A recent study found rates of prostate-specific antigen (PSA) screening in older men have not changed, despite the updated guidelines from national organizations recommending against screening in men with a limited life expectancy (Cancer. 2014;120:1491–1498).

The balance of benefits and harms of screening for prostate cancer are controversial. In 2008, the US Preventive Services Task Force issued a guideline that recommended against PSA-based screening for men aged 75 years and older because the likelihood of benefit from screening men with approximately 10 years of remaining life expectancy (RLE) was low. This was updated in 2012 to recommend against PSA-based screening in all men, stating that the benefits do not outweigh the risks for anyone.

Recommendations from the American Cancer Society (ACS), National Comprehensive Cancer Network, and the American Urological Association all discourage PSA-based screening in men with fewer than 10 years of RLE. These guidelines also emphasize engaging in shared decision-making and educating the patient about the risks and benefits of PSA screening at any age.

The primary objective of the current study was to investigate the association between RLE and rates of PSA screening in men aged 65 years and older between the years of 2005 and 2010.

“Our study shows too many older men in the United States with limited life expectancies undergo routine PSA screening,” says the study’s corresponding author Scott Eggener, MD, associate professor of urologic oncology surgery and codirector of the prostate cancer program at the University of Chicago in Illinois. “These men are unlikely to benefit from screening and may even be harmed if treatments lead to declines in quality of life.”

Other objectives included investigating how the rates of PSA screening differed among men with varying rates of 9-year predicted mortality between 2005 and 2010, as it was between these years that updated guidelines emphasized the importance of RLE on the decision to screen. Investigators also wanted to determine the percentage of men aged 75 years and older who recalled having their physician recommend and/or discuss the risks and benefits of screening.

The data were gleaned from the 2005 and 2010 National Health Interview Surveys. The National Health Interview Survey is done on a continuous basis each year among approximately 87,500 randomly selected people. The chances that an individual was interviewed in both years were very small. The men were divided into 2 age groups (those aged 65–74 years and those aged 75 years and older) and then into subgroups based on the 9-year mortality estimate using a validated index. Those men with a personal history of prostate cancer were excluded.

Study Findings
The final cohort included 1613 men interviewed in 2005 and 1475 interviewed in 2010. There were no significant differences in the estimated 9-year mortality rate noted...
between the years for any age group. The PSA screening rates did not differ between 2005 and 2010 when analyzed by age and predicted 9-year mortality in either age group.

The most frequently screened men were the healthiest men: those aged 65 years to 74 years who had less than a 27% chance of dying within the next 9 years. Approximately 58% of this group was screened in 2005 and 56% was screened in 2010. Of the men aged 75 years and older who had a 76% or higher likelihood of 9-year mortality, 36% underwent PSA screening in 2005 and 34% were screened in 2010.

Among men aged 75 years and older who were screened, greater than 94% recalled their physician recommended it, regardless of the 9-year mortality estimate. Alternately, significantly fewer remembered (approximately 55% in all mortality categories) being told about the advantages of PSA screening and even fewer (approximately 25%) recalled discussing any disadvantages to PSA screening.

Of those unscreened individuals aged 75 years and older, slightly more than one-half recalled that their physician recommended screening, regardless of their mortality risk group, and very few recalled discussing the risks and benefits of screening.

“For a number of years, guidelines from major medical organizations have recommended that clinicians educate men on both the benefits and harms associated with screening and treatment of early prostate cancer,” says Durado Brooks, MD, MPH, director of prostate and colorectal cancer at the ACS in Atlanta, Georgia. “In spite of these guidelines, this and a number of other studies indicate that clinician recommendations focus on the potential advantages of screening while infrequently discussing potential disadvantages.”

“It is important for patients to understand the potential ‘life-saving’ elements, as well as the possibility of ‘life-altering’ elements inherent with PSA screening,” notes Dr. Eggener. “While PSA screening for prostate cancer can be life-saving, it should only be offered to well-informed men with a life expectancy greater than 8 to 10 years.”

Putting It All Together
The current study found that even though the US Preventive Services Task Force recommended in 2008 to limit screening in older men with fewer than 10 years of RLE and stop screening altogether for those aged 74 years and older, screening rates did not significantly differ between 2005 and 2010.

The data also indicated that many younger, healthier men were not screened for prostate cancer, even though this group did have the highest screening rate. The authors state the data are in line with other studies that have shown no changes in screening rates among men with a limited life expectancy and suggest that physician behavior was not influenced by the guidelines. The authors cite survey data that indicate physicians’ concerns over malpractice, meeting patients’ expectations, and handling time constraints, as well as difficulty in assessing RLE and trouble talking to patients about life expectancy present barriers to changing their screening patterns.

“We need to determine better ways to disseminate new knowledge on screening and treatment recommendations to clinicians,” says Dr. Brooks. “Prostate cancer screening for many patients and clinicians has become habituated. They need to be made aware of changes in guidelines and the importance of individualizing the screening decision.” He also notes that there are validated decision aids available from the ACS and other organizations, but says they are rarely used.

The authors note that the main strengths of the current study include its use of a population-based overview of contemporary US-based data, a wide demographic variety of men surveyed, and the validated tool for estimating life expectancy. The weaknesses include recall bias and the lack of availability of comprehensive patient health information.

In addition to increasing education regarding the appropriate use of available screening tests, work concerning improving screening needs to be done. “There are novel tests and methods being evaluated for prostate cancer screening, such as the prostate health index (PHI), 4-kallikrein panel, and better patient selection based on genetic susceptibility,” says Dr. Eggener. Future research will need to define whether these approaches will improve screening for prostate cancer and ultimately affect screening recommendations, he adds.

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