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## African American Primary Care Physicians' Prostate Cancer Screening Practices

Louie E. Ross<sup>1</sup> and Ingrid J. Hall<sup>2</sup>

<sup>1</sup>North Carolina A & T State University, Greensboro, NC, USA

<sup>2</sup>Centers for Disease Control and Prevention, Atlanta, GA, USA

### Abstract

**Introduction**—Prostate cancer is the most common cancer and the second leading cause of cancer death among men in the United States. African American (AA) men have greater prostate cancer burden than other men. Little is known about AA primary care physicians' (PCPs) practices regarding prostate cancer screening.

**Methods**—We analyzed data from the 2007–2008 National Survey of Primary Care Physicians' Practices Regarding Prostate Cancer Screening. The current study included 604 AA PCPs. Outcomes assessed were (a) offering screening using the prostate-specific antigen (PSA) test, (b) use of screening discussions to involve patients in the decision to screen, and (c) having a discussion policy to try to talk the patient into getting the screening tests.

**Results**—Most AA PCPs were male (52%), younger than 50 years (61%), and had 21% to 100% AA patients in their practices (74%). The majority (94%) of AA PCPs offered prostate cancer screening using PSA, discussed the tests with their male patients to involve them in the decision to screen (83%), and had a policy to try to talk the patient into getting the screening tests (77%). Multivariate analysis showed that offering screening, use of discussions, and a usual policy to encourage taking the screening tests varied mainly by practice-related factors, including practice type, practice location, and percentage of AA patients in the practice.

**Conclusion**—Data from this study indicate that most AA PCPs reported high proscreening behaviors for all 3 outcomes. Additionally, practice- and screening-related factors may be important when examining AA PCP screening behaviors.

### Keywords

prostate cancer; screening; African American primary care physicians; physician practices; prostate-specific antigen

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Corresponding Author: Louie E. Ross, Department of Leadership Studies, North Carolina A&T State University, 130 Proctor Hall, Greensboro, NC 27411, USA. [leross@ncat.edu](mailto:leross@ncat.edu).

### Declaration of Conflicting Interests

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

## Introduction

Prostate cancer affects nearly 200 000 men and claims about 30 000 lives each year making it the second leading cause of cancer death in US men.<sup>1,2</sup> In addition to older age and family history, African American (AA) race is a strong risk factor for being diagnosed with prostate cancer. In 2009, prostate cancer incidence was about 72% greater in AA compared with white men and much greater than that observed among Asian, Hispanic, and men of other race,<sup>1</sup> while mortality from prostate cancer was nearly 2.5 times as high among AA men compared with white men and even higher compared with other men.<sup>3</sup>

The clinical and scientific community lack agreement on whether to offer routine screening for prostate cancer to asymptomatic men, yet most primary care physicians (PCPs) offer screening to their male patients older than 50 years.<sup>4,5</sup> Prostate cancer screening has been associated with early detection of the disease,<sup>6</sup> and use of the digital rectal examination (DRE) combined with the prostate-specific antigen (PSA) as primary screening tests has increased over the past several years.<sup>6–8</sup> However, the net benefits and risks of prostate cancer screening remain uncertain. Disagreements among the major public health organizations regarding routine screening continue, even for AA men who suffer a disproportionate burden from this disease.<sup>1</sup>

At the time this study was conducted, some organizations recommended that men should begin screening at age 50, and perhaps earlier if they were AA or had a known family history of prostate cancer.<sup>9,10</sup> Other groups, including the US Preventive Services Task Force (USPSTF), differed in their recommendations.<sup>11</sup> In 2008, the USPSTF concluded that current evidence was insufficient to recommend routine population-based screening with DRE or PSA in men younger than 75 years.<sup>12</sup> The USPSTF also recommended against routine screening for prostate cancer in men 75 years or older. The most recent USPSTF guidelines recommend against all routine screening for prostate cancer (grade D recommendation).<sup>13</sup> Currently, many organizations recommend physician–patient discussions about the appropriateness of screening and suggest that PCPs and patients engage in some form of shared decision making (SDM).<sup>11,15</sup>

