Excess days in acute care may improve performance measurement for hospitals

ACP Hospitalist Weekly Staff

Measuring hospital performance by excess days in acute care (EDAC) rather than 30-day readmission rates may provide a more comprehensive assessment, according to a new study.

CMS currently uses 30-day readmission rates to evaluate hospital quality in the Hospital Readmissions Reduction Program (HRRP). The EDAC measure, in contrast, captures all hospital encounters, including inpatient, ED, and observation stays, within 30 days of discharge. Researchers studied hospitals that participated in the HRRP in fiscal year 2019 to determine whether using the EDAC measure instead of 30-day readmissions would change hospitals' penalty status for three targeted conditions: heart failure, acute myocardial infarction (MI), and pneumonia. The study results were published Oct. 13 by *Annals of Internal Medicine*.

Overall, 3,173 hospitals that participated in HRRP in fiscal year 2019 were included in the study, reflecting discharges among Medicare fee-for-service beneficiaries ages 65 years and older from 2014 to 2017. Among all hospitals, the median readmission rate was 21.6% (range, 15.9% to 29.8%) for heart failure, 16.0% (range, 12.0% to 20.7%) for acute MI, and 16.7% (range, 12.5% to 23.3%) for pneumonia, while the median EDAC per 100 discharges for these conditions was 5.1 days (range, −60.1 to 143.4 days), 4.8 days (range, −59.0 to 174.3 days), and 6.3 days (range, −57.8 to 148.9 days), respectively.

Five hundred sixty-four hospitals were ranked in the top performance group for heart failure when the readmission measure was used, and of these, 280 (49.6%) were reclassified to a lower performance group when the EDAC measure was used. Similarly, 239 of the 571 hospitals in the worst performance group (41.9%) were reclassified to a higher performance group when the EDAC measure was used. Similar reclassification patterns were also seen for acute MI and for pneumonia. It was determined that the HRRP penalty status of 769 of 2,845 hospitals (27.0%) for heart failure, 581 of 2,055 hospitals (28.3%) for acute MI, and 724 of 2,911 hospitals (24.9%) for pneumonia would change if the EDAC measure were used to evaluate performance instead of the 30-day readmission measure. The distribution of penalties by hospital characteristics would also change, with fewer small hospitals and fewer rural hospitals being penalized.

The authors noted that the study looked only at conditions initially targeted by the HRRP, that only the EDAC point estimate, not its associated margin of error, was used to determine reclassification of penalty status, and that the EDAC measure does not address limitations such as inadequate adjustment for social risk. They concluded that “CMS should consider using the EDAC measure, which provides a more comprehensive picture of hospital use within 30 days of discharge than the readmission measure, to evaluate health care system performance under federal quality, reporting, and value-based programs.”

An accompanying editorial said that while the current study is "a step in the right direction," it had limited ability to adjust for frailty, medical complexity, and social determinants of health and did not account for which rehospitalizations represent lapses in care. "Although the EDAC measure captures the use of acute care hospital resources, both it and the readmissions metric are poorly designed to measure quality of care and patient safety. The continued use of readmission measures as a reflection of quality of care in national rankings and pay-for-performance programs is empirically suspect and an ongoing source of frustration and confusion among health care leaders and researchers," the editorialist wrote. "We can do better."