PROSTATE CANCER

New PSA screening guideline faces widespread opposition

Debate is once again raging around the issue of PSA screening, following the final recommendation statement of the US Preventive Services Task Force (USPSTF), published online on 22nd May in *Annals of Internal Medicine*. That the USPSTF recommends against PSA-based screening for prostate cancer should come as no surprise given the draft recommendation issued in October 2011, but this has done nothing to temper widespread reaction to the news. Urologists, men with prostate cancer and patient advocacy groups have all spoken out against the decision.

The USPSTF analysed data from the randomized Prostate, Lung, Colorectal and Ovarian (PLCO) screening trial and the European Randomized Study of Screening for Prostate Cancer (ERSPC) trial, and weighed reported mortality benefits against the harms associated with prostate cancer detection and treatment. Based on these trials the USPSTF panel state there is convincing evidence that after 10–14 years the number of prostate cancer deaths prevented by PSA screening is, at best, very small, with only 0–1 prostate cancer deaths avoided per 1,000 men screened. Moreover, the task force found that the harms associated with the diagnosis and treatment of prostate cancer are common and often persistent. The panel concluded with moderate certainty that the benefits of PSA-based screening for prostate cancer do not outweigh the harms, which corresponds to a grade D recommendation.

News of the panel's decision quickly elicited numerous responses from the urologic community. Angry clinicians took to Twitter, suggesting that the USPSTF's decision was biased, poorly justified and hugely understates the benefits of screening. The American Urological Association (AUA), the Prostate Cancer Foundation, the Men's Health Network, the Veterans Health Council and the Large Urology Group Practice Association (an organization

representing more than 1,800 practicing urologists in the USA) all issued official statements strongly opposing the USPSTF recommendation. Memorial Sloan–Kettering Cancer Center announced that they will remain committed to their own prostate cancer screening guidelines, developed 3 years ago, which advocate a more-selective screening approach based on risk assessment for each individual.

At the AUA annual meeting in Atlanta, Georgia, a town hall meeting on PSA screening was scheduled to coincide with the task force's announcement. Tim Wilt from the USPSTF took to the stage first to explain how the panel reached their decision. He was followed by Ruth Etzioni from the Cancer Intervention and Surveillance Modeling Network, who emphasized the short-term nature of the trial data and presented statistical analysis to suggest that in the longer term approximately six lives might be saved per 1,000 men screened.

This view was also put forward by an ad hoc group of prostate cancer experts—including William Catalona, who originally developed the PSA test—in a commentary published alongside the task force recommendation in *Annals of Internal Medicine*. The authors outline what they believe to be a number of flaws in the panel's analysis. As well as highlighting the short follow-up of

both screening trials, they also mention the contamination issue associated with PLCO and the possibility that complications related to diagnostic procedures also occur in unscreened populations. They believe the USPSTF gave inadequate consideration to the morbidity of advanced disease, high-risk patient groups and age.

However, not every response has been negative. In a second accompanying commentary, Otis Brawley (Executive Vice President of the American Cancer Society) shows general support for the USPSTF's decision and praises their objective unbiased assessment. He states his concern that the harms of screening and overdiagnosis are often ignored in a society that increasingly believes that cancer must be detected early and treated aggressively. Moreover, he stresses the difference between mass screening and screening decisions made between patient and physician—an important distinction that is also included in the USPSTF statement.

Ultimately, anger at the decision must be redirected into research efforts focused on refining the screening procedure to maximize benefits and minimize harms. For example, lengthening the interval between PSA tests (to 2 or 4 years) or increasing the PSA threshold that defines the need for biopsy or intervention have been suggested. In particular, active surveillance holds much promise for the reduction of harms, and results of the PIVOT and ProtecT randomized trials are eagerly anticipated.

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Original articles Moyer, V. A. Screening for Prostate Cancer: U.S. Preventive Services Task Force Recommendation Statement. *Ann. Intern. Med.* doi:10.1059/0003-4819-157-2-201207170-00459 | Catalona, W. J. et al. What the U.S. Preventive Services Task Force Missed in Its Prostate Cancer Screening Recommendation. *Ann. Intern. Med.* doi:10.1059/0003-4819-157-2-201207170-00463 | Brawley, O. W. Prostate cancer screening: what we know, don't know, and believe. *Ann. Intern. Med.* doi:10.1059/0003-4819-157-2-201207170-00460