Studies of PCPs and prostate cancer screening have focused on several topics, including (a) likelihood that US PCPs discuss and recommend prostate cancer screening with their patients<sup>16</sup>; (b) specific factors that influence the SDM process<sup>17</sup>; (c) the effect of general practitioners' gender and age on systematic recommendation for cancer (including prostate cancer) screening<sup>18</sup>; (d) the extent of informed decision making for prostate cancer screening in a defined population<sup>19</sup>; (e) PCP demographics, knowledge of, and attitudinal influence toward PSA screening practices<sup>20,21</sup>; (f) use of prescreening discussions to promote informed decision making<sup>22</sup>; (g) guidelines that recommend SDM on physician practice patterns<sup>23</sup>; and (h) whether PCPs routinely discuss prostate cancer screening and the barriers to and facilitators of these discussions.<sup>24</sup> Most of the above studies<sup>16–22,24</sup> lacked significant numbers to examine AA PCPs as a group or AA PCP practices were not mentioned in the findings. Thus, it remains to be seen whether PCP prostate cancer screening practices described in previous literature reflect the practices of AA PCPs.

Primary care physicians are likely the first to encounter men to discuss and offer the PSA test and the DRE. Two qualitative studies of PCPs in the United States sought to examine their screening patterns. The first study identified 2 types of physician screening behaviors: (a) “routine screeners” who attributed their screening practices to experience and belief in the benefit of PSA screening and (b) “nonroutine screeners” who cited lack of scientific evidence documenting the benefit of PSA screening.<sup>4</sup> Regardless of screening pattern, both groups tended to recommend prostate cancer screening to most men. In a second study of AA PCPs, almost all reported offering the PSA test to asymptomatic non-AA men starting at 50 years of age and to asymptomatic AA men 5 to 10 years younger.<sup>25</sup> Most of the AA PCPs were proactive about screening, reporting that concerns about the seriousness of prostate cancer outweighed the potential limitations of screening including the risks of side effects from treatment.<sup>25</sup> Both studies recommended that quantitative research should be conducted to explore physician characteristics in general, and AA PCP practices in particular, as they relate to prostate cancer screening, including individual and practice-related characteristics<sup>4,25</sup>

The purpose of this study was to characterize prostate screening behaviors in a nationally representative sample of AA PCPs, a group that has been understudied in the literature, by individual physician-level and practice-related factors. We report PCP attitudes and behaviors regarding recommending prostate cancer screening to asymptomatic males during routine health maintenance examinations (HMEs).

## Methods

In 2008, the Centers for Disease Control and Prevention completed the *Survey of Primary Care Physicians' Practices Regarding Prostate Cancer Screening*. The questionnaire measured PCP attitudes, beliefs, and behaviors related to prostate cancer and prostate cancer screening. Information about this survey has been described elsewhere.<sup>16</sup> The instrument was mailed in 2007–2008 to a nationally representative sample of PCPs with specialties in family and general practice as well as general internal medicine using a disproportionate stratified sampling design. The survey was completed by 1256 PCPs. After adjusting survey response for surveys that were undeliverable or returned as ineligible or deceased, the overall participation rate was 57% (1256/2219). This study focused on a subset of this sample, AA PCPs (N = 604) who were oversampled to provide reliable estimates for this group.

## Measurement of Variables

Outcomes examined assessed the following general prostate cancer screening practices of AA PCPs, whether they (a) offered screening using the PSA test for asymptomatic male patients aged 40 years or older as part of their HME (0 = no, 1 = yes), (b) conducted prescreening discussions to involve patients in the decision to screen (0 = no, 1 = yes), and (c) discussed PSA testing with patients (0 = try to talk the patient out of getting the test or remain neutral, 1 = try to talk patient into getting the test). Having a policy when discussing the test with patients (item c above) was asked only for those who responded “yes” to

conducting screening discussions to involve patients in the decision to screen (item *b* above).

