The Morality of Using Mortality as a Financial Incentive

Unintended Consequences and Implications for Acute Hospital Care

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THE STRATEGY OF USING FINANCIAL INCENTIVES TO improve quality and lower costs is firmly embedded in the Affordable Care Act and the hospital value-based purchasing program launched nationwide in October 2012. The Affordable Care Act not only stiffens penalties for hospitals with high readmission rates but also uses risk-standardized 30-day mortality rates (RSMRs) for patients diagnosed with pneumonia, congestive heart failure, and acute myocardial infarction as a criterion for rewarding or penalizing hospitals. As currently designed, these incentives set a new benchmark for hospital quality and functionally establish a 30-day "warranty period" during which hospitals and physicians are held accountable for patient outcome.[1] However, 2 questions are worth asking: (1) are RSMRs an appropriate measure of hospital quality; and (2) does linkage of incentives to RSMRs for the 3 highest-volume hospital conditions increase the potential for early misuse or overuse of hospice or palliative care measures for patients whose risk of death is higher than expected but by no means certain?

Although RSMRs have useful purposes, they are not a consistent or reliable indicator of hospital quality.[2] Risk adjustment models can only account for variables that are measured and in the case of administrative claims data, captured by the coding process. Furthermore, risk adjustment methods that rely on claims data can be influenced by the regional number and size of hospitals; the age, sex, and income distribution of the population; and local coding procedures. Hospital rankings based on RSMRs only account for a small percentage of the variability in hospital quality and only weakly correlate with adherence to processes of care.[3] RSMRs do provide a single measure of quality but lack the necessary granularity to account for variability in hospital performance.

The empirical evidence that incentive programs produce actual gains in value and quality for the patient is limited. For example, the Premier Quality Incentive Demonstration Project, on which the current value-based purchasing program is designed, failed to demonstrate a positive relationship between bonus payments and RSMRs.[4] A recent Congressional Budget Office report showed that except for bundled payments, none of the Centers for Medicare & Medicaid Services incentive demonstration projects saved money.[5] In the Medicare Physician Group Practice Demonstration project, there were no significant savings once the bonuses paid to the participating clinical sites were included. Moreover, in the absence of detailed clinical information, hospitals cannot use administrative claims data to improve quality or operationalize changes in processes that would lead to improved 30-day survival. As a result, there is potential for hospitals to institute review processes that are more about judgment than about improvement.

Despite these shortcomings, policy makers have chosen to place financial accountability for any mortality that occurs within 30 days of admission squarely on the shoulders of the hospital and the physician. Although RSMRs are risk adjusted, it is all-cause mortality that is being measured, meaning that all deaths subsequent to hospital discharge will be included in the metric even if the death is unrelated to the quality of care. The 30-day time period is somewhat arbitrary but was chosen because it was close enough to implicate events during hospitalization with the outcome. This measure assumes that incremental changes in adherence to guideline recommendations will have a proportional effect on short-term mortality—an assumption that may not be correct.[6] It also assumes that a significant number of hospital-related deaths are preventable, an assumption that is challenged by recent Leapfrog safety data.[7] Most importantly, this measure does not consider the current model in which palliative care can coexist with curative therapy, even though there is still the expectation of death. In this case, mortality is not a relevant outcome. There remain many questions about linking financial incentives to RSMRs.

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How will hospitals and clinicians respond to being held financially accountable for 30-day mortality? The hope is that improved performance on quality measures and uniformity of care will lead to better outcomes. However, these measures alone may be insufficient to produce the necessary improvements in survival to earn incentives or avoid penalties. Hospitals might then look to focus on their administrative coding practices—a strategy that does not improve quality. Another option would be to pursue alternative care pathways such as hospice for the most high-risk patients whose anticipated likelihood of 30-day survival is low because patients in this category are excluded from mortality data. Under current guidelines, patients who are already in hospice or elect hospice during the first day (24-hour rule) of the index admission are excluded from the mortality measure. Operationally, this means that for many seriously ill patients, the decision between hospice and traditional inpatient services will need to be decided fairly quickly. In short, hospital services for Medicare beneficiaries have the potential to be rationed on the likelihood of estimated survival at the time of initial evaluation, without the opportunity to see if the situation can be reversed or stabilized. Because hospitals will be held accountable for outcomes, physicians may be under pressure to be highly selective when recommending inpatient services for patients whose 30-day mortality risk is higher than average, although not certain.

The policies that hospitals and clinicians will implement to avoid being saddled with a mortality they are not in a position to predict or prevent should not be underestimated. This perspective is supported by several observations. In states in which public reporting is already mandatory, high-risk Medicare beneficiaries are less likely to undergo potentially beneficial coronary revascularization, suggesting that some physicians are risk averse when confronted with public reporting.[8] In addition, increased usage of palliative care coding to reduce publicly reportable hospital mortality rates has been observed in Canada and the United Kingdom. In Canada for example, observed declines in hospital-standardized mortality rates between 2004 and 2010 correlated with similar increases in crude palliative care coding rates, suggesting that administrators may be influenced by public and financial pressures to show improvement.[9] Whether the results from the Canadian experience are applicable in the United States is uncertain. Increased use of palliative and hospice care resources might be appropriate, but in the absence of specific clinical data, it becomes difficult to know whether declines in mortality are due to real gains in quality or to hospitals learning to manage the financial realities of the health care system.

As currently designed, the RSMRs incentive is focused on the mechanism of care and not whether the care was appropriate and highly valued. For example, the RSMR does not differentiate between the quality of care received by a patient with Alzheimer disease who is transitioned to hospice care after a minimal trial of diuretics or antibiotics from one who undergoes emergency cardiac catheterization and then subsequently dies. As a result many of the incentives regarding transition of patients to hospice care are compressed into the first day of hospitalization. Although early referral to hospice may be beneficial, there can be a discrepancy between the challenges of patients and families coming to terms with the transition to hospice care and the demands of the incentive system. Situations may arise in which clinicians are placed between the desires of the patients and families for more time vs the pressures of the system. One potential solution would be to extend the 24-hour rule so that patients who are transitioned to hospice shortly after admission are excluded from the mortality measure. This could alleviate the pressures to rapidly triage the sickest patients to hospice care and allow the process to be less influenced by financial incentives for either the hospital or the physician.

Financial incentives can be powerful motivators but the results might not always be beneficial. Changes in program design and more widespread implementation might help overcome prior limitations but the potential for unintended consequences also may increase as the financial imperatives of hospitals to win incentives increases. It is important to move ahead with quality initiatives even though there are gaps in current knowledge. The challenge for policy makers will be to design a balanced system that can lower costs and improve care while preserving the ethical integrity of the medical profession, and respect patients' rights to make choices about their health care.

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