have devoted to reducing readmissions while discouraging hospitals from decommissioning salutary programs.

Second, if HRRP were phased out rather than eliminated, where might hospitals better focus their quality improvement efforts? Other patient safety and quality practices could serve as attractive targets. For example, a 2013 Agency for Healthcare Research and Quality expert panel identified an array of patient safety practices with significantly stronger evidence-based support than readmissions. These practices include preoperative surgical and anesthesia checklists, clinical bundles and order sets to prevent catheter-associated infections, and expanded use of clinical pharmacists to reduce adverse drug events. Hospitals could also reallocate their resources toward improving use of evidence-based therapies such as prescription of angiotensin-converting enzyme inhibitors or angiotensin-receptor blockers for patients hospitalized with congestive heart failure or reperfusion therapy for patients with acute stroke; such treatments are supported by extremely strong bodies of evidence, currently underused, and under the direct control of hospitals. Other potential opportunities for improvement, such as clinician and hospital personnel wellness, patient experience, addiction treatment services, and palliative care, also warrant attention.

In 2010, reducing hospital readmissions appeared to be a fruitful target for quality improvement. In 2022, after more than a decade of concerted effort, it is time to focus limited hospital resources on more tractable and evidence-based targets that are more directly under the control of hospitals.

**REFERENCES**