New Study Finds Flaws in Policy of Medicare Reimbursements Made to Hospitals Based on Quality Measurements

Team of researchers led by UMass Amherst resource economist shows the types of illnesses included in quality indexing plays a major role in Medicare reimbursements

AMHERST, Mass. – A new study by researchers from the University of Massachusetts Amherst indicates that current methods used to measure hospital quality are fraught with problems that have large consequences for how hospitals are reimbursed by Medicare.

Because the U.S. Senate recently passed reforms to how Medicare payments are made, the way that regulators determine healthcare quality has come under increasing debate. One current measure of inefficiency in U.S. healthcare is the frequency of hospitals’ potentially preventable readmissions (PPRs).

In a study published in the March edition of The American Journal of Accountable Care, lead author Sylvia Brandt, associate professor of resource economics at UMass Amherst, and co-authors Ning Ding and Brenton Dickinson detail how they analyzed hospitalization in Massachusetts over an eight-year period and show that the rate of repeat hospitalization was determined by what health conditions were included in the index rather than underlying quality of the hospital or provider. They found that there was a 20-fold difference between the health condition with the lowest and the health condition with the highest repeat hospitalizations. Therefore, which conditions are included in any measurement of quality—and the frequency of individuals that are admitted to any individual hospital—will thus determine a hospital’s reimbursement from Medicare.

Massachusetts has been among the states with the highest penalties for repeat hospitalizations as currently calculated by Medicare. The researchers believe that the study’s findings are important because Medicare uses a hospital’s rate of repeat hospitalizations to determine payments. Their results suggest that tying reimbursements to the rate of repeat hospitalizations as currently measured does not optimize efficiency, and that changes in the quality scoring mechanisms could save Massachusetts hospitals significant sums every year.

“Between 2003 and 2004, 34 percent of Medicare patients discharged from a hospital were readmitted within 90 days,” the authors explain in the paper, citing previous research. “PPRs’ estimated $12 billion cost to Medicare led the Centers for Medicare & Medicaid Services (CMS) to enact provisions in the Affordable Care Act tying a hospital’s payments to its PPR rate. The rate may be measured by different indexes, which include or exclude admissions for a variety of medical conditions; CMS presently measures PPRs with a three-condition composite that counts readmissions for acute myocardial infarction, congestive heart failure and pneumonia. In October 2012, Medicare penalized more than 2,000 hospitals (about 71 percent of those reviewed) for
excessive readmissions, with fines totaling more than $280 million.”

The study also addresses the previously observed differences in repeat hospitalizations by race and ethnicity of patients. Brandt and her colleagues found that contrary to conventional wisdom, there was no consistent difference by race or ethnicity across health conditions or in aggregate measures. They found that there is, however, a clear pattern that individuals from lower-income neighborhoods have a higher probability of repeat admission than similar individuals from higher income neighborhoods, so hospitals serving those populations are therefore penalized by the current Medicare reimbursement system.

“An effective policy for improving healthcare efficiency or reducing disparities across socio-demographic groups must include a commonly accepted measure of PPRs,” Brandt and her co-authors conclude in their report. “Medicare’s current index measures admissions for only three conditions, and may be slightly expanded in the future, but that choice of measurement lacks a sound basis in the literature.”

The full study, “Methodological Effects on the Measurement of Repeat Hospitalizations,” can be found online here.

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