



DMS's Ann Gormley, M.D., chairs the Urinary Incontinence Treatment Network, a nine-site research group funded by the National Institute of Diabetes and Digestive and Kidney Disease.

A million overdiagnosed—and counting

Since the late 1980s, for every one man helped by the PSA (prostate-specific antigen) test, about 20 men have been unnecessarily diagnosed and treated for prostate cancer. And that's an optimistic estimate. The real ratio is probably closer to 50 to 1. These are some of the conclusions of a recent study conducted by DMS's H. Gilbert Welch, M.D., and Peter Albertson, M.D., a urologist at the University of Connecticut.

Rates: Welch and Albertson analyzed national data on age-specific prostate cancer incidence and death rates between 1986 and 2005. They estimated that about one million additional men have been diagnosed with and treated for prostate cancer since the late 1980s as a result of the PSA test. Then they looked at how many of those men likely benefited from being diagnosed, and how many exposed themselves to potentially dangerous treatments, in the form of radiation and surgery, with no benefit to their life span or quality of life.

"Approximately 56,500 prostate cancer deaths have been averted" since 1986, Welch and Albertson calculated. Under the "most optimistic assumption about the benefit of screening—that the entire decline . . . is attributable to this additional

diagnosis—we estimated that, for each man who experienced the presumed benefit, more than 20 had to be diagnosed," they wrote in the *Journal of the National Cancer Institute*. And they say a more likely estimate—assuming that some of the improvement in prostate cancer mortality is a result of better therapies—is that at least 50 men had to be diagnosed for each prostate cancer death avoided.

"Many men who thought their lives were saved by being screened, diagnosed, and treated for localized prostate cancer are perplexed to learn that so few benefit," wrote Otis Brawley, M.D., chief medical officer of the

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American Cancer Society, in an editorial that accompanied the paper. The fact that the PSA test leads to overdiagnosis "is not a new finding," he continued. "What is new is the fact that many health professionals are finally accepting it as true."

Of course there's no way to know, on an individual level, which men benefited from PSA screening and which didn't. Once a person has been treated for cancer, especially a small, slow-growing cancer, it's impossible to know if that cancer would have progressed into a deadly form if it had been left alone. And since few people are comfortable simply watching and waiting once they're told they have cancer, most diagnoses lead to treatment.

Predict: "We desperately need the ability to predict which patient has a localized cancer that is going to metastasize and cause suffering and death," Brawley wrote, "and which patient has a cancer that is destined to stay in the patient's prostate for the remainder of his life."

In many ways the PSA test is a gamble for most men: Will I be the one helped? Or will I be one of the 20 to 50 who is unnecessarily diagnosed and treated? For now, no one knows. JENNIFER DURGIN

Viewer beware

Most of the 220,000 men diagnosed with prostate cancer each year look for information about the condition online. But, according to DHMC surgeon Peter Steinberg, M.D., what they find might not be very balanced. Steinberg and other researchers studied YouTube videos that discuss treatments for prostate cancer and the controversial prostate-specific antigen (PSA) test. They found that 69% of the videos expressed a bias in favor of screening or treatment, but none expressed a bias for less aggressive approaches. "YouTube is not a reliable source of information for individual patients seeking to better understand the screening for, and management of, prostate cancer," Steinberg wrote in *Urology*.



Doctor disparities

"We need to create incentives for surgeons to practice in rural areas," explained DMS surgeon Ian Paquette, M.D., at a recent gathering of the American College of Surgeons. Paquette made the suggestion in the context of presenting research showing that people living in the country are more likely to suffer a perforated appendix than are people living in the city. One reason for the regional difference, according to Paquette, is that there are more general surgeons in urban than rural areas.



JON GILBERT FOX

Welch and a collaborator looked at PSA's effects.