Physician characteristics examined included gender, age at time of survey, and number of years practicing medicine. Practice characteristics included practice location, type of practice, weekly patient volume, as well as number of hours worked per week in direct patient care, and percentage of AA male patients in the practice. Percentage of AA male patients ranged from 0% to 100%. We used the 50th percentile (20%) as a cutpoint to divide the variable into 2 categories. Who made the decision to be screened was the one screening-related factor in the analysis (see Table 1 for coding).

### Statistical Analyses

Data were analyzed using Proc SURVEY procedures in SAS Version 9.2 (SAS Institute, Cary, NC) to account for the stratified sampling design. Final sample weights adjusting for disproportionate stratified sampling, differential rates of eligibility, and nonresponse among physician subgroups were used. Proc SURVEY used these final sample weights to generate population-based estimates. We examined weighted percentages of AA PCPs who routinely screened with PSA during HMEs. Only characteristics for which *P* values from  $\chi^2$  tests in bivariate analyses were  $<.20$  were retained in the multivariate logistic regression model. Odds ratios (ORs) and 95% confidence intervals (CIs) were used to assess variability in the estimates of percentages and  $\chi^2 P$  values were used to make comparisons within groups. Means were compared using the *F* test. Separate multivariate logistic regression models were used to estimate adjusted odds of offering the PSA, discussions about the screening tests, and encouragement (policy to talk the patient into getting the screening tests). All tests were 2-sided with a significance level of .05.

### Results

The study sample represented 4544 AA PCPs nationally. Physicians were primarily male (51%) and younger than 50 years (61%). A majority (60%) of AA PCPs had practiced medicine 15 years or less (Table 1). For practice-related factors, the largest portions of PCPs served in suburban (31%) and urban inner city (31%) locations. The largest portion of PCPs served in solo practices (39%). A slight majority (55%) of PCPs served fewer than 100 patients per week and nearly half worked from 31 to 40 hours per week. Most PCPs (74%) served between 21% and 100% AA male patients. A slight majority (53%) participated in some form of shared decision making as the PCP and patient/family jointly decided whether the patient should be screened. The majority (94%) of AA PCPs offered prostate cancer screening using PSA, conducted prescreening discussions with their male patients to involve them in the screening decision (83%), and had a discussion policy to try to talk the patient into getting the screening tests (77%).

Offering the PSA test to men during HMEs varied by type of practice and percentage of AA male patients in the practice (Table 2). Discussions about the prostate cancer screening tests also varied by practice location. Practices in suburban, urban inner city, and urban non-inner city PCPs were more likely to conduct discussions about the screening tests than PCPs in rural areas. Male PCPs and PCPs in solo practices were more likely to have a discussion

policy to try to talk the patient into getting the prostate cancer screening tests than their referents. Likewise, PCPs with higher weekly patient volumes, those who worked 31 hours per week, and those who served higher percentages of AA patients in the practice were more likely to have a discussion policy to try to talk the patient into getting the prostate cancer screening tests than their referents. Having a discussion policy to try to talk the patient into getting the screening tests also varied by who decided whether the patient should be screened.

After adjustment, practice-related factors were associated with offering screening, conducting prescreening discussions, and having a discussion policy of trying to talk the patient into getting the screening tests (Table 3). AA PCPs who worked in other types of practices had lower odds (OR = 0.15, CI = 0.05–0.49) of offering the PSA to age-appropriate men than those in solo practices. Also, PCPs with higher percentages of AA patients in the practice (21% to 100%) had higher odds (OR = 2.26, CI = 1.05–4.89) of offering the PSA test than those with lower percentages (0% to 20%). AA PCPs who worked in suburban and urban inner city locations had higher odds of having discussions with men about prostate cancer screening tests than PCPs located in rural areas.

