



First, do no harm

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Every man prefers belief to the exercise of judgment.
Seneca

Early this summer a healthy 62-year-old man with a history of colorectal cancer came to see me for his periodic health examination. In an effort to embrace patient-centred, evidence-informed decision making, much of these visits with healthy men 50 and older in my practice seems to be taken up with discussing the risks and benefits of screening for prostate cancer with a prostate-specific antigen (PSA) blood test. In this case, however, my patient was confident that PSA testing was the right thing to do. I know his certainty about the benefits of screening was influenced by his previous experience with being screened for colorectal cancer. Early detection had resulted in a cure.

In this issue of *Canadian Family Physician*, a study by Scott Smith and Richard Birtwhistle (page e502) examines perceptions of the risks and benefits of PSA screening among a group of men in 2 family practice clinics in Kingston, Ont.¹ While the study is small and limited in several ways, the results are important: 95% of the men believed that the PSA test as a screening tool was not risky; 68% believed that the PSA test was good or very good at preventing death from prostate cancer; and 79% believed that the routine use of PSA testing was important or very important to their health. Should men have such confidence in the benefits of PSA testing?

Before the 2009 publication of the first results of the Prostate, Lung, Colorectal and Ovarian (PLCO) cancer screening trial² (which concluded there was no benefit to screening) and the European Randomized Study of Screening for Prostate Cancer (ERSPC) trial³ (which concluded there was possible small benefit to screening), it was impossible to have an evidence-informed discussion about the risks and benefits of PSA screening in average-risk men aged 50 to 75. As Brett and Ablin have written:

[T]he idea that physicians could initiate truly informed discussion was wishful thinking, because clinicians and patients had to consider an enormous list of probability estimates and uncertainties: What PSA cutoff is best? What level should trigger repeat PSA testing or biopsy? How often should we repeat either one? What is the patient's pretest probability of cancer? What is the chance that a PSA test plus a biopsy will find cancer, if it's present? If cancer is found, will it be clinically important? Will this patient prefer surgery, radiation therapy, or watchful waiting? What are the probabilities of serious

side effects from each treatment, and how will this patient weigh them? Most important, will screening reduce this patient's risk of death from prostate cancer?⁴

Where do things stand today? In October 2011, the US Preventive Services Task Force (USPSTF) published a draft recommendation statement and invited comment from various stakeholders. In May 2012, the Task Force published their final statement and concluded, "After about 10 years, PSA-based screening results in the detection of more cases of prostate cancer, but small to no reduction in prostate cancer-specific mortality."⁵

The USPSTF gave PSA screening a D recommendation, arguing that there is moderate to high certainty that the test has no net benefit or that the harms outweigh the benefits. There has been criticism of the USPSTF recommendation and some have argued that given the relative methodologic strengths of the ERSPC trial over the PLCO trial, the USPSTF should have given PSA screening a C recommendation, thereby encouraging greater discussion with patients and patient-centred, individualized decision making.⁶

Although there is no doubt that the PSA controversy will continue, the USPSTF recommendation is a step forward:

For two decades, primary care physicians have been expected to present a flawed screening test to patients, cloaking the flaws in an elaborate ritual of informed decision making. In turn, men have been expected to make sense of a confusing mix of hypothetical outcomes. Although the USPSTF recommendation is unlikely to end the PSA controversy, a document finally exists that should provide guidance to clinicians and policymakers.⁴

According to the findings of Drs Scott and Birtwhistle,¹ one of the more pressing tasks for family physicians is to more adequately educate the men in our practices about the considerable limitations and the potential harms of PSA screening.

Competing interests

None declared

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