The Value of PSA Screening in Underwriting

Prostate cancer is the most common malignancy among men aged 45 and over. An estimated one in six men will be diagnosed with prostate cancer in their lifetimes, though the risk of death is only one in 35. While many clinicians believe that men generally will die with prostate cancer rather than because of it, that is not always the case. The introduction of the prostate-specific antigen, also known as PSA, led to the thought that early detection could improve both mortality and morbidity from the disease.

Clinicians began using PSA for prostate cancer screening in the mid-1980s. Its use was quickly accepted, despite the lack of studies demonstrating the hoped-for benefits. Life insurers rapidly added the PSA screen to their underwriting requirements for fully underwritten male applicants, and it is commonly required for all male applicants age 45 and older. They hoped that this test could prevent earlier death claims and reduce adverse selection by men who knew their PSA was elevated or those already diagnosed with prostate cancer.

The Pros and Cons of the PSA

Over the past 30 years, the medical field has accumulated more data about males screened with PSA testing and treated for prostate cancer. Interestingly, the data appears to support doctors who argue that screening for prostate cancer, while detecting some cancers earlier, will not have any measurable improvement in overall survival, especially in males diagnosed after age 75. The PSA screen, however, has its advocates and its opponents.

Dr. Oliver Sartor, medical director of the Tulane Cancer Center, estimates that prostate-cancer mortality rates have decreased by 40 percent since screening became routine in middle-aged males’ physical exams. He says prostate cancer monitoring (with the PSA as a component) has helped identify an estimated 17,000 cases of metastatic cancer annually.

However, according to Richard Albin, MD, a pathology professor at the University of Arizona’s Medical College and discoverer of the PSA, the screen is imperfect and may actually be harmful. Key to his view is the high level of false positives the test generates. While PSA can indicate cancerous cells, it is more likely that prostate infections or a benign prostatic enlargement (BPH) caused the elevation. This can create highly erratic test results. For example, a cancer-free man may produce a “normal” PSA count during a routine visit and a highly elevated count during a follow-up visit due to minor infection or high cholesterol.

Once an elevated PSA is detected, many doctors immediately refer patients for urologic evaluation and ultimately a prostate biopsy. Fortunately
for the individual, many of these biopsies are negative for tumor. A treatment dilemma arises if a test indicates the possible presence of cancer: should the patient undergo surgical removal or extensive irradiation of the prostate and surrounding tissue, or should he simply be observed? Evidence exists that waiting for treatment with careful and regular observation can result in the same outcome for low to intermediate grade tumors, especially at older ages. However, many men faced with this decision will choose the more aggressive therapy, despite potentially significant complications including incontinence, rectal dysfunction and impotence.

The US Preventive Services Task Force's current guidelines recommend against PSA-based screening for prostate cancer. “There is adequate evidence that the benefit of PSA screening and early treatment ranges from 0 to 1 prostate cancer deaths avoided per 1000 men screened.” The American Cancer Society recommends that “asymptomatic men who have at least a 10-year life expectancy have an opportunity to make an informed decision with their health care provider about screening for prostate cancer.”

**A Question of Ethics?**

If the test is not required by an applicant’s physician, can an insurer compel the applicant to submit for the test? Many insurers have defended the practice on free-market principles: applicants are always free to apply for coverage from carriers that do not require a PSA. Dr. Peter Albertson (University of Connecticut) maintains that the test's goal is to identify applicants who are at higher risk of having cancer and therefore constitute a greater risk of loss.³

Christopher Coley, MD (Harvard University Health Service) disagrees. “Ethically, it's really a problem to do a test and say, 'We'll deal with the consequences later'... PSA is particularly problematic because the clear proof of benefit, at least for the average man, just doesn't exist the way it does for mammography, for instance.”⁴ Dr. David Atkins, the Agency for Healthcare Research and Quality, adds, "It is coercing men into getting tested with an unproven technology, which may actually do more harm than good to the individual. Second, it removes testing from the clinical setting where actions can be taken to reduce harms and maximize benefits.”⁵

**A Matter of Effectiveness, Not Ethics**

If a test is relatively ineffective in generating accurate and desired results, insurers should seriously question the value of requiring the test. However, the industry finds it highly difficult to discontinue a test once implemented. As it stands, both the clinical and insurance value of the PSA appear to lack significant merit for a majority of middle-aged males. ∞

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Endnotes

2 ibid.
4 ibid.
5 ibid.