

Readmissions Are Decreasing—Is It Time to Celebrate?

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In recent years, American hospitals have invested substantial resources in initiatives to reduce their readmission rates. For many, the cost of these efforts outweighs the financial penalties that these same hospitals would have faced under Medicare's Readmissions Reduction program. The article on readmissions patterns by Suter et al. in this issue of JGIM¹ adds to the emerging body of evidence suggesting that these efforts may be paying off, as readmission rates are beginning to decrease nationwide. The time period examined (2009–2012) was one during which hospital readmission rates were publicly reported, but not yet subject to financial penalties by Medicare. Presumably, the institution of financial incentives will amplify this trend in coming years. Does this mean that the program has succeeded?

The answer to this question comes in two parts. First, are readmission rates really declining, and if they are, what has this decline achieved for patients and the healthcare system? Suter et al. report that risk-adjusted readmission rates declined for acute myocardial infarction, heart failure and pneumonia. Hospitals were judged not on their observed readmission rates, but on their observed/expected rates, adjusted for patient comorbidities. The authors acknowledge that these administrative measures could have been affected by changes in hospital coding patterns over this period. Although both the mortality and readmission models have been validated in the past through chart review, the models may not reflect secular changes in coding patterns. These may be driven by a desire on the part of hospitals to document comorbidities more accurately, specifically to lower their risk-adjusted rates. The models are recalibrated to account for coding drift, but recent studies have shown that more liberal use of codes such as sepsis² can improve risk standardized mortality rates by removing the sickest patients from the diagnosis group; the same phenomenon might affect readmissions as well. At the same time, the Centers for Medicare & Medicaid Services (CMS) does not count observation stays as either index admissions or readmissions. The use of outpatient observation stays has risen dramatically in recent years,³ raising the question of whether we are simply shifting patients with unplanned returns to the

hospital into an unmeasured group. The extent to which this trend has affected risk standardized readmission rates is unknown.

Assuming that readmission rates are falling, does that mean care has improved? There are two potential benefits to lowering readmission rates. First, readmission rates are a surrogate marker for low quality care, so falling readmission rates, especially if combined with declining mortality, could be an indicator that hospital care is improving. Indeed, Medicare began measuring readmission rates as a “balance measure” to guard against hospitals taking advantage of the DRG payment system by discharging patients too soon (ironically, there is no balance measure to ensure readmission rates do not go too low). The second benefit to lower readmission rates is the resultant cost savings. A 2005 MedPAC analysis cited savings to Medicare of \$12 billion annually if all potentially preventable readmissions were prevented.⁴ Can we then assume that, because readmission rates are falling, quality is improving and costs are also declining, or is it possible that just like some surrogate markers of disease, the marker may be affected without any change in the underlying condition?

The relationship between quality and readmissions is complex, but can be divided into three components: care delivered during the hospital stay, during the discharge process, and in the community after discharge. The first component—care delivered during the hospital stay—is unlikely to be responsible for the observed decline in readmissions. Over the past decade, hospitals have made marked improvement in publicly reported process measures for myocardial infarction, heart failure and pneumonia, with many of these measures bumping up against 100%. However, there is only a very weak correlation between process measures and readmission rates.⁵ In the study by Suter et al., changes in another marker of overall hospital quality—mortality—were less consistent. Mortality declined for myocardial infarction and pneumonia, but increased for heart failure. Other measures of patient safety, such as adverse medication events and hospital acquired infections, saw inconsistent reductions over this same time period.⁶

A more likely candidate for the improvement in readmissions is the discharge process. Many hospitals have embraced programs such as Project RED and Project BOOST that target the discharge process and transition of care. These efforts include patient-centered discharge instructions, medication reconciliation, discharge planning, timely follow-up with primary care

providers, and a follow-up phone call. Evidence for the effectiveness of these programs is weak, limited to a single-center randomized trial of project RED⁷ and an observational study of 11 participants and 14 controls for Project BOOST.⁸ Based on the Project BOOST results, we might expect that universal implementation would result in absolute declines in readmission rates of up to 2 %, which are in keeping with the 0.4 to 0.8 % declines observed over the 4-year period by Suter et al. These likely represent true improvements in the quality of care at discharge.

The real opportunity for preventing readmissions, however, lies in the community. Studies demonstrate that a minority of patients are readmitted for the same condition, and that more than one-third of readmissions occur more than 15 days after discharge.⁹ The very modest improvements seen during 4 years of public reporting in the run-up to substantial financial penalties attest to the difficulties that hospitals face in trying to provide care after discharge in a fragmented delivery system with poor communication between doctors, hospitals, pharmacies and patients, each with competing financial incentives. To overcome this challenge, some hospitals are extending hospital care into the community through the use of home nurse visits or post-discharge clinics. One hospital is even attempting an experiment in which hospitalists assume responsibility for providing ongoing primary care to patients with frequent hospitalizations.¹⁰ These programs, which address the continuum of care, have potential to show a greater impact on readmissions, but they also involve greater costs. It is unlikely that the readmissions penalty alone will convince hospitals that they have to become integrated health systems. Therein lies the conundrum: the penalties for readmissions apply to hospitals, but the means of preventing readmissions (and perhaps more importantly, admissions) rest in the community. Until these two entities share a common financial destiny, no amount of hospital penalties will solve the problem.

This leads to the second question: has the readmissions reduction program reduced healthcare costs? From the perspective of CMS, the program will clearly save money on the hospital side, as hospitals either reduce readmissions or pay fines to CMS. From a societal perspective however, the answer is less clear. Hospitals have had to shoulder the costs of these programs out of their already decreasing margins. Initially, some hospitals may view these payments as a more palatable alternative to CMS fines. But for stand-alone hospitals the programs may be unsustainable, unless the costs can be passed along to private patients. In that case, the net savings to the system could be zero or even negative. New payments to primary care doctors for transitional care management might also erode the savings from readmissions. Further study is warranted.

The picture may be brighter for integrated health systems that offer health plans and for some accountable care organizations, where savings from reduced readmissions may offset the costs of more intensive care management and investment in primary care access. It was the emphasis on quality of care in the VA—America's largest integrated health care

system—that demonstrated that investment throughout the continuum of care could reduce both length of stay and readmissions.¹¹ Indeed, many of the hospitals with better than expected readmission rates, including Mayo Clinic and Intermountain Health, have robust integrated health care systems, but more study is needed to know whether reliable primary care networks can prevent either admissions or readmissions.

We now have 5 years of experience measuring and comparing hospital readmission rates, and are beginning to understand the impact of CMS' public reporting initiatives. Is it time to celebrate? Improved discharge processes mean that patients leave the hospital better informed and have a greater chance of follow-up with a primary care physician, but progress has been slow, and the gains remarkably small. There is still a long way to go in mending our fragmented healthcare system. Accountable care organizations may achieve this goal, but we are too early in the process to know whether this approach will succeed. In the meantime, there is rapid consolidation occurring across the industry as individual hospitals are bought up by larger health systems. We can only hope that the leaders of these organizations will shift their attention from the surrogate marker of readmissions and focus instead on meeting their patients' needs in the community. Rather than purchasing community practices as "loss leaders" to get patients into the hospital, they should invest in a system of enhanced primary care to keep them out. That would truly improve the quality of the healthcare that we provide.

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