HSD105

Sociodemographic variations in PSA screening use: A cross-sectional analysis of data from the National Health Interview Survey

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Introduction

In 2018, the United States Preventive Services Task Force (USPSTF) recommended discussing prostate-specific antigen (PSA) testing with males who are 55 to 69 years old for prostate cancer screening (Grade C recommendation).[1]

There are significant disparities in prostate cancer diagnoses and outcomes.[2] Further, prior work shows increased PSA testing among privately-insured males following this update.[3]

Our objective was to assess sociodemographic variations in PSA screening outside the USPSTF recommended age range.

Methods

We used cross-sectional data from the 2019 National Health Interview Survey.[4] We included males who had a PSA test in the past year; participants previously diagnosed with prostate cancer, or who reported PSA tests for reasons other than part of a routine exam were excluded.

We conducted multivariable logistic regression in R for the analysis, using the survey package.

Our analysis shows disproportionate use of PSA screening outside the USPSTF recommended age range of 55 to 69 years among males with higher levels of education, income, and estimated 5-year mortality risk.

This study was supported by the Cancer Prevention and Research Institute of Texas (grant RP190210) and The University of Texas MD Anderson's Cancer Center (support grant funded from National Institutes of Health, National Cancer Institute under award number P30CA016672, using the Shared Decision Making Core and Clinical Protocol and Data Management System). Dr. Tan is supported by a cancer prevention fellowship, supported by the Cancer Prevention and Research Institute of Texas (grant award RP170259; Shine Chang, PhD, Principal Investigator) and by the MD Anderson Cancer Center (support grant CA016672 funded by the National Cancer Institute). Dr. Maki is also supported, in part, by NIH Center grant P30 CA022453 awarded to the Karmanos Cancer Institute at Wayne State University.

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Results

The weighted sample consisted of 17,417,715 respondents (mean age = 64.0 years), most of whom were White (76.2%). Key results are in Table 1.

Table 1. Factors Associated with PSA Screening Outside USPSTF Recommended Age Range

Variable	OR (95% CI)
Educational attainment	
≥ 4-year college (referent)	---
< High school/GED	0.73 (0.46 – 1.17)
High school/GED	**0.60 (0.45 – 0.80)**
Some college	**0.76 (0.60 – 0.97)**
Income-Poverty ratio	
Income : Poverty ≥ 2 (referent)	---
Income : Poverty < 2	**0.62 (0.44 – 0.89)**
5-Year Mortality Risk Estimate	
5% (referent)	---
8%	1.16 (0.82 – 1.63)
12%	**1.52 (1.08 – 2.14)**
19%	**2.68 (1.72 – 4.16)**
29-37%	**3.64 (2.43 – 5.47)**
49-62%	**9.59 (5.71 – 16.12)**

Note: p<.05 is in **bold** and **green**

References

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