Study shows drop in unnecessary care after Medicare reimbursement cut

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When Medicare policy changes led to reductions in reimbursement for hormonal treatment of prostate cancer, there was a sharp decline in its use among patients not likely to benefit from the treatment. But among patients for whom the therapy is clearly beneficial, doctors continued to prescribe it at the same rate, according to a new study.

This finding suggests that financial reform of health care can reduce unnecessary care without impacting care to those patients most likely to benefit from a treatment.

"We found that physicians respond to reimbursement, but they respond in a way that appears to be beneficial to the patient. They don't tend to cut out necessary care, but they tend to cut out unnecessary or inappropriate care. This suggests cutting reimbursements in the right context can help reduce unnecessary care," says lead study author Vahakn B. Shahinian, M.D., M.S., assistant professor of internal medicine at the University of Michigan Medical School and a member of the U-M Comprehensive Cancer Center.

Results of the study appear Nov. 4 in the New England Journal of Medicine.

The researchers looked at use of androgen deprivation therapy, a common type of treatment for prostate cancer that involves blocking the male hormone testosterone through a regular injection. Clinical trials have shown clear benefit for men with high-risk tumors who receive this

treatment along with radiation therapy. But the benefit is less clear when androgen deprivation therapy is used by itself in lower risk tumors.

Through the 1990s, Medicare reimbursement for this therapy was set at 95 percent of the average wholesale price of the drug. The average practice got the drug for 82 percent of wholesale, which allowed for large profits by many practices. Use of androgen deprivation therapy grew until half-million men were receiving it at its peak, with more than $1 billion in Medicare expenditures.

The Medicare Modernization Act of 2003 changed policies for reimbursement of injected medications, including hormonal therapy, eventually setting it at 106 percent of the average sale price by 2005. This number was more precise than the wholesale price, as it was based on actual sales transactions reported by the pharmaceutical companies, leaving less room for profit.

Shahinian and his colleagues looked at data from 54,925 men treated for prostate cancer from 2003 to 2005, using the Surveillance, Epidemiology and End Results-Medicare database, a large population-based registry.

"SEER-Medicare has all the detailed cancer and treatment data we needed to categorize these patients, and it gave us a very good picture of the response to this change in Medicare reimbursement," said study author Yong-Fang Kuo, an associate professor at the University of Texas Medical Branch at Galveston.

Scott M. Gilbert, M.D., M.S., assistant professor of urology at the University of Florida College of Medicine, was also a co-author.

Patients were separated into three categories for androgen deprivation therapy based on the characteristics of their disease and the other treatment they received: appropriate use, potentially inappropriate use

and discretionary.

Over the course of the Medicare reimbursement cuts, use of androgen deprivation therapy stayed steady for patients in the appropriate use category. Inappropriate use, however, dropped from 39 percent at the end of 2003 to 22 percent by the end of 2005. The discretionary group also declined, but more moderately.

In that time, reimbursements for ADT fell from $356 per dose in 2003 under the initial reimbursement to $176 per dose in 2005 under the revised reimbursement.

"There's a growing realization that these treatments might have more side effects than we first realized," Shahinian says. "Some of the patients who had been receiving androgen deprivation therapy would tend to do well without any treatment, and a lot of older patients die of causes other than their prostate cancer. It's inappropriate to treat these men when there is limited likelihood of benefit, no positive proof of benefit and increasing threat of side effects."

Shahinian notes that during this same time period, more studies were uncovering side effects to this treatment, which may also have influenced use of this treatment.

"Androgen deprivation therapy remains a life-saving treatment for a certain subset of patients, and in our study, those patients continued to be prescribed this treatment. Financial incentives are most likely to impact physician behavior when there's a gray zone in terms of benefit, not when there's clear evidence of life-saving benefit," Shahinian says.

More information: Reference: *New England Journal of Medicine*, Vol. 363, No. 19, Nov. 4, 2010

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