

**Helping You Take Care of  
Yourself Men of Color Prostate  
Health Workshops**

Final Report

March 1, 2013

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## EXECUTIVE SUMMARY

Prostate cancer, a public health priority in the Commonwealth of Massachusetts, is the second-leading cause of cancer death among men. In particular, men of color ages 40 and older are disproportionately affected by the disease with the incidence of prostate cancer in Massachusetts almost 1.5 times higher for black men than white men (Massachusetts Department of Public Health 2012, Centers for Disease Control and Prevention 2012). The risk for prostate cancer increases with age for men of all races. To improve early detection and treatment for populations at higher risk for the disease, the American Cancer Society and the US Preventive Services Task Force recommend that discussions with a provider about screening should begin at age 40 (American Cancer Society 2013; Moyer and the US Preventive Services Task Force).

To improve survival and address disparities in the disease, the Massachusetts Department of Public Health (MDPH) supports health education workshops that are part of its *Helping You Take Care of Yourself* (HYTCOY) curricula. The primary goals of the workshops are to increase participants' knowledge about prostate cancer and screening and equip them to speak to their health care providers about the issue. Community health workers (CHWs) recruit men in the community to participate in the workshops and deliver the HYTCOY prostate curriculum, which provides men with basic information about the physiology of the prostate and prostate cancer risk factors, signs and symptoms, and screenings such as digital rectal exams (DREs) and prostate-specific antigen (PSA) tests.

This report describes the knowledge gain among HYTCOY prostate health workshop participants as measured by scores on pre-tests administered immediately before the workshops and post-tests administered immediately after the workshops. Knowledge gain is examined by demographic characteristics and prior screening knowledge and behavior. The workshops were delivered from May to August 2012 by CHWs from three community-based organizations (CBOs) funded by MDPH's Men of Color program. The three participating CBOs included the Refugee and Immigrant Assistance Center (RIAC); Mosaic Cultural Complex, Inc. (MCC); and YMCA of Greater Springfield (YMCA). The overall goal of the Men of Color Program is to improve health outcomes and reduce health disparities in Massachusetts. The CBOs help to accomplish this goal by developing and implementing action plans to support innovative and sustainable policy, systems, and environmental changes and providing linkages between the community and the health care system to promote wellness and reduce chronic diseases amongst men of color in Massachusetts. Participating organizations include community health centers and CBOs serving minority and marginalized populations. Under agreement with MDPH, the three Men of Color CBOs incorporated delivery of the HYTCOY prostate curriculum among their activities, targeting recruitment to black men ages 40 to 64. The findings include the following:

- **Participant demographics and prior screening knowledge and behavior.** Most workshop participants (56 percent) were not within the target age range of 40 to 64, but almost three-quarters were men of color. Most workshop participants were younger than 40, black, non-Hispanic, proficient in English, born in the United States, insured under Medicaid, and high school graduates.
  - Most workshop participants ages 40 and older (62.6 percent) reported receiving a prostate cancer screening (DRE or PSA test) in the past. Black/African American men were 6.7 percentage points less likely to report receiving a screening than were white men (63.9 versus 70.6 percent, respectively). Men who reported having health insurance or a regular health care provider were 15.4 and

20.4 percentage points more likely, respectively, to have received a screening in the past than those who did not.

- Among workshop participants ages 40 and older, 54.8 percent had discussed prostate cancer screening with a health care provider before attending the workshop. The proportion of men speaking to their providers about prostate cancer screening was greater among those with higher education levels and those with health care providers.
- **Knowledge gain.** Men were administered identical tests of knowledge about prostate health before and after the workshop. Pre- and post-test scores demonstrate that knowledge increased among workshop participants on average. Scored on a scale of 0 to 5, the mean pre-test score among workshop participants was 3.7 and the mean post-test score was 4.2. Nearly half of workshop participants who completed both tests increased their scores from the pre- to post-tests, though differential results in knowledge gain were found by individual question. Approximately one-eighth had a decrease in scores between the two tests; and the remainder had no change in test scores. When stratified by demographics, most subgroups had a similar trend in knowledge gain as that seen overall.
- **Satisfaction.** Analysis of the evaluation forms showed that participants were generally satisfied with the workshops. Most of the participants (90.8 percent) said they would recommend the workshop to family or friends; rated the group leader as good or excellent (88.0 percent), with excellent as the highest rating; and rated the workshops overall as good or excellent (87.2 percent), with excellent as the highest rating.

In summary, this analysis suggests that the HYTCOY prostate cancer unit workshops led to short-term increases in knowledge among participants. In addition, the knowledge gain experienced by the men who attended these workshops was similar to that found in a previous assessment, both overall and when examined by demographic categories. Previous workshops were conducted in similar types of venues by different CBOs, such as CBO offices, halfway houses, community health centers, housing developments, and private residences. The previous assessment included a higher proportion of men in the target age range of 40 to 64, a lower proportion of men who used the English version of the forms, and a higher proportion of men born outside the United States. The comparability in results given differences in the population served indicates that the curriculum might be able to achieve similar effects on knowledge gain across settings and audiences.

However, when interpreting results from this study, there are several key considerations. First, the method used to recruit men to participate in these workshops was not random. These men represent a convenience sample and are, therefore, not necessarily representative of all men in Massachusetts. Because CBOs educated all men regardless of whether they were in the target population of black men ages 40 to 64, the analysis includes men outside of this group. Therefore, the results for this convenience sample of men also cannot be generalized to the overall population of black men ages 40 to 64 in Massachusetts, let alone all men in the Commonwealth. In addition, knowledge gain from pre- to post-tests does not enable us to assess the longevity of knowledge retention or whether gains in knowledge led to changes in behaviors related to screening. Another study of the HYTCOY prostate curriculum is currently underway that will help to address some of the limitations of the analyses presented in this report and provide further context to the results. This other study includes a follow-up survey component to assess knowledge retention over time and behavior change; results from that study will be available in summer 2013.

## I. INTRODUCTION

Prostate cancer, a public health priority in the Commonwealth of Massachusetts, is the second-leading cause of cancer death among men. Healthy People 2020 established an objective to reduce prostate cancer-related mortality to 21.2 deaths per 100,000 males by the end of this decade (Healthy People 2012). Between 2005 – 2009, the prostate cancer mortality rate among Massachusetts males was higher than the Healthy People 2020 objective at 23.1 per 100,000 (Massachusetts Department of Public Health 2012). Specifically, men of color ages 40 and older are disproportionately affected by the disease in the Commonwealth. The incidence of prostate cancer is almost 1.5 times higher for black men than for white men, and the risk for prostate cancer increases with age for men of all races (Massachusetts Department of Public Health 2012, Centers for Disease Control and Prevention 2012). To improve early detection and treatment for populations at higher risk for the disease, the American Cancer Society and US Preventive Services Task Force recommend that discussions with a provider about screening should begin at age 40 (American Cancer Society 2013; Moyer and the US Preventive Services Task Force).

To reduce the rate of prostate cancer-related mortality to the Healthy People 2020 objective and address health disparities in the disease, the Commonwealth supports several initiatives to increase awareness and early detection, including the provision of health education workshops for men of color ages 40 and older. The Massachusetts Department of Public Health (MDPH) funds the health education workshops, which use its *Helping You Take Care of Yourself* (HYTCOY) curricula. The workshops provide men with basic information about the physiology of the prostate and prostate cancer risk factors, signs and symptoms, and screenings such as digital rectal exams (DREs) and prostate-specific antigen (PSA) tests. The education sessions equip and encourage men to have discussions with their providers about their prostate cancer risk and if a screening might be appropriate for them. Workshop participants are also asked to provide information about their demographics and previous screening behaviors as well as to take pre- and post-tests assessing knowledge related to both prostate cancer and screening. Community health workers (CHWs) are trained to deliver the educational workshops to people in their communities.<sup>1</sup> Since the prostate health workshops began in 2009, 1,180 men have been educated across the Commonwealth.

This report describes the knowledge gain among HYTCOY prostate health workshop participants as measured by scores on pre-tests administered immediately before the workshops and post-tests administered immediately after them. Knowledge gain is examined by demographic characteristics and prior screening knowledge and behavior. The workshops were delivered from May to August 2012 by CHWs from three community-based organizations (CBOs) funded by the MDPH's Men of Color program. These sites included Refugee and Immigrant Assistance Center (RIAC); Mosaic Cultural Complex, Inc. (MCC); and YMCA of Greater Springfield (YMCA). The overall goal of the Men of Color Program is to improve health outcomes and reduce health disparities in Massachusetts. The CBOs help to accomplish this goal by developing and implementing action plans to support innovative and sustainable policy, systems, and environmental changes and providing linkages between the community and the health care system to promote

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<sup>1</sup> The HYTCOY curricula were designed to increase preventive health screening rates for members of underserved populations. When first developed in 2006, the curricula included units on breast and cervical health. In 2007, a cardiovascular health unit was added and, beginning in 2009, a prostate health unit was included. For more about the HYTCOY curricula, please contact Ms. Marilyn Gardner at [marilyn.gardner@state.ma.us](mailto:marilyn.gardner@state.ma.us).

wellness and reduce chronic diseases amongst men of color in Massachusetts. Participating organizations include community health centers and CBOs serving minority and marginalized populations. Under agreement with MDPH, the three Men of Color CBOs incorporated delivery of the HYTCOY prostate curriculum among their activities, targeting recruitment to black men ages 40 to 64. Chapter II presents the demographics and backgrounds of those educated by the CHWs and Chapter III discusses the knowledge gain among participants. In the final chapter, the implications of the findings for future outreach and implementation of the workshops are discussed. Appendix A provides information about the methods used for data collection and analysis.

## II. DEMOGRAPHICS AND SCREENING BACKGROUNDS OF WORKSHOP PARTICIPANTS

The three CBOs received funding to recruit 250 men, but educated 258 men in total (Table II.1). Each CBO exceeded its specific recruitment objective during the workshop period. However, only 27 percent of the educated men were members of the target population (black men ages 40 to 64). The three top reasons that motivated members of the target population to attend the workshops (a family member or friend had prostate cancer, the man's provider talked to him about prostate cancer, or he heard something about prostate cancer in the news) were all factors beyond the CBO's ability to influence. Review of the venues at which CBOs conducted the workshops showed that many of the workshops took place at events such as basketball tournaments, which did not cater specifically to members of the target population. A community assessment of the venues that men within the target population frequent might help CBOs better direct recruitment efforts in the future.

**Table II.1. Number of Workshop Participants, by Site**

Site	Recruitment Target	Number Educated	Number in Target Population <sup>a</sup>	Percentage Educated in Target Population
<b>TOTAL</b>	<b>250</b>	<b>258</b>	<b>69</b>	<b>27</b>
Mosaic Cultural Complex, Inc.	100	104	14	14
Refugee and Immigrant Assistance Center	50	51	17	33
YMCA of Greater Springfield	100	103	38	37

<sup>a</sup>Men were classified as being part of the target population for the prostate unit if they were ages 40 to 64 and self-identified as Black, African American, African, Cape Verdean, Haitian Creole, or some type of multiracial or multiethnic group that includes one of the previously named groups.

The rest of this chapter discusses the demographic distribution of the men educated, their previous screening behavior, and previous discussions they had with health care providers about prostate cancer screening. An example of the demographic form used to collect participants' self-reported data can be found in Appendix B and characteristics of the CHWs that delivered the workshops are provided in Appendix C.

### A. Demographic Characteristics of Workshop Participants

The analysis of demographics included all 258 men who attended the workshops. Overall, most workshop participants were younger than 40 (54.7 percent), black (58.5 percent), non-Hispanic (66.3 percent), proficient in English (88.4 percent), born in the United States (70.5 percent), insured under Medicaid (59.7 percent), and high school graduates (75.2 percent) (Table II.2). Notably, CHWs educated a large proportion of men who were younger than the target population. In addition,

almost 90 percent of workshop participants said that they had some kind of health insurance, indicating that they likely had coverage for screening and other health care (87.6 percent).

**Table II.2. Demographic Characteristics of Workshop Participants**

Characteristic	Number	Percentage
<b>Total</b>	258	100.0
<b>Age</b>		
Younger than 40	141	54.7
40 to 64	112	43.4
65 and older	3	1.2
Unknown	2	0.8
<b>Race<sup>a</sup></b>		
Black/African American	151	58.5
White	42	16.3
Other	21	8.1
Unknown	44	17.1
<b>Ethnicity</b>		
Hispanic/Latino	83	32.2
Not Hispanic/Latino	171	66.3
Unknown	4	1.6
<b>Language of Demographic Form</b>		
English	228	88.4
Spanish	30	11.6
<b>Country of Birth</b>		
Born in United States	182	70.5
Born in U.S. territories	38	14.7
Born in other country	33	12.8
Fewer than 5 years in U.S.	6	18.2
More than 5 years in U.S.	18	54.6
Unknown length of time in U.S.	9	27.3
Unknown	5	1.9
<b>Health Insurance</b>		
Yes	226	87.6
Private	52	20.2
Medicare	20	7.8
Medicaid, MassHealth, or CommonHealth	154	59.7
Other public insurance	10	3.9
No	21	8.1
Unknown	11	4.3
<b>Education</b>		
Less than high school	51	19.8
High school/GED/training program	106	41.1
College	88	34.1
Other/unknown	13	5.0

Note: This analysis included all 258 men who attended the workshops.

<sup>a</sup> Participants who self-identified as Black, African American, African, Cape Verdean, Haitian Creole, or some type of multiracial or multiethnic group that includes one of the previously named groups were coded as Black or African American. This was done to match the definition of the target population. Participants who self-identified as White and not Black or African American were coded as White. Participants who did not provide a response were coded as Unknown. All other participants were coded as Other.

GED = general equivalency diploma.

## B. Screening Behavior

To provide context to the assessments of knowledge gain and further characterize the population served, the analysis examined whether participants had received previous screenings. Prior screening history can lead to higher baseline knowledge of prostate cancer. However, because prostate cancer screening is not recommended for all men, a lack of screening is not necessarily indicative of a lack of knowledge or access to screening. This portion of the analysis included 115 men ages 40 and older, as prostate cancer screening is typically recommended for this age group.

On the demographic form, men were asked about their most recent prostate screening, PSA test or DRE. Table II.3 presents these answers to provide information about participants' receipt of either screening test, both overall and by various demographic factors. Appendix D, Tables D.1 and D.2 provide supplemental information about receipt of each type of screening separately.

Most workshop participants ages 40 and older (62.6 percent) reported receiving a prostate cancer screening in the past (Table II.3). The percentage that had ever received a DRE was 14.8 points higher than the percentage that had ever received a PSA (Appendix D). Black/African American men were 6.7 percentage points less likely to report receiving a screening than were white men (63.9 versus 70.6 percent, respectively). However, black/African American men were more likely to report having a PSA than were white men (50.0 versus 41.2 percent, respectively) (Appendix D). Men who reported having health insurance or a regular health care provider were 15.4 and 20.4 percentage points more likely, respectively, to have received a screening in the past than those who did not. Almost 80 percent of men reporting that they had a college education had received a prior screening compared with about half of men with a high school or less than a high school education.

**Table II.3. Receipt of Prostate Cancer Screening Among Male Workshop Participants Ages 40 and Older, by Demographic Characteristics and Interactions with Health Care Providers**

	Number	Previous Prostate Cancer Screening		
		Yes	No	Unknown
		Percentage		
<b>Total</b>	115	62.6	34.8	2.6
<b>Age</b>				
40 to 64	112	62.5	35.7	1.8
65 and older	3	66.7	0.0	33.3
<b>Race<sup>a</sup></b>				
Black/African American	72	63.9	31.9	4.2
White	17	70.6	29.4	0.0
Other	6	66.7	33.3	0.0
Unknown	20	50.0	50.0	0.0
<b>Ethnicity</b>				
Hispanic/Latino	28	50.0	50.0	0.0
Not Hispanic/Latino	84	69.1	28.6	2.4
Unknown	3	0.0	66.7	33.3
<b>Language of Demographic Form</b>				
English	103	65.1	32.0	2.9
Spanish	12	41.7	58.3	0.0
<b>Country of Birth</b>				
Born in United States	75	60.0	37.3	2.7
Born in U.S. territories	19	63.2	36.8	0.0

	Number	Previous Prostate Cancer Screening		
		Yes	No	Unknown
		Percentage		
Born in other country	18	83.3	16.7	0.0
Unknown	3	0.0	66.7	33.3

Table II.3 (continued)

	Number	Previous Prostate Cancer Screening		
		Yes	No	Unknown
		Percentage		
<b>Health Insurance</b>				
Yes	104	65.4	33.7	1.0
Private	26	76.9	23.1	0.0
Medicare	11	54.5	45.5	0.0
Medicaid, MassHealth, or CommonHealth	72	62.5	36.1	1.4
Other public insurance	4	100	0.0	0.0
No	8	50.0	50.0	0.0
Unknown	3	0.0	33.3	66.7
<b>Education</b>				
Less than high school	21	52.4	47.6	0.0
High school/GED/training program	47	53.2	44.7	2.1
College	45	77.8	17.8	4.4
Other/unknown	2	50.0	50.0	0.0
<b>Have Regular Health Care Provider</b>				
Yes	90	67.8	32.2	0.0
No	19	47.4	52.6	0.0
Unknown	6	33.3	16.7	50.0
<b>Discussed Prostate Cancer Screening with Health Care Provider</b>				
Yes	63	79.4	20.6	0.0
No	38	42.1	57.9	0.0
Unknown	14	42.9	35.7	21.4

Notes: This analysis included 115 men ages 40 and older who attended the workshops.

Prostate cancer screening includes PSA tests or DREs.

Men participating in this workshop were not randomly selected and represent a convenience sample. As a result, the sample of participating men is not representative of a larger population. Therefore, statistical tests were not conducted to assess differences between subgroups, as the purpose of these tests is to assess whether the differences in estimates from two subgroups are statistically significant—that is, likely not due to random variation.

<sup>a</sup> Participants who self-identified as Black, African American, African, Cape Verdean, Haitian Creole, or some type of multiracial or multiethnic group that includes one of the previously named groups were coded as Black or African American. This was done to match the definition of the target population. Participants who self-identified as White and not Black or African American were coded as White. Participants who did not provide a response were coded as Unknown. All other participants were coded as Other.

DRE = digital rectal exam; GED = general equivalency diploma; PSA = prostate-specific antigen.

### C. Previous Discussion of Prostate Cancer Early Detection and Screening with a Health Care Provider

As with having a previous screening, a previous discussion with a clinician about prostate cancer screening could also increase baseline knowledge. Among the 115 workshop participants ages 40 and older, 54.8 percent had discussed prostate cancer screening with a health care provider before attending the workshop (Table II.4). This distribution was generally similar across racial, ethnic, and language categories. In addition, the proportions of men speaking to their providers about prostate cancer screening were higher for those with greater education levels: 66.7 percent for those with a college education, 51.1 percent for those with a high school education, and 42.9 percent for those having less than a high school education. In addition, 61.1 percent of those with a regular health care provider had discussed prostate cancer screening with their provider before the workshop, compared with 36.8 percent of those who did not have a regular health care provider.

**Table II.4. Discussion of Prostate Cancer Early Detection/Screening with a Health Care Provider Among Male Workshop Participants Ages 40 and Older, by Demographic Characteristics**

	Number	Discussed Prostate Cancer Early Detection or Screening with Health Care Provider		
		Yes	No	Unknown
		Percentage		
<b>Total</b>	115	54.8	33.0	12.2
<b>Age</b>				
40 to 64	112	55.4	33.9	10.7
65 and older	3	33.3	0.0	66.7
<b>Race<sup>a</sup></b>				
Black	72	58.3	29.2	12.5
White	17	47.1	35.3	17.7
Other	6	33.3	33.3	33.3
Unknown	20	55.0	45.0	0.0
<b>Ethnicity</b>				
Hispanic/Latino	28	50.0	46.4	3.6
Not Hispanic/Latino	84	56.0	29.8	14.3
Unknown	3	66.7	0.0	33.3
<b>Language of Demographic Form</b>				
English	103	55.3	32.0	12.6
Spanish	12	50.0	41.7	8.3
<b>Country of Birth</b>				
Born in United States	75	58.7	29.3	12.0
Born in U.S. territories	19	42.1	57.9	0.0
Born in other country	18	61.1	22.2	16.7
Unknown	3	0.0	33.3	66.7
<b>Health Insurance</b>				
Yes	104	56.7	35.6	7.7
Private	26	73.1	23.1	3.9
Medicare	11	63.6	36.4	0.0
Medicaid, MassHealth, or CommonHealth	72	50.0	40.3	9.7
Other public insurance	4	100.0	0.0	0.0
No	8	50.0	12.5	37.5
Unknown	3	0.0	0.0	100
<b>Education</b>				
Less than high school	21	42.9	52.4	4.8

		Discussed Prostate Cancer Early Detection or Screening with Health Care Provider		
		Yes	No	Unknown
High school/GED/training program	47	51.1	31.9	17.0
College	45	66.7	24.4	8.9
Other/unknown	2	0.0	50.0	50.0
<b>Have Regular Health Care Provider</b>				
Yes	90	61.1	33.3	5.6
No	19	36.8	42.1	21.1
Unknown	6	16.7	0.0	83.3

Table II.4 (continued)

Notes: This analysis included 115 men ages 40 and older who attended the workshops.

Men participating in this workshop were not randomly selected and represent a convenience sample. As a result, the sample of participating men is not representative of a larger population. Therefore, statistical tests were not conducted to assess differences between subgroups, as the purpose of these tests is to assess whether the differences in estimates from two subgroups are statistically significant—that is, likely not due to random variation.

<sup>a</sup> Participants who self-identified as Black, African American, African, Cape Verdean, Haitian Creole, or some type of multiracial or multiethnic group that includes one of the previously named groups were coded as Black or African American. This was done to match the definition of the target population. Participants who self-identified as White and not Black or African American were coded as White. Participants who did not provide a response were coded as Unknown. All other participants were coded as Other.

GED = general equivalency diploma.

### III. KNOWLEDGE GAIN AMONG WORKSHOP PARTICIPANTS

The primary goals of the workshops are to increase participants' knowledge about prostate cancer and screening and equip them to speak to their health care providers about the issue. To assess knowledge gain among participants, men were administered identical tests about prostate health immediately before and after the two-hour workshops. The tests included five questions related to prostate cancer risk factors, screening, and symptoms. The complete test forms are included in Appendix B.

#### A. Overall Knowledge Gain Between Pre- and Post-test

This portion of the analysis includes 230 workshop participants who answered all questions on pre- and post-tests; participants who had a missing answer on either test were not included because it cannot be inferred if a missing answer represents a correct or incorrect response. Pre- and post-test scores demonstrate that knowledge increased among workshop participants on average (Table III.1). Each pre- and post-test was scored on a scale of 0 to 5; a correct answer corresponded to 1 point and an incorrect answer corresponded to 0 points. The mean pre-test score among workshop participants was 3.7 and the mean post-test score was 4.2. Overall, nearly half of workshop participants who completed both tests increased their scores between the pre- and post-tests and approximately one-eighth had a decrease in their scores between the two tests; the remainder of the participants did not have a change in test scores. Appendix D, Table D.3 provides additional information on the distribution of scores by pre- and post-test.

When stratified by participant demographics, mean test scores increased between pre- and post-tests for most racial, ethnic, language, country of birth, and health insurance categories. Mean test scores also increased among those who had prior exposure to prostate health information, including those with previous screenings and who had previous discussions with their providers. Notably, the curriculum appeared to contribute to a slightly greater knowledge gain for men who had not previously discussed prostate cancer screening with a health care provider or received a prostate cancer screening than for those who had previously engaged in such discussions or screenings. This was due to both lower pre-test scores and higher post-test scores when compared with participants who had previously discussed prostate cancer screening with a health care provider or received a prostate cancer screening. This might indicate that the program is more useful for men who have not been exposed to this information before.

**Table III.1. Prostate Knowledge on Pre-Tests and Post-Tests, by Demographic Characteristics and Interactions with Health Care Providers for Workshop Participants**

	Number	Pre-Test	Post-Test	Percentage with Increased Score	Percentage with Decreased Score	Percentage with No Change in Score
		Mean Score	Mean Score			
<b>Total</b>	230	3.7	4.2	47.0	12.6	40.4
<b>Age</b>						
Younger than 40	131	3.6	4.2	51.9	13.0	35.1
40 to 64	96	3.8	4.3	40.6	11.5	47.9
65 and older	1	3.0	4.0	100	0.0	0.0
Unknown	2	2.0	1.0	0.0	50.0	50.0
<b>Race<sup>a</sup></b>						
Black/African American	134	3.7	4.3	49.3	12.7	38.1
White	37	3.8	4.3	43.2	10.8	46.0
Other	21	3.8	3.8	28.6	19.1	52.4
Unknown	38	3.5	4.2	52.6	10.5	36.8
<b>Ethnicity</b>						
Hispanic/Latino	75	3.5	4.2	49.3	12.0	38.7
Not Hispanic/Latino	152	3.7	4.3	46.1	11.8	42.1
Unknown	3	3.3	3.0	33.3	66.7	0.0
<b>Language of Demographic Form</b>						
English	204	3.7	4.3	47.1	12.3	40.7
Spanish	26	3.3	3.8	46.2	15.4	38.5
<b>Country of Birth</b>						
Born in United States	165	3.7	4.2	46.7	15.2	38.2
Born in U.S. territories	31	3.5	4.2	38.7	3.2	58.1
Born in other country	30	3.6	4.4	60.0	3.3	36.7
Unknown	4	3.8	3.5	25.0	50.0	25.0
<b>Health Insurance</b>						
Yes	203	3.7	4.2	44.8	12.8	42.4
Private	47	3.9	4.5	51.1	8.5	40.4
Medicare	18	3.7	3.8	38.9	22.2	38.9
Medicaid, MassHealth, or CommonHealth	135	3.6	4.2	43.0	13.3	43.7
Other public insurance	10	3.9	4.7	50.0	10.0	40.0
No	20	3.5	4.4	65.0	5.0	30.0
Unknown	7	3.6	4.0	57.1	28.6	14.3
<b>Education</b>						
Less than high school	44	3.3	4.0	50.0	15.9	34.1
High school/GED/training program	96	3.6	4.3	46.9	10.4	42.7
College	78	3.8	4.3	46.2	10.3	43.6
Other/unknown	12	3.9	3.8	41.7	33.3	25.0
<b>Have Regular Health Care Provider</b>						
Yes	170	3.7	4.3	48.2	11.2	40.6
No	53	3.7	4.1	41.5	15.1	43.4
Unknown	7	3.6	4.0	57.1	28.6	14.3
<b>Discussed Prostate Screening with Health Care Provider</b>						
Yes	76	3.7	4.2	39.5	13.2	47.4
No	128	3.6	4.3	53.1	10.9	35.9
Unknown	26	3.8	4.2	38.5	19.2	42.3

Table III.1 (continued)

	Pre-Test		Post-Test		Percentage with Increased Score	Percentage with Decreased Score	Percentage with No Change in Score
	Number	Mean Score	Mean Score	Mean Score			
Ever Received PSA Test							
Yes	51	3.9	4.2		29.4	9.8	60.8
No	167	3.6	4.3		53.3	12.6	34.1
Unknown	12	3.5	3.8		33.3	25.0	41.7
Ever Received DRE							
Yes	74	3.9	4.2		32.4	12.2	55.4
No	150	3.6	4.3		54.0	12.0	34.0
Unknown	6	3.5	3.8		50.0	33.3	16.7

Notes: This analysis included 230 men who answered all questions on both the pre- and post-test.

Men participating in this workshop were not randomly selected and represent a convenience sample. As a result, the sample of participating men is not representative of a larger population. Therefore, statistical tests were not conducted to assess differences between subgroups, as the purpose of these tests is to assess whether the differences in estimates from two subgroups are statistically significant—that is, likely not due to random variation.

Number is the number of workshop participants who answered all five questions on both pre- and post-tests. Participants that did not respond to a question on either pre- or post-test are not included in the analysis.

<sup>a</sup> Participants who self-identified as Black, African American, African, Cape Verdean, Haitian Creole, or some type of multiracial or multiethnic group that includes one of the previously named groups were coded as Black or African American. This was done to match the definition of the target population. Participants who self-identified as White and not Black or African American were coded as White. Participants who did not provide a response were coded as Unknown. All other participants were coded as Other.

DRE = digital rectal exam; GED = general equivalency diploma; PSA = prostate-specific antigen.

## B. Knowledge Gain by Individual Pre- and Post-Test Question

To provide further insight into changes in composite knowledge scores between pre- and post-tests, the portion of participants with correct responses was examined for each pre- and post-test question (Table III.2). To be included in the analysis for a specific question, a man had to answer the question on both tests. Overall, the percentage of men answering correctly increased for each of the individual questions. The increase between pre- and post-test was greatest for the question relating to when men should begin talking to their doctors about prostate cancer screening (question 2); however, this is also the question that men were least likely to answer correctly on the post-test.

**Table III.2. Prostate Health Knowledge by Pre-Test and Post-Test Questions Among Workshop Participants**

	Number	Correct Answers on Pre-Test	Correct Answers on Post-Test	Percentage Change
		Percentage	Percentage	
1. Men are more likely to get prostate cancer when they are younger	244	77.5	83.2	7.4
2. Starting at age 65, men should start talking to their doctors about testing for prostate cancer	243	50.2	64.6	28.7
3. Men of African descent are at high risk for getting prostate cancer	244	83.2	93.4	12.3
4. Difficulty or pain during urination are signs of prostate problems	243	79.0	92.2	16.7
5. PSA test results are typically higher in men with prostate cancer	238	76.9	91.2	18.6

Note: Number is the number of workshop participants who answered the specific question on both pre- and post-tests. Participants who did not respond to a question on either test are not included in the analysis for that question. Therefore, numbers are not consistent across questions.

PSA = prostate-specific antigen.

#### IV. EVALUATION OF WORKSHOPS

At the end of the workshop sessions, participants completed an evaluation form consisting of four questions regarding whether they would recommend the session to family or friends, their satisfaction with the session overall, their satisfaction with the group leader, and suggestions to improve future workshops. (The evaluation form is provided in Appendix B). The evaluation forms were confidential and did not include identification numbers and, therefore, could not be linked to demographic, pre-test, and post-test forms.

The 242 participants who answered any question on the evaluation form were generally satisfied with the workshops (Table IV.1); 7 other participants provided completely blank evaluation forms that were included in the analysis. Most of the participants (90.8 percent) said they would recommend the workshop to family or friends; rated the group leader as good or excellent (88.0 percent), with excellent as the highest rating; and rated the workshops overall as good or excellent (87.2 percent), with excellent as the highest rating. Though ratings were high across the CBOs, RIAC was less likely to get the highest possible rating compared with other CBOs. For instance, 34.0 percent of RIAC workshop participants rated the workshop as excellent, compared with 45.1 percent of Mosaic participants and 53.0 percent of YMCA participants.

**Table IV.1. Summary of Responses to Evaluation Questions Among Workshop Participants, by Site**

Question	Total		Mosaic Cultural Complex, Inc.		Refugee and Immigrant Assistance Center		YMCA of Greater Springfield	
	#	%	#	%	#	%	#	%
1. Would you suggest that your family or friends come to this health session?								
Yes	226	90.8	95	93.1	39	83.0	92	92.0
No	14	5.6	3	2.9	3	6.4	8	8.0
Unknown	9	3.6	4	3.9	5	10.6	0	0.0
2. Overall, how would you rate this health session?								
Excellent	115	46.2	46	45.1	16	34.0	53	53.0
Good	102	41.0	47	46.1	23	48.9	32	32.0
Average	18	7.2	6	5.9	1	2.1	11	11.0
Fair	5	2.0	1	1.0	1	2.1	3	3.0
Poor	1	0.4	0	0.0	1	2.1	0	0.0
Unknown	8	3.2	2	2.0	5	10.6	1	1.0
3. Overall, how would you rate the group leader?								
Excellent	127	51.0	56	54.9	19	40.4	52	52.0
Good	92	37.0	36	35.3	18	38.3	38	38.0
Average	18	7.2	8	7.8	3	6.4	7	7.0
Fair	2	0.8	0	0.0	1	2.1	1	1.0
Poor	2	0.8	0	0.0	1	2.1	1	1.0
Unknown	8	3.2	2	2.0	5	10.6	1	1.0

Note: This analysis included the 249 men from whom an evaluation form was received; seven completely blank forms were included in the analysis.

Free responses provided by participants on the evaluation forms support the high ratings provided through the closed-ended questions. Among 242 participants who completed any of the questions on the evaluation forms, 112 provided written responses to the question: “Do you have any ideas about how to make the sessions better?” More than half, 60 of these 112 participants, provided comments other than “n/a,” “no,” “none,” “no ideas,” “not at this time,” “not really,” or “nothing.” Among these 60, 31 participants left a positive comment, 21 provided suggestions for improving the session, and 8 provided other types of feedback regarding the sessions.

Examples of positive comments from workshop participants’ evaluation forms include, “The presentation was well done, very informative, eye opening ...” and “Yes! have more of these groups all over the place ... the information that was shared with me by the mentors and group leaders [was] life changing and maybe even life saving.” Participants also suggested that it would be helpful to have a cancer survivor participate in the workshop, invite participants’ wives to the sessions, better address the emotional aspects of learning about the disease, provide information about the role of nutrition, provide more frequent workshops, and include a DVD as part of the presentation. Additionally, one participant suggested including “More of a question-and-answer session because I believe there are a lot of individuals that may be confused.” In terms of other feedback, one participant commented that the workshops were exclusive based on race, and he regretted not being

able to fully participate. Another participant said that the presenter's approach was aggressive, and he felt that he was "being spoken down to." Finally, one participant mentioned that the meeting took longer than expected. However, overall, the workshop participants commented that the workshops were clear and informative and men were excited to receive the information.

## V. DISCUSSION

The underlying framework for conducting the HYTCOY prostate workshops is that education will result in increased awareness about prostate cancer and early detection leading to improved screening behavior—the overall population outcome being more early detection of the disease and reduction in prostate cancer-related mortality in Massachusetts. The findings from this analysis indicate that the HYTCOY prostate cancer unit workshops led to short-term increases in knowledge among participating men, including members of a higher risk population—that is, black men ages 40 to 64. To put the results in context and highlight considerations when interpreting the results, this chapter includes a comparison between current and previous findings and presents the limitations of the study.

### A. Comparison of Current and Previous Findings

Overall, the knowledge gain experienced by the men who attended these workshops was similar to that found in previous assessments; one prior assessment of knowledge gain among 863 prostate workshop participants in 2009 and 2010 showed the average score increase was 0.7 points and 48.4 percent of men demonstrated an increase in knowledge from pre- to post-tests (Lipson 2011). In comparison, the average score increase was 0.5 points and 47.0 percent of men increased knowledge from pre- to post-tests for the current assessment. When examined by demographics, results were similar between the previous and current assessments, in which nearly all demographic groups gained knowledge. For example, among black men, both the previous and current assessments found 0.6 point increases in average scores.

The similarities in knowledge gain between the current and previous studies indicate that the curriculum might be able to achieve similar effects on knowledge gain across various settings and audiences. Both the current and previous studies included workshops conducted at CBO offices, halfway houses, community health centers, housing developments, and private residences. In addition to these venues, the previous study also conducted workshops at churches, educational centers, and barber shops. And, as stated previously, the demographic characteristics varied between the current and previous studies.

Analyses conducted under this study provide further insights into factors associated with knowledge gain and outreach than the previous study. In addition to stratifying results by basic demographics, this study examined knowledge gain by country of birth, health insurance, having a regular health care provider, previous screening experience, or previous discussion about screening with a provider. These additional analyses showed that men who had not previously had prostate cancer screenings or discussed these screenings with a provider had slightly higher levels of knowledge gain compared with men who had previously received or discussed screenings.

### B. Limitations

This study has several limitations related to the recruitment of men and the collection and provision of data, including the use of a convenience sample, length of time between pre- and post-tests, and information available about the workshops.

First, the method used to recruit men to participate in these workshops was not random. These men represent a convenience sample and are, therefore, not necessarily representative of all men in Massachusetts. Because CBOs educated all men regardless of whether they were in the target population of black men ages 40 to 64, the analysis includes men outside of this group. Therefore, the results for this convenience sample of men also cannot be generalized to the overall population of black men ages 40 to 64 in Massachusetts, let alone all men in the Commonwealth. In addition, because the selection of these men was not random, statistical tests comparing two subgroups are not appropriate here because such tests assess whether the differences in estimates from two subgroups are statistically significant—that is, likely not due to random variation. The design of this study does not meet the assumptions underlying the statistical tests, which are meant to work within the framework of probability sampling theory.

Second, even when interpreting results for the population that attended the workshops, systematic bias might also have been introduced in analyses of knowledge gain because men who had missing answers on either test were excluded—that is, men who are more likely to have incomplete scores could be less likely to see an improvement in their score. The 28 men with excluded tests represented 10.9 percent of workshop participants. Of these 28 men, 1 did not answer any questions on the pre-test, 9 did not answer any post-test questions, and 2 did not answer any questions on either test; the remaining 16 did not answer some portion of questions on one of the tests. Generally, the demographic characteristics of the men with missing answers were similar to those of the overall workshop participant population. The only exception was that men with missing answers were older than those in the overall population of workshop participants (64.3 percent were 40 or older versus 44.6 percent in the overall population).

To further determine the extent of the potential bias in knowledge gain results, a sensitivity analysis was conducted that included scores for the 28 men with missing answers in the assessment of knowledge gain. For this sensitivity analysis, a missing answer on a pre-test was counted as correct and on the post-test was counted as incorrect. This approach simulates the maximum possible level of bias by assuming that men with missing answers would have answered missing questions correctly in the pre-test, but incorrectly in the post-test, leading to the smallest possible knowledge gain (or largest knowledge decrease). Using this conservative method for calculating the scores for the 28 men with missing answers, the mean knowledge gain was 0.3 points when they were included compared with 0.5 points when they were excluded. The proportion of men whose scores increased between tests decreased from 47.0 percent when men with missing scores were excluded to 43.4 percent when these men were included. This sensitivity analysis provides a lower-bound estimate of the knowledge change when including all workshop participants, which would still be positive and lead to more than 40 percent of men with an increase in knowledge.

Finally, the pre- and post-tests provide an opportunity to assess immediate knowledge gain; however, they do not enable us to assess the longevity of knowledge retention or whether gains in knowledge led to changes in behaviors related to screening. Information about which CHWs conducted specific workshops was also unavailable and, as a result, limited the examination of knowledge gain by trainer. As a proxy, an analysis of knowledge gain by CBO was conducted and showed that post-test scores were similar across three CBOs (Appendix D, Table D.4). Though it is possible that there could be a trainer effect on outcomes, the average overall effect across trainers on knowledge gain was similar between this round of workshops and previous ones. Another study of the HYTCOY prostate curriculum is currently underway that will help to address some of the limitations of the analyses presented in this report and provide further context to the results. The other study includes a follow-up survey component to assess knowledge retention over time and behavior change; results from that other study will be available in summer of 2013.

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**APPENDIX A**  
**METHODS**

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## A. Curriculum

The *Helping You Take Care of Yourself* (HYTCOY) prostate health module provides information to improve men's awareness and knowledge about prostate cancer. The goal of the curriculum is to equip and encourage men to talk to their health care providers and get screened, if appropriate. The curriculum uses of a PowerPoint presentation, notes, and anatomical models to convey the necessary information, including that about the prostate gland and its function in the body, risk factors for prostate cancer, prostate cancer signs and symptoms, and screenings.<sup>1</sup>

## B. Site Selection, Training, and Workshop Locations

Three community-based organizations (CBOs) participating in the Massachusetts Department of Public Health (MDPH)'s Men of Color program conducted the workshops, including the Refugee and Immigrant Assistance Center (RIAC); Mosaic Cultural Complex, Inc. (MCC); and YMCA of Greater Springfield (YMCA). Before holding workshops with community members, 19 community health workers (CHWs) from the three CBOs attended a training on the prostate health module of the *Helping You Take Care of Yourself* (HYTCOY) curriculum. CBOs held workshops in a variety of locations, including at the CBO offices, community health centers, halfway houses, housing developments, and people's private residences. All three CBOs were chosen because they serve communities that include a high proportion of men of color. Many of the workshops were held at venues where CBOs already had scheduled activities. CBOs actively recruited men for a few of the workshops.

## C. Data Collection

### 1. Workshops

CBOs used the prostate health HYTCOY curriculum and materials developed by MDPH. Workshops lasted approximately two hours. The CHWs started by introducing themselves and asking the participants what they had heard about prostate cancer. At the beginning of the workshop, the participants filled out demographic and pre-test forms. Then the CHWs presented the PowerPoint slides, engaged the participants in group discussions, and answered any additional questions. Afterward, the participants filled out the remaining data collection forms, including the post-test and evaluation forms. CHWs stressed that the data would be kept confidential and that completing the forms was optional.

### 2. Data Collection Forms

CBOs collected data using four standardized forms: demographics, a pre-test of knowledge, a post-test of knowledge, and an evaluation. The demographic, pre-test, and post-test forms were printed with unique identification numbers. The demographic form asked participants to provide basic demographic information, such as name, age, and date of birth, in addition to the health care questions about insurance, previous screenings, and how they heard about the workshops. The pre- and post-test forms are identical: they include five statements about prostate cancer and ask participants if they agree or disagree with the statements. The evaluation form consists of four

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<sup>1</sup> For more information about the HYTCOY curricula, please contact Ms. Marilyn Gardner at [marilyn.gardner@state.ma.us](mailto:marilyn.gardner@state.ma.us).

questions asking participants to rate the health session and the group leader. In addition, the form asks if participants would recommend the workshops to a friend or family member and includes a section in which the participants can provide suggestions to improve future workshops. A complete set of the English versions of the forms is included in Appendix B.

The workshop forms were provided in English and Spanish. The number of participants per workshop ranged from 1 to 46. The three CBOs held 44 workshops and educated 260 unique workshop participants on prostate health; unique participants were defined by name, birth date, and town of residence. After the workshops, CBOs mailed the data collection forms to Mathematica in batches that included a cover sheet for each workshop.

### 3. Data Processing and Cleaning

From May 2012 to August 2012, data were collected from 258 men who participated in workshops held by three CBOs; 249 participants submitted all four forms, that is a demographic form, a pre-test, a post-test, and an evaluation form, though not all answers were necessarily completed on all of the forms. The other 9 men had missing evaluation forms.<sup>2</sup>

The forms were carefully reviewed for completeness, coded, and entered into a Viking database. After data entry was complete, two analytic data sets were created in SAS. The first data set included data from demographic, pre-test, and post-test forms and the second data set contained information from evaluation forms. Each participant in the first data set was assigned a unique identifier composed of a combination of the identification number printed on the demographic form and the session identification number assigned to the workshop. The second data set included de-identified information from the evaluation forms.

The workshop forms received were coded using detailed quality check specifications developed from previous evaluations of the HYTCOY curricula conducted in 2008, 2010, and 2011 (see Trebino et al. 2008 for a more detailed discussion of the methods).<sup>3</sup> After the analysis file was complete, minor data cleaning occurred. For example, two participants who self-identified as female were eliminated from the analysis.

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<sup>2</sup> In May 2012, Mathematica also collected 19 data forms completed by CHWs during the training workshop. The CHWs completed demographic, pre-test, and post-test forms. Results of the tests are presented in Appendix C.

<sup>3</sup> Methods used to code the race variable and calculation of pre- and post-test varied slightly from those used in previous studies. For this round of analysis, we collapsed responses for race into four categories: Black or African American, White, Other, and Unknown. Those who self-identified as Black, African American, African, Cape Verdean, Haitian Creole, or some type of multiracial or multiethnic group that included one of the previously named groups were coded as Black or African American. Men who self-identified as White were coded as White. The Other category also included respondents of mixed race who did not self-report as White, Black, African American, African, Cape Verdean, or Haitian Creole. Previously responses for race and ethnicity were merged into one category in which ethnicity took precedence over race, such that respondents who self-identified as Latino/Hispanic were coded as Hispanic. The previous race/ethnicity category included six subcategories: White, Black, Asian, Hispanic, Other, and Unknown. In addition, participants who reported more than one race were coded as Other; the rest of the categories included participants who reported a single race only. For this study, participants' test scores were calculated only for those men who answered all five test questions. Previously, if a participant did not answer one or more questions on a test, the test score was still calculated with missing responses considered as incorrect.

## D. Data Analysis

The data were analyzed to describe the population educated and to assess health screening behaviors, baseline knowledge, whether the prostate health workshops improved knowledge, and satisfaction with the workshops. To gain a basic understanding of the population served by the curriculum, descriptive analyses were conducted to assess participants' age, race, ethnicity, language, country of birth, length of time in the United States, health insurance, and level of education.<sup>4</sup>

To assess knowledge gain for members of different groups, pre- and post-test scores were analyzed by demographic characteristics (age, race, ethnicity, language, country of birth, and level of education); health access (health insurance status and having a primary health care provider); and previous prostate cancer screening knowledge and behavior (previous discussions about prostate cancer screening with a health care provider and receipt of a prostate cancer screening). To assess satisfaction with the workshops, responses on the evaluation forms were tabulated for the total sample as well as by CBO.

The number of men included in an analysis varied depending on its purpose. For the assessment of demographics, all men who attended the workshop were included in the analysis, as the aim was to understand the characteristics of all participating men. The analysis of demographics included 258 men. In contrast, the analysis of prior screening and discussions with providers about prostate cancer was limited to men ages 40 and older, as this is the recommended age group for which a prostate cancer screening might be appropriate; this analysis included 115 men. The assessment of knowledge gain using overall pre- and post-test scores was limited to men who provided an answer to all questions on the pre- and post-tests; because a missing score cannot be interpreted as correct or incorrect; this analysis included 230 men. Similarly, the analysis of knowledge gain for each question was restricted to men who answered the specific question on both the pre- and post-test. The analysis of questions 1 and 3 included 244 men; questions 2 and 4 included 243 men; and question 5 included 238 men. Finally, the analysis of satisfaction was limited to those who submitted a workshop evaluation form; this analysis included 249 men.

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<sup>4</sup> The data were also analyzed from forms completed by the CHWs from the training session. See Appendix C for more information on results from this analysis.

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**APPENDIX B**  
**WORKSHOP FORMS**

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Date: \_\_\_\_\_ Location: \_\_\_\_\_

## Helping You Take Care of Yourself

### Prostate Cancer Workshop – Demographics Form

1. Name: \_\_\_\_\_

2. Sex:

Male

Female

3. What is your date of birth? \_\_\_\_month \_\_\_\_day \_\_\_\_year

4. How old are you?

under 40

40-49

50-64

65 and over

5. What city or town do you live in? \_\_\_\_\_

6. Were you born in....

One of the 50 states or the District of Columbia

One of the US territories (Puerto Rico, Guam, American Samoa, US Virgin Islands, Mariana Islands, Solomon Islands)

Some other country → **How old were you when you first moved to the United States?**

\_\_\_\_ Age \_\_\_\_ Don't know

7. Are you Latino/Hispanic?

No

Yes → **Which one of these groups best describes you?**

Brazilian

Cuban

Dominican

Mexican, Chicano, Mexican American

Puerto Rican

Some other Hispanic or Latino origin (*please specify*): \_\_\_\_\_

8. What is your race? (*you may check more than one*) Are you.....

Alaska Native or American Indian

Asian

Black or African American

Native Hawaiian or other Pacific Islander

White

Other (*please specify*): \_\_\_\_\_

9. What is the highest grade or level of school you have finished?

I didn't go to school

8th Grade or less

Some high school but did not graduate

High School graduate or GED

Training Program

College

**For Internal Use ONLY**

Organization Name

Trainer Name

Light green

05/11

English

B.3

Date: \_\_\_\_\_ Location: \_\_\_\_\_

Other: (please specify): \_\_\_\_\_

**10. What type of health care coverage (insurance) do you use to pay for most of your medical care? Is it coverage through:**

- Your employer or someone else's employer
- A plan that you or someone else buys
- Medicare
- Medicaid, MassHealth, CommonHealth or MassHealth HMOs offered through Neighborhood Health Plan, Fallon Community Health Plan, Boston Medical Center HealthNet or Network Health or Commonwealth Care
- Free Care or Safety Net
- Other (please specify): \_\_\_\_\_
- I don't have any health coverage (insurance)

**11. Do you have one person you think of as your personal doctor or health care provider?**

- Yes
- No

**12. Have you ever discussed prostate cancer early detection or screening with your healthcare provider?**

- Yes
- No
- Don't know / Not sure

**13. A digital rectal exam is an exam in which a doctor, nurse or other health professional places a gloved finger into the rectum to feel the size, shape, and hardness of the prostate gland. When was your most recent digital rectal exam (DRE)?**

- Within the past year (anytime less than 12 months ago)
- Within the past 2 years (1 year but less than 2 years ago)
- Within the past 3 years (2 years but less than 3 years ago)
- Within the past 5 years (3 years but less than 5 years ago)
- 5 or more years ago
- I have never had a DRE

**14. A Prostate-Specific Antigen test, also called a PSA test, is a blood test used to check men for prostate cancer. When was your most recent prostate specific antigen (PSA) test?**

- Within the past year (anytime less than 12 months ago)
- Within the past 2 years (1 year but less than 2 years ago)
- Within the past 3 years (2 years but less than 3 years ago)
- Within the past 5 years (3 years but less than 5 years ago)
- 5 or more years ago
- I have never had a PSA test

**15. Why did you come to the workshop today?** (*Check yes or no for each statement below*)

One of my friends or relatives had/has prostate cancer

- Yes
- No

I saw something on the news about prostate cancer

- Yes
- No

My health care provider just talked to me about prostate cancer

- Yes
- No

Other (*please explain*)

---

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Date: \_\_\_\_\_  
Location: \_\_\_\_\_

**Helping You Take Care of Yourself – Health Education Session**  
**Pre-test**

**Prostate Health and Prostate Cancer Screening Unit**

For the statements below, please check the box YES if you agree with the statement or NO if you disagree with the statement.

- |   |                          |                          |
|---|--------------------------|--------------------------|
| 1. Men are more likely to get prostate cancer when they are younger.....                                      | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <b>YES</b>               | <b>NO</b>                |
| 2. Starting at the age of 65, men should start talking to their doctor about testing for prostate cancer..... | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <b>YES</b>               | <b>NO</b>                |
| 3. Men of African descent are at high risk for getting prostate cancer.....                                   | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <b>YES</b>               | <b>NO</b>                |
| 4. Difficulty or pain during urination are signs of prostate problems.....                                    | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <b>YES</b>               | <b>NO</b>                |
| 5. PSA test results are typically higher in men with prostate cancer .....                                    | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <b>YES</b>               | <b>NO</b>                |

<b>For Internal Use ONLY</b> Organization Name _____ Trainer Name _____
---

Date: \_\_\_\_\_  
Location: \_\_\_\_\_

**Helping You Take Care of Yourself – Health Education Session**  
Post-test

**Prostate Health and Prostate Cancer Screening Unit**

For the statements below, please check the box YES if you agree with the statement or NO if you disagree with the statement.

- |   |                          |                          |
|---|--------------------------|--------------------------|
| 1. Men are more likely to get prostate cancer when they are younger.....                                      | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <b>YES</b>               | <b>NO</b>                |
| 2. Starting at the age of 65, men should start talking to their doctor about testing for prostate cancer..... | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <b>YES</b>               | <b>NO</b>                |
| 3. Men of African descent are at high risk for getting prostate cancer.....                                   | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <b>YES</b>               | <b>NO</b>                |
| 4. Difficulty or pain during urination are signs of prostate problems.....                                    | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <b>YES</b>               | <b>NO</b>                |
| 5. PSA test results are typically higher in men with prostate cancer .....                                    | <input type="checkbox"/> | <input type="checkbox"/> |
|   | <b>YES</b>               | <b>NO</b>                |

**For Internal Use ONLY**

Organization Name

Trainer Name

Date: \_\_\_\_\_  
Location: \_\_\_\_\_

## Helping You Take Care of Yourself – Health Education Session Participant Evaluation

Please take a minