AAFP

USPSTF Final Recommendation

Personalize Decisions on PSA Screening for Men Ages 55-69

May 11, 2018 03:45 pm Chris Crawford (mailto:aafpnews@aafp.org) – On May 8, The U.S. Preventive Services Task Force (USPSTF) posted a final recommendation statement (https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/prostate-cancer-screening1) and three final evidence reviews on screening for prostate cancer.

In addition to a traditional systematic evidence review, (https://www.uspreventiveservicestaskforce.org/Page/Document/final-evidence-review/prostate-cancer-screening1) the task force also issued a contextual review on overdiagnosis in prostate cancer screening decision models

(https://www.uspreventiveservicestaskforce.org/Page/Document/contextual-review-overdiagnosis-in-prostate-cancer-screening/prostate-cancer-screening1) and a contextual overview of prostate cancer screening decision models. (https://www.uspreventiveservicestaskforce.org/Page/Document/contextual-review-overview-of-prostate-cancer-screening/prostate-cancer-screening1)

This final recommendation statement offers physicians and their patients important new information about the benefits and harms of prostate-specific antigen (PSA)-based screening.

Based on its review of the evidence, the USPSTF said for men ages 55-69, the decision to undergo periodic PSA-based screening for prostate cancer should be individualized -- a "C" recommendation. (https://www.uspreventiveservicestaskforce.org/Page/Name/grade-definitions#crec2)

"In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of family history, race/ethnicity, comorbid medical conditions, patient values about the benefits and harms of screening and treatment-specific outcomes, and other health needs. Clinicians should not screen men who do not express a preference for screening," the final recommendation statement said.

STORY HIGHLIGHTS

- On May 8, the U.S. Preventive Services Task Force (USPSTF) posted its new final recommendation statement and three final evidence reviews on screening for prostate cancer.
- Based on its review of the evidence, the USPSTF said for men ages 55-69, the decision to undergo periodic PSA-based screening for prostate cancer should be individualized -- a "C" recommendation.
- For men ages 70 and older, the potential benefits of PSA-based screening don't outweigh the harms, so this group should not be screened for prostate cancer -- a "D" recommendation.

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This final recommendation applies to adult men who haven't previously been diagnosed with prostate cancer and who have no symptoms of the disease. Importantly, the guidance applies to both men at average risk and those at increased risk for prostate cancer, such as African-American men and men with a family history of prostate cancer, as there is inadequate evidence to determine if the benefits differ between these populations.

"Prostate cancer is one of the most common cancers to affect men and the decision whether to be screened is complex," said family physician and USPSTF Vice Chair Alex Krist, M.D., M.P.H., in a news release. (https://www.uspreventiveservicestaskforce.org/Home/GetFile/6/250/prostate-cancer-final-rec-statement-bulletin/PDF) "Men should discuss the benefits and harms of screening with their doctor, so they can make the best choice for themselves based on their values and individual circumstances."

In 2012, the USPSTF and the AAFP (https://www.aafp.org/patient-care/clinical-recommendations/all/prostate-cancer.html) recommended against PSA-based screening for prostate cancer for all men, a recommendation that was added to the Choosing Wisely list (https://www.aafp.org/patient-care/clinical-recommendations/all/cw-prostate-cancer.html) of tests and procedures that may be overused. However, since then, there has been longer-term follow-up to the research and a shift in treatment strategies.

Final Recommendation Details

The USPSTF found that adequate evidence from randomized clinical trials showed that PSA-based screening programs in men ages 55-69 may prevent as many as one to two deaths from prostate cancer per 1,000 men screened over a 13-year period. Screening programs may also prevent as many as three cases of metastatic prostate cancer per 1,000 men screened for 13 years. The trials did not show a reduction in all-cause mortality.

Adequate evidence from randomized clinical trials also showed no prostate cancer mortality benefit of PSA-based screening for men age 70 and older.

Potential harms from screening and treatment can occur immediately. Harms from PSA-based screening include frequent false-positive results. One major trial involving men screened every two to four years concluded that during a 10-year period, more than 15 percent of men experienced at least one false-positive test result.

Harms of related diagnostic procedures include complications of prostate biopsy, such as pain, hematospermia and infection. About 1 percent of prostate biopsies result in complications requiring hospitalization.

PSA-based screening for prostate cancer leads to diagnosis of prostate cancer in some men whose cancer would never have become symptomatic during their lifetime; thus, treatment provides them no benefit. Follow-up to previous large, randomized trials has suggested that 20 percent to 50 percent of men diagnosed with prostate cancer through screening may be overdiagnosed, with the highest rates in men age 70 and older.

As for potential harms of prostate cancer treatment, they include sexual impotence, urinary incontinence and bothersome bowel symptoms. About one in five men who have a radical prostatectomy develop long-term urinary incontinence, and more than two in three men experience long-term sexual impotence.

Similarly, more than half of men who have radiation therapy experience long-term sexual impotence and erectile dysfunction, and as many as one in six men experience long-term problematic bowel symptoms, including urgency and fecal incontinence.

The final recommendation statement is also based in part on new evidence on the use of active surveillance, which includes regular, repeated PSA testing and often repeated digital rectal examination and prostate biopsy. Active surveillance has become a more common treatment choice for men with lower-risk prostate cancer and may reduce the chance of overtreatment. It may also offer men the opportunity to delay -- or even completely avoid -- active treatment and its potential complications.

In a study that assessed community-based urology practice in the United States between 2010 and 2013, about half of men with low-risk prostate cancer were treated with radical prostatectomy. In comparison, the rate of active surveillance use in this population increased from 14.3 percent in 2009 to 40.4 percent in 2013.

It's important to note, as well, that the new final recommendation was informed by comments received during the public comment window and it is consistent with the USPSTF's 2017 draft recommendation statement, although the language has been updated since then.

Updates Since Draft Recommendation Statement

Jennifer Frost, M.D., medical director for the AAFP's Health of the Public and Science Division, told *AAFP News* the USPSTF's general recommendation remains the same in its final recommendation statement -- the decision whether to screen for prostate cancer should be individualized, based on the potential benefits and harms along with patient preference.

"I think the slight language change shifts the focus to understanding the benefits and harms and that men will weigh them differently, rather than simply ensuring all men have a shared decision-making visit," she said. "Since release of the draft recommendation, there have been efforts to make a shared decision-making visit for prostate cancer a performance measure. Not to say that shared decision-making isn't vital, but the intent of the guidance is not to make sure clinicians check a box saying this was done."

Also since the USPSTF released its draft recommendation last year, an additional study was published -- the CAP randomized clinical trial. (https://www.ncbi.nlm.nih.gov/pubmed/29509864) The task force added evidence from this trial to its final recommendation.

"This trial included more than 400,000 men, and did not show any difference in prostate cancer mortality with one-time screening," Frost said. "There were several limitations to this study, so ultimately it did not affect the USPSTF's recommendation."

The CAP trial's limitations included that it examined only one-time, PSA-based screening and that there was only a small difference between the percentage of men in the control and intervention groups (about 10-15 percent versus 34 percent, respectively) who received PSA-based screening.

Response to Public Comment

A draft version of this recommendation statement was posted for public comment on the USPSTF website from April 11 to May 8, 2017; the AAFP provided several comments during this period.

Many commenters suggested that because men are now living longer, they should be screened beyond age 70.

"However, the USPSTF considered other evidence in addition to data on life expectancy when recommending against screening in men older than 70 years, including results from large screening trials that did not report a mortality benefit for men older than 70 years and evidence on the increased likelihood of harm from screening, diagnostic evaluation, treatment, overdiagnosis and overtreatment," the final recommendation said.

Some commenters asked for a recommendation for younger men and for baseline PSA-based screening in men age 40 and older or age 50 and older. But the task force found inadequate evidence that screening younger men or performing baseline PSA-based screening provided benefit.

Several commenters wanted more clarification on what new evidence led to the change from a "D" to a "C" grade.

"The new evidence included longer-term follow-up of the European Randomized Study of Screening for Prostate Cancer (ERSPC) trial (http://www.erspc.org/) and new data on reductions in risk of metastatic disease with screening," the USPSTF said.

And although the ERSPC trial reported only a small added benefit from a 13-year follow-up compared to 10-year follow-up (increased number of lives saved from 1.07 to 1.28), the results bolstered the task force's confidence that the benefit of screening could be greater during a 20- to 30-year period.

The USPSTF said the potential harms of screening and treatment, including psychological harms and harms from active surveillance, are important to consider and therefore information about this supporting evidence was added to the Rationale, Clinical Considerations and Discussion sections of its final recommendation statement.

AAFP Recommendations

Frost recommended family physicians reference the USPSTF's infographic on prostate cancer screening (https://screeningforprostatecancer.org/wp-content/uploads/2018/05/USPSTF_ProstateCancer_Infographic_FINAL-5-4.pdf) and use it as a valuable resource in treating patients.

As for next steps for the AAFP, its Commission on Health of the Public and Science plans to review the task force's final recommendation statement and evidence reviews, and determine the Academy's stance on the recommendation.

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a survival improvement for 1.07/1000 to 1.28/1000jQuery18308529507708452342_1526383336587 wow, I am totally underwhelmed. when discussing this with my patients I don't think they will be impressed.

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https://www.aafp.org/news/health-of-the-public/20180511psascreen.html

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