African American PCPs with higher percentages of AA patients in the practice had higher odds (OR = 1.60, CI = 1.01–2.54) of having a discussion policy to try to talk the patient into getting the screening tests (compared with those with lower percentages of AA patients in the practice; Table 3). Last, PCPs who jointly decided with the patient and family as well as PCPs that allowed the screening decision to be made primarily by patient and family had lower odds of having a discussion policy to try to talk the patient into getting the screening tests (compared with the PCP deciding or mostly deciding alone).

## Discussion

This study used data from a national survey that examined physician-level and practice-related factors and their associations with offering the PSA test, having prescreening discussions with men about prostate cancer screening tests, and the nature of these discussions. This study adds specificity to an earlier qualitative study of AA PCPs<sup>25</sup> that noted several interesting points: (a) the gender of AA PCPs is near parity and is distributed somewhat differently from the general PCP population, (b) the majority of AA PCPs served larger percentages of AA patients considering that AAs comprise about 13% of the general population, and (c) a slight majority of AA PCPs and their patients were involved in some form of SDM.

In extending the earlier qualitative results, our study confirmed that females represent nearly 50% of AA PCPs compared with 30% of the national PCP population.<sup>16</sup> A recent study noted that male PCPs were more likely to believe in PSA screening efficacy than female PCPs, and female PCPs were more likely to discuss topics in general (other than prostate cancer screening) with patients than their male counterparts.<sup>26</sup> Gender distribution may affect the proscreening tendency of AA PCPs as a group and should be examined more thoroughly in assessing PCP prostate cancer screening attitudes and behaviors. We also confirmed that AA PCPs overwhelmingly serve a largely AA patient base. Finally, we

corroborated that the majority (83%) of AA PCPs engage in prescreening discussions that may be characterized as SDM.

This study provides the new findings that practice- and screening-related factors may be important predictors of PCP screening behaviors. Higher percentages of AA male patients in the practice was a strong correlate for both offering the PSA test as well as having a discussion policy to try to talk the patient into getting the screening tests. In a qualitative study by Stroud et al<sup>25</sup> 2006, most AA PCPs mentioned that the seriousness of prostate cancer outweighed both limitations of screening as well as possible side effects from treatment. PCPs in the current quantitative analysis may also reflect sensitivity to these same issues.

Type of practice appeared to be an important factor for offering tests. AA PCPs in other types of practices were less likely to offer the PSA test than AA PCPs in solo practices. AA PCPs in solo practices may have had greater independence in deciding whether to offer screening than those in other settings. We were not able to evaluate whether PCPs operating in other settings may have been impacted by an organizational policy governing behavior related to prostate cancer screening.

Practice location was important for having physician discussion with patients. AA PCP practices located in suburban and inner city areas were more likely to have discussions with their patients about prostate cancer screening than their rural counterparts. As most health organizations recommend some form of SDM, AA patients located in rural areas may be at a disadvantage because these PCPs were least likely to have discussions about the screening tests. Additional research should be conducted to provide some clarity for this finding.

Finally, when the PCP primarily decided whether the patient should take the screening tests, the discussion policy was mainly to try to talk the patient into getting the screening tests. This finding is consistent with prior literature that found most discussions emphasized the pros of screening more often than the cons.<sup>26</sup> Additionally, given the high percentage of AA male patients in the client base of these PCPs (data not shown), AA PCPs may show more protective behavior because of lower health literacy among their patient base.<sup>27</sup>

Overall, AA PCPs reported high proscreening behaviors in the 3 outcomes examined: offering the PSA test, conducting discussions with patients about the screening tests, and having a discussion policy to try to talk the patient into getting the screening tests. A strength of this study is that it includes one of the largest, most comprehensive surveys to date of prostate cancer screening practices. This study oversampled AA PCPs, representing nearly 5000 PCPs nationally whose prostate cancer screening practices are relatively unknown. Our findings about AA PCP attitudes and behaviors relative to prostate cancer screening offer information that could not be obtained from earlier PCP qualitative studies.<sup>4,25</sup> The current study explores more variables that specifically relate to prostate cancer screening compared with other general PCP studies.<sup>18,28</sup>

This study is limited by its use of mailed surveys and reliance on nonvalidated data derived from self-reports of PCPs.<sup>29-31</sup> Also, when PCPs tried to talk the patient into getting the screening tests, we were not sure whether the PCP discussion policy was formal or informal.

Formal organizational policies may influence physicians' flexibility in their screening recommendations. We also had no information on the content of the discussions, that is, if the discussions covered the benefits and limitations of screening, if patients had ample time to ask questions, and so on. Finally, this study was conducted before the newer American Cancer Society prostate cancer screening guidelines (2010) and the most recent USPSTF guidelines (2011) were released, thus results may or may not adequately reflect PCPs following of current screening guidelines that support some form of informed or shared decision making.<sup>14</sup>

Whether to offer the PSA test to AA men poses a challenge because organizations and PCPs are not in agreement about prostate cancer screening. The USPSTF acknowledges that AA men represented a small minority of participants in randomized clinical trials of screening and no firm conclusions can be made about the balance of benefits and risks of PSA-based screening in this population.<sup>32</sup> Therefore, a discussion regarding the benefits and risks of the disease should be conducted that includes specific risk of prostate cancer burden to higher risk groups (eg, men with a family history of prostate cancer and AA men). Other challenges to these discussions include getting men to go to the doctor oftentimes at earlier ages, promoting better provider–patient communication, and obtaining updated educational materials including brochures, pamphlets, and anatomical models.<sup>25</sup> This study serves to enlighten both researchers and clinicians about some of the practices of AA PCPs and also identifies specific individual- or practice-related factors associated with prostate cancer screening behaviors that may be useful in addressing some of the challenges encountered in conducting meaningful discussions.

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## Biographies

**Louie E. Ross** is an Adjunct Research Professor at North Carolina A&T State University and has served as a Research Behavioral Scientist at the Centers for Disease Control and Prevention in Atlanta, GA. He received his PhD in Sociology from North Carolina State University and conducts research related to health disparities, chronic disease epidemiology, and prostate cancer.

**Ingrid J. Hall**, PhD, MPH, is a cancer epidemiologist and team lead in the Division of Cancer Prevention and Control at the Centers for Disease Control and Prevention where she has worked for the past 15 years. She holds a BS degree in biology from Duke University, and a PhD in genetics and molecular biology and an MPH in epidemiology from University of North Carolina at Chapel Hill. Dr. Hall's research focus is in the area of health disparities in cancer incidence and survival. Dr. Hall has published first-author papers on breast cancer-risk factor associations in African American women as well as the genetics and family history of breast, ovarian, and prostate cancers.

**Table 1**

Selected Characteristics of US African American Primary Care Physicians.

	All AA PCPs <sup>a</sup>		
	n	Weighted n	Percentage
PCP characteristics			
All PCPs	604	4544	100.0
Individual			
Gender			
Male	313	2380	51.4
Female	291	2164	48.6
Age (years)			
32–49	359	2710	60.8
50+	238	1744	39.2
Years practicing medicine			
1–15	363	2710	60.3
16+	229	1783	39.7
Practice related			
Practice location			
Rural	93	724	16.4
Suburban	187	1380	31.3
Urban inner city	178	1365	30.9
Urban non–inner city	130	943	21.4
Type of practice			
Solo practice	221	1718	38.7
Single specialty group	173	1265	28.5
Multispecialty group	169	1245	28.1
Other type of practice	27	207	4.7
Weekly patient volume			
<100 patients per week	329	2483	55.3
100+ patients per week	267	2004	44.7
Hours worked per week			
0–30	132	989	23.0
31–40	278	2076	48.4
41+	163	1228	28.6
% AA in practice			
0–20	160	176	25.9
21–100	444	3368	74.1
Screening related			
Who decides whether patient should be screened?			
PCP decides or mostly decides	196	1486	33.7
PCP and patient/family decide	312	2349	53.3
Patient/family decide or mostly decide	79	571	13.0

