

## Prostate Cancer Treatment: Does Insurance Type Matter?

Potosky AL, Merrill RM, Riley GF, Taplin SH, Barlow W, Fireman BH, Lubitz JD. Prostate cancer treatment and ten-year survival among group/staff HMO and fee-for-service Medicare patients. *Health Serv Res* 1999;34:525-46.

### Study Overview

**Objective.** To compare treatment patterns and 10-year survival rates in prostate cancer patients receiving care in health maintenance organizations (HMOs) and fee-for-service (FFS) health settings.

**Design.** Population-based, retrospective longitudinal analysis of data from multiple linked databases.

**Setting and participants.** 21,741 men at least 65 years of age living in the greater San Francisco-Oakland and Seattle-Puget Sound areas and diagnosed with prostate cancer between 1985 and the end of 1992. Data on subjects were collected from 2 population-based tumor registries that were part of the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program [1]. HMO participants were receiving care from either Kaiser Permanente of Northern California or Group Health Cooperative of Puget Sound, 2 large, nonprofit, group/staff HMOs.

**Main outcome measures.** Patient sociodemographic and clinical characteristics (including comorbidities), HMO and FFS characteristics, treatment patterns, and survival rates through 1994 were determined based on SEER registry data linked with Medicare claims data and HMO utilization data. Multivariate regression models were used to assess treatment and survival rate differences in HMO and FFS settings, adjusting for sociodemographic and clinical characteristics.

**Main results.** Among those with nonmetastatic prostate cancer, HMO patients were more likely than FFS patients to receive aggressive therapy (either prostatectomy or radiation) in San Francisco-Oakland (odds ratio [OR], 1.69; 95% CI, 1.46 to 1.96) but not in Seattle (OR, 1.15; 95% CI, 0.93 to 1.43). Among those receiving aggressive therapy, HMO patients were 3 to 5 times more likely to receive radiation therapy than prostatectomy. Overall mortality was equivalent (HMO versus FFS mortality risk ratio [RR], 1.01; 95% CI, 0.94 to 1.08), but prostate cancer mortality was higher among HMO patients (RR, 1.25; 95% CI, 1.13 to 1.39).

### Conclusion

Despite receiving different treatment for clinically localized

prostate cancer, patients in HMO and FFS settings had similar all-cause survival. The better prostate-specific survival rate among FFS patients may be explained by differences in tumor characteristics and patient selection factors.

### Commentary

This study shows that patients with prostate cancer at the 2 HMO study sites received care at least as aggressive as that provided patients in traditional FFS Medicare settings and that survival was comparable in the 2 groups. These findings should provide some comfort for enrollees in the HMOs evaluated. However, managed care is not monolithic (a point frequently forgotten in the current national debate about the future of U.S. health care delivery and financing), and care may vary significantly among different managed care plans. Given such potential for variation, the results of this study are not generalizable to other managed care settings.

### Applications for Clinical Practice

Although managed care has grown most quickly among the nonelderly, working adult population, the Health Care Financing Administration has actively encouraged its growth in the national Medicare program, where patients are accustomed to receiving care in FFS settings. In response to concerns about undertreatment and quality of care provided by managed care plans, authors such as Potosky and colleagues have assessed differences in care and outcomes of patients in HMO and FFS settings. Managed care has performed well in such comparative studies: Some studies have noted that managed care patients receive more diagnostic tests, such as cancer screening tests [2], and the current study indicates that therapy may be even more aggressive in some HMOs than in FFS settings.

### References

1. Ries LA, Kosary CL, Hankey BF, Miller BA, Hurray A, Edwards BK. SEER Cancer Statistics Review, 1973-1994. Bethesda (MD): U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Cancer Institute; 1997. NIH Publication No. 97-2789.
2. Potosky AL, Breen N, Graubard BI, Parsons PE. The association between health care coverage and the use of cancer screening tests. Results from the 1992 National Health Interview Survey [published erratum appears in *Med Care* 1998;36:1470]. *Med Care* 1998;36:257-70.