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Media Advisory: To contact Harlan M. Krumholz, M.D., S.M., call Karen Peart at 203-432-1326 or email karen.peart@yale.edu.

**Rates of Death, Hospitalizations and Expenditures Decrease for Medicare Patients**

Among Medicare fee-for-service beneficiaries age 65 years or older, all-cause mortality and hospitalization rates, along with expenditures per beneficiary, decreased from 1999 to 2013, according to a study in the July 28 issue of *JAMA*, a theme issue on Medicare and Medicaid at 50. There has also been a decrease in recent years in total hospitalizations and inpatient expenditures for the last 6 months of life.

In recent decades, the United States has experienced a period of dynamic change in health care technology, health care delivery, and health behaviors. Given these changes, which could provide benefit or cause unintended harm, there is a need to assess the results that are being achieved. The Medicare fee-for-service program is ideally positioned to provide information on trends in mortality, hospitalizations, and hospitalization outcomes during this period in health care. A comprehensive analysis of national hospital trends in the Medicare fee-for-service population can provide an assessment of past performance and targets for future interventions, according to background information in the article.

Harlan M. Krumholz, M.D., S.M., of the Yale University School of Medicine, New Haven, Conn., and colleagues examined national trends between 1999 and 2013 in all-cause mortality for all Medicare beneficiaries and trends in all-cause hospitalization and hospitalization­associated outcomes and expenditures for fee-for-service beneficiaries. The analyses included adults 65 years of age or older. Geographic variation, stratified by key demographic groups, and changes in the intensity of care for fee-for-service beneficiaries in the last 1, 3, and 6 months of life were also assessed.

The sample consisted of 68,374,904 Medicare beneficiaries (fee-for-service and Medicare Advantage). The annual all-cause mortality rate across the Medicare population declined from 5.3 percent in 1999 to 4.5 percent in 2013. Among hospitalized fee-for-service beneficiaries, in-hospital mortality declined, as did 30-day and 1-year mortality.

Among fee-for-service beneficiaries (n = 60,056,069), the total number of hospitalizations decreased between 1999 and 2013, as did the number of hospitalizations that involved major surgical procedures. The median hospital length of stay for beneficiaries who had at least 1 hospitalization declined from 5 to 4 days. Average inflation-adjusted inpatient expenditures per Medicare fee-for-service beneficiary declined from $3,290 to $2,801.

Among fee-for-service beneficiaries in the last 6 months of life, the number of hospitalizations decreased from 131 to 103 per 100 deaths. The percentage of beneficiaries with 1 or more hospitalizations decreased from 70.5 to 57 per 100 deaths, while the inflation-adjusted inpatient expenditure per death increased from $15,312 in 1999 to $17,423 in 2009 and then decreased to $13,388 in 2013. Findings were consistent across geographic and demographic groups.

The researchers also found that patients were increasingly discharged to rehabilitation and nursing facilities or with home health care, whereas the proportion of patients discharged to home without care decreased steadily.

“Even though it is difficult to disentangle the specific reasons for improvement, it is clear that over the past 15 years there have been marked reductions in mortality, hospitalization, and adverse hospital outcomes among the Medicare population aged 65 years or older,” the authors write.

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