

\$32 Million: Cost of Overtreatment of Prostate Cancer

Zosia Chustecka

Feb 13, 2013

Amid mounting concern that many men with low-risk prostate cancer in the United States are being treated unnecessarily, risking harm for no major benefit, comes an analysis that calculates the financial cost of this overtreatment.

Overtreatment costs more than \$15,000 per person, which amounts to \$32 million a year in the United States.

"This is a poor use of healthcare resources," said lead author Ayal Aizer, MD, resident physician at the Harvard radiation oncology program in Boston, Massachusetts. This money could be put to better use, especially in these times of cost containment and healthcare reform, he added.

Dr. Aizer will be presenting this analysis, along with senior author Paul Nguyen, MD, from the Brigham Women's Hospital/Dana-Farber Cancer Institute in Boston, at a poster session during the 2013 Genitourinary Cancers Symposium, being held February 14 to 16 in Orlando, Florida.

Guidelines from the National Comprehensive Cancer Network recommend active surveillance or watchful waiting for men with low-risk prostate cancer who have a life expectancy of 10 or fewer years.

"This is the only treatment option recommended for these patients," Dr. Aizer noted. Previous studies have shown that for men with low-risk disease, the risk of dying from their prostate cancer is very low, around 0% to 3%. Therefore, definitive treatment is not recommended because it would offer little survival benefit but has significant risk for harm, he told *Medscape Medical News*.

However, in clinical practice, many of these men do undergo definitive treatment, with either surgery or radiotherapy, which is overtreatment, he explained.

To examine the extent of this overtreatment, Dr. Aizer and colleagues used data from the Surveillance, Epidemiology and End Results (SEER)-Medicare Program, and identified 11,744 men 66 years and older who were diagnosed with low-risk prostate cancer from 2004 to 2007.

The researchers estimated expected survival for these men, taking comorbidities into account, and found that 3001 had a life expectancy of 10 years or less.

Of these 3001 men, 2011 (67%) received definitive treatment — 1773 (88%) were treated with radiotherapy and 238 (12%) underwent prostatectomy.

"We were surprised that the number was so high," Dr. Aizer said.

It is possible that physicians have trouble estimating life expectancy, Dr. Aizer said. We need to do a better job of this," he noted.

It is also possible that financial issues could be at play. An investment in a radiation facility could encourage the use of radiation; available data suggest that physicians recommend the treatment they

are most familiar with, he reported. Therefore, urologists suggest surgery and radiation oncologists suggest radiotherapy.

Toll of Overtreatment

Overtreatment takes its toll on patients, said Dr. Aizer. For men with low-risk prostate cancer and a life expectancy of less than 10 years, definitive treatment does not offer any major benefit and carries a high risk for adverse events.

"Virtually every man who undergoes a prostatectomy will have some degree of urinary or erectile problems," Dr. Aizer said. These are often evident immediately after surgery and can diminish with time. With radiation, the time course is the opposite; the problems develop and worsen with time.

Of the 238 men who underwent prostatectomy, 59.0% reported long-term urinary problems, 47.9% reported long-term erectile dysfunction, and 7.1% reported long-term bowel problems. These figures were a little different for the 1773 who underwent radiotherapy; 50.0% reported urinary problems, 19.7% reported erectile dysfunction, and 17.8% reported bowel problems.

"Quality of life takes a hit," Dr. Aizer said. In addition, overtreatment is a poor use of healthcare resources, he noted.

The researchers estimated that overtreatment costs \$15,308 more per patient than active surveillance, which involves monitoring of prostate-specific antigen (PSA) levels, biopsies, and definitive treatment if the cancer progresses. Definitive treatment includes the cost of treatment and any complications that arise.

"When extrapolated nationally, the cumulative net cost of overtreatment in men aged ≥ 66 years is \$32 million per annum," the researchers conclude.

"I was rather depressed to see these figures," Bruce J. Roth MD, professor of medicine in the division of oncology at the Washington University School of Medicine in St. Louis, Missouri, told *Medscape Medical News*. He was not involved in the study, but was asked to comment on the findings.

"In addition to saving money by not treating these men, we could save even more money by not screening them and diagnosing prostate cancer in the first place," he said.

These are men with a life expectancy of less than 10 years. "I would argue that they shouldn't be having PSA tests in the first place," he said. Once they have the test and a prostate cancer is diagnosed, it places a huge burden on the patient. It can be very difficult to tell an elderly man that cancer has been found but it does not need to be treated, he explained.

"Hopefully, this situation will improve" as guidelines recommending no screening in this age group filter down into clinical practice, Dr. Roth said. But currently, "a lot of money is being spent on patients who are not benefiting from therapy."

Dr. Roth agrees that physicians are "not great at estimating life expectancies," and adds that this needs to be done on an individual basis, not on a life table. Comorbidities need to be taken into account, he said; if, for example, there is significant cardiovascular disease and the life expectancy is less than 10 years, why would you do a PSA screening test for prostate cancer?

Dr. Aizer has disclosed no relevant financial relationships. Dr. Nguyen reports receiving research funding from Varian and consulting for Ferring Inc.

2013 Genitourinary Cancers Symposium (GUCCS): Abstract 161. To be presented February 14, 2013.

Medscape Medical News © 2013 WebMD, LLC

Send comments and news tips to news@medscape.net.

Cite this article: \$32 Million: Cost of Overtreatment of Prostate Cancer. *Medscape*. Feb 13, 2013.