Variation in the Types of Physicians Visited among Men Diagnosed with Stage IV Prostate Cancer

Eberechukwu Onukwugha, PhD and Candice Yong, BSc(Pharm)

Pharmaceutical Health Services Research, University of Maryland School of Pharmacy, Baltimore, MD

Background

- Multi-specialist contact may be beneficial for patients diagnosed with advanced prostate cancer (PCa) and ensure that they receive comprehensive care and select the most appropriate, evidence-based treatment.
- Little is known about specialist visit patterns among patients with advanced PCa in the period immediately following diagnosis.

Objective

- We investigate whether metastatic (M1) PCa is associated with increased variation in the types of physicians seen following diagnosis compared to stage IV non-metastatic PCa, and the impact of patient clinical and demographic factors on multi-specialist contact.

Methods

Dataset: Linked Surveillance Epidemiology and End Results (SEER)-Medicare data

- **Study inclusion and exclusion criteria:**
  - AJCC (American Joint Committee on Cancer) stage IV prostate cancer from 2000-2007 with claims data from 1999-2009
  - Age 66+ at the time of diagnosis
  - Continuously enrolled in Medicare Parts A and B for the 12 months prior to diagnosis
  - Enrolled in an HMO during the 12 months prior to diagnosis
  - History of cancer (except non-melanoma skin cancer) within 5 years prior to prostate cancer diagnosis
  - Unknown diagnosis month
  - Prostate cancer found on autopsy or death certificate

Results

- **The study sample included 9,826 men diagnosed with incident stage IV PCa, of whom 74% (N=7,301) had M1 disease.**
- **The mean age of the sample was 77 years.** Additional descriptive statistics are provided in Table 2.
- **The distribution of PVI values during one month post-diagnosis and six-months post-diagnosis are shown in Figure 1.**

Results

- **PVI varies with time and is lower when calculated over a longer post-diagnosis interval.**
- **Table 3 shows the impact of patient clinical and demographic factors on PVI at 1 month and 6 months post-diagnosis.** Based on a multivariable beta regression, an incident diagnosis of M1 PCa was associated with a decrease in the 6m PVI of 0.03 (95% CI: -0.04 to -0.02).
- **The 6m PVI also was statistically significantly lower among individuals residing in an urban area, with a non-zero CCI score, or with prior use of preventive services compared to individuals in the reference category.**
- **The PVI was statistically significantly higher among AA men, individuals above 85yrs, and individuals with poor functional status.**

Conclusions

- The number of physician types seen following PCa diagnosis varies according to metastatic disease status as well as patient race and comorbidity status.
- Given the relationship between physician contact and treatment receipt, the downstream implications of these clinical and demographic differences in PVI score are worth further investigation.

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Contact Information

Candice Yong, PhD
Department of Pharmaceutical Health Services Research
University of Maryland School of Pharmacy
cyong001@umaryland.edu