	All AA PCPs <sup>a</sup>		
	n	Weighted n	Percentage
PCP screening practices			
Routinely offer PSA to asymptomatic males during HMEs			
No	37	275	6.2
Yes	562	4193	93.8
Discuss screening to involve patients in the decision about screening			
No or restricted discussion	103	779	17.4
Yes, discussion with all patients	498	3712	82.6
Policy when discussing PSA with patients			
Remain neutral or discourage test	141	1014	23.5
Try to talk patient into getting the test	436	3298	76.5

Abbreviations: AA, African American; PCP, primary care physician; PSA, prostate-specific antigen; HME, health maintenance examination.

<sup>a</sup>Unweighted frequencies, weighted numbers, and weighted percentages of column based on valid responses for category.

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**Table 2**

Selected Characteristics of US African American Primary Care Physicians' Practices When Consulting With Male Patients About Prostate Cancer Screening.

PCP Characteristics	Offer PSA to Men During HMEs		Discussions About Prostate Cancer Screening Tests		Discussion Policy to Try to Talk the Patient Into Getting the Screening Tests	
	n (%) <sup>a</sup>	P	n (%) <sup>a</sup>	P	n (%) <sup>a</sup>	P
All PCPs <sup>b</sup>	599 (93.8)		601 (82.6)		577 (76.5)	
Individual						
Gender		.172		.611		.033
Male	284 (92.5)		259 (83.4)		239 (80.1)	
Female	273 (95.3)		236 (81.8)		194 (72.4)	
Age (years)		.087		.476		.187
32-49	341 (95.1)		301 (83.4)		251 (74.7)	
50+	204 (91.9)		183 (81.0)		174 (79.6)	
Years practicing medicine		.874		.925		.336
1-15	331 (93.6)		293 (82.6)		250 (75.1)	
16+	219 (94.0)		195 (82.3)		178 (78.6)	
Practice related		.708		.024		.251
Practice location						
Rural	86 (92.4)		68 (72.8)		69 (80.1)	
Suburban	173 (95.0)		158 (85.6)		142 (80.5)	
Urban inner city	165 (94.4)		152 (86.7)		124 (72.3)	
Urban non-inner city	118 (92.2)		103 (78.8)		88 (74.3)	
Type of practice		.003		.247		.003
Solo practice	208 (95.9)		189 (86.4)		178 (84.1)	
Single specialty group	152 (91.1)		136 (80.3)		118 (74.0)	
Multispecialty group	163 (96.5)		139 (82.1)		118 (75.3)	
Other type of practice	21 (76.8)		21 (73.2)		13 (51.5)	
Weekly patient volume		.342		.937		<.001
<100 patients per week	301 (93.2)		268 (82.7)		219 (70.7)	
100+ patients per week	250 (95.2)		220 (82.5)		209 (84.0)	

PCP Characteristics	Offer PSA to Men During HMEs		Discussions About Prostate Cancer Screening Tests		Discussion Policy to Try to Talk the Patient Into Getting the Screening Tests	
	n (%) <sup>a</sup>	P	n (%) <sup>a</sup>	P	n (%) <sup>a</sup>	P
Hours worked per week		.794		.346		.001
0–30	119 (92.6)		103 (77.9)		77 (63.4)	
31–40	259 (93.8)		230 (83.8)		204 (78.8)	
41+	150 (94.6)		135 (83.4)		128 (81.6)	
% AA in practice		.026		.210		.014
0–20	142 (90.0)		125 (79.2)		103 (69.0)	
21–100	415 (95.2)		370 (83.8)		330 (79.1)	
Screening related						
Who decides whether patient should be screened?		.352		.100		.003
PCP decides or mostly decides	183 (94.9)		151 (77.6)		151 (85.1)	
PCP and patient/family decide	289 (93.8)		262 (84.6)		220 (73.3)	
Patient/family decide or mostly Decide	71 (90.1)		69 (86.2)		50(66.3)	

Abbreviations: AA, African American; PCP, primary care physician; PSA, prostate-specific antigen; HME, health maintenance examination.

<sup>a</sup>Unweighted frequencies and weighted percentages of column based on valid responses for category.

<sup>b</sup>PCPs who responded “yes” to each outcome: offers PSA to men during HME, conducts discussions about prostate cancer screening tests, has a discussion policy to try to talk the patient into getting the screening tests.

**Table 3**

Adjusted Odds for US African American Primary Care Physicians and Offered PSA Test, Discussed With Men Prostate Cancer, and Encouraged Men to Take the Screening Tests by Selected PCP Characteristics.

PCP Characteristics	Offer PSA to Men During HMEs <sup>a</sup> (n = 555)		Discussions With Men About Prostate Cancer Screening Tests <sup>a</sup> (n = 566)		Discussion Policy to Try to Talk the Patient Into Getting the Screening Tests <sup>a</sup> (n = 547)	
	AOR (95% CI)	P	AOR (95% CI)	P	AOR (95% CI)	P
Gender		.16		—		.29
Male	Ref				Ref	
Female	1.81 (0.80–4.13)				0.78 (0.50–1.23)	
Age (years)		.19		—		.51
31–49	Ref				Ref	
50+	0.60 (0.28–1.28)				1.17 (0.73–1.87)	
Years practicing medicine		—		—		—
1–15						
16+						
Practice location		—		.04		
Rural			Ref			
Suburban			2.24 (1.18–4.26)			
Urban inner city			2.43 (1.24–4.76)			
Urban non–inner city			1.39 (0.72–2.67)			
Practice type		.04		—		.13
Solo practice	Ref				Ref	
Single specialty group	0.41 (0.17–1.00)				0.70 (0.41–1.20)	
Multispecialty group	1.05 (0.33–3.26)				0.65 (0.37–1.14)	
Other type of practice	0.15 (0.05–0.49)				0.32 (0.11–0.91)	
Weekly patient volume		—		—		.07
<100 patients per week					Ref	
100+ patients per week					1.58 (0.95–2.62)	
Hours worked per week		—		—		.10
0–30					Ref	
31–40					1.83 (1.05–3.21)	
41+					1.85 (0.94–3.64)	

PCP Characteristics	Offer PSA to Men During HMEs <sup>a</sup> (n = 555)		Discussions With Men About Prostate Cancer Screening Tests <sup>a</sup> (n = 566)		Discussion Policy to Try to Talk the Patient Into Getting the Screening Tests <sup>a</sup> (n = 547)	
	AOR (95% CI)	P	AOR (95% CI)	P	AOR (95% CI)	P
% AA in practice		.04		.22		.05
0–20	Ref		Ref		Ref	
21–100	2.26 (1.05–4.89)		1.36 (0.83–2.23)		1.60 (1.01–2.54)	
Who decides whether patient should be screened		—		.17		.04
PCP decides or mostly decides			Ref		Ref	
PCP and patient/family decide			1.55 (0.96–2.53)		0.53 (0.31–0.92)	
Patient/family decide or mostly decide			1.88 (0.86–4.10)		0.44 (0.22–0.91)	

Abbreviations: AA, African American; PCP, primary care physician; PSA, prostate-specific antigen; HME, health maintenance examination; Ref, reference category; AOR, adjusted odds ratio; CI, confidence interval.

<sup>a</sup>Model includes all variables in Table 2 excluding those variables with *P* values >.20.