Older patients with limited life expectancy still receiving cancer screenings

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A substantial number of older patients with limited life expectancy continue to receive routine screenings for prostate, breast, cervical and colorectal cancer although the procedures are unlikely to benefit them.

An aim of Healthy People 2020 is to increase the proportion of individuals who receive cancer screening consistent with the U.S. Preventive Services Task Force's (USPSTF) evidence-based guidelines. And there is general agreement that routine cancer screening is unlikely to benefit patients with limited life expectancy.

The authors examined rates of prostate, breast, cervical and colorectal cancer screening in patients 65 or older using data from the National Health Interview Survey from 2000 through 2010. The study included 27,404 participants who were grouped by risk (low to very high) of nine-year mortality. Low mortality risk was defined as less than 25 percent and very high mortality risk was 75 percent or more.

In patients with very high mortality risk, 31 percent to 55 percent received recent cancer screening, with prostate cancer screening being the most common (55 percent). For women who had a hysterectomy for benign reasons, 34 percent to 56 percent had a Papanicolaou test within the past three years. The overall screening rates for the study group were prostate cancer, 64 percent (ranging from 70 percent in individuals with low mortality risk to 55 percent in those with very high mortality risk); breast cancer, 63 percent (ranging from 74 percent among people with low mortality risk to 38 percent in patients with very high mortality

risk); cervical cancer, 57 percent (ranging from 70 percent among low mortality risk patients to 31 percent in patients with very high mortality risk); and colorectal cancer, 47 percent (ranging from 51 percent for low-mortality risk patients to 41 percent for patient with very high mortality risk). There was less screening for prostate and cervical cancers in more recent years compared with 2000. Older age was associated with less screening for all cancers. Patients who were married, had more education, had insurance, or had a usual place for care were more likely to be screened.

"These results raise concerns about overscreening in these individuals, which not only increases health care expenditure but can lead to patient net harm. Creating simple and reliable ways to assess life expectancy in the clinic may allow reduction of unnecessary cancer screening, which can benefit the patient and substantially reduce health care costs. There is considerable need for further dissemination efforts to educate physicians and patients regarding the existing screening guidelines and potential net harm from screening in individuals with limited life expectancy." Trevor J. Royce, M.D., M.S., University of North Carolina at Chapel Hill, and colleagues wrote in thier *JAMA Internal Medicine* article.

In 'Modeling Study Analyzes Colonoscopy Screening of Medicare Patients,' author Frank van Hees, M.Sc., of Erasmus University Medical Center, the Netherlands, and colleagues concluded in a simulated modeling study that screening Medicare beneficiaries with colonoscopies more regularly than recommended resulted in only small increases in prevented colorectal cancer (CRC) deaths and life-years gained but large increases in colonoscopies performed and colonoscopy-related complications.

All guidelines for CRC screening recommend a screening interval of 10 years for colonoscopy screening in average-risk patients. The U.S.

Preventive Services Task Force and the American College of Physicians recommend against routine screening in adults older than 75 years with an adequate screening history.

The authors used a microsimulation model to estimate whether more intensive screening than recommended was beneficial to Medicare beneficiaries, as well as whether any benefit justified the additional resources required.

Screening Medicare beneficiaries with a negative screening colonoscopy result at 55 years according to current guidelines (i.e. screening again at 65 and 75) resulted in 14.1 CRC cases prevented, 7.7 CRC deaths prevented and 63.1 life-years (LYs) gained per 1,000 beneficiaries compared with no screening. Compared with screening every 10 years, screening every five years resulted in 1.7 additional CRC cases prevented, 0.6 additional CRC deaths prevented, 5.8 additional LYs gained and prevented 10.9 additional LYs with CRC care per 1,000 beneficiaries. To achieve this small benefit, 783 more colonoscopies had to be performed.

"Screening Medicare beneficiaries more intensively than recommended is not only inefficient from a societal perspective; often it is also unfavorable for those being screened. This study provides strong evidence and a clear rationale for clinicians and policy makers to actively discourage this practice."

In a related commentary, Cary P. Gross, M.D., of the Yale University School of Medicine, writes: "Cancer screening in the 21st century, however, is losing its luster. Increasing evidence suggests that many modalities of cancer screening may be far less beneficial than first thought."

"It is particularly important to question screening strategies for older

persons. Patients with a shorter life expectancy have less time to develop clinically significant cancers after a screening test and are more likely to die from noncancer health problems after a cancer diagnosis. In addition, older persons face a higher risk of complications from procedures such as screening colonoscopy. In this context, two articles in this issue of *JAMA Internal Medicine* are informative," Gross continues.

"It truly will be a new era when providers will be evaluated, in part, by their ability to refrain from ordering cancer screening tests for some of their patients. We are moving toward a time when prevention efforts will be more evidence based, more effective and patient centered. What could be more wonderful than that?" Gross concludes.

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