# Cost of Prostate Cancer Care Varies with Initial Treatment Choice

A new analysis has found that short-term and long-term costs of prostate cancer care vary considerably based on which treatment strategy a man initially receives. Published early online in Cancer, a peer-reviewed journal of the American Cancer Society, the study finds that treatments that may be less expensive in the short-term may have higher long-term costs.

For men with early stage prostate cancer, various treatments are available, including surgery, radiation therapy, hormonal treatment, watchful waiting, or combinations of the above. A variety of factors determines which treatment is appropriate for a given man, and in some cases, a man may be able to choose among several options. Cost is one of many factors to consider when choosing among these options.

To determine how the initial treatment received by men with early stage prostate cancer affects costs of medical care both in the short-term (first year following diagnosis) and long-term (across five years of follow-up), Claire Snyder, PhD, of the Johns Hopkins School of Medicine and the Johns Hopkins Bloomberg School of Public Health in Baltimore led a team that reviewed early stage prostate-cancer cases from the Surveillance, Epidemiology and End Results (SEER)-Medicare database. (This database combines cancer incidence and survival data from US population-based cancer registries with Medicare administrative claims.) Patients included 13,769 men aged 66 years or older who were diagnosed in 2000 and were followed for 5 years. They were divided into groups based on the treatment they received during the first 9 months after diagnosis: watchful waiting, radiation, hormonal therapy, hormonal therapy plus radiation, and surgery (men in this latter group may have received hormones and/or radiation as well). Treatment costs were divided into initial (months -1 to 12), long-term (each 12 months thereafter), and total (months -1 to 60) costs. The incremental costs of care were calculated as the difference in medical costs for patients versus a group of similar men without cancer.

The investigators found that for most prostate cancer cases, costs were highest in the initial year and then dropped sharply and remained steady over the next several years; however, patterns of costs varied widely in the short-term and long-term based on initial treatment received. Watchful waiting had the lowest initial ($4270) and five-year total costs ($9130). Initial treatment costs were highest for patients who received hormonal therapy plus radiation ($17,474), followed by those undergoing surgery ($15,197). Hormonal therapy had the second lowest initial costs but the highest five-year total costs ($26,896). "This demonstrates that treatments that may be less expensive in the short-term may have higher long-term costs," said Dr. Snyder. Hormonal therapy plus radiation ($25,097) and surgery ($19,214) had the second and third highest five-year total costs. After excluding the last 12 months of life (because patterns of costs are quite different in the period prior to death), total costs were highest for hormonal therapy plus radiation ($23,488) and hormonal therapy only ($23,199).

These findings provide new information for patients, providers, and payers involved in prostate cancer care. Despite the high prevalence of early stage prostate cancer and the controversies associated with determining initial treatment, few other studies have examined both the short-term and long-term costs of available treatment options.

Article: "How does initial treatment choice affect short-term and long-term costs for clinically localized prostate cancer?" Claire F. Snyder, Kevin D. Frick, Amanda L. Blackford, Robert J. Herbert, Bridget A. Neville, Michael A. Carducci, and Craig C. Earle. Cancer; Published Online: August 23, 2010 (DOI: 10.1002/cncr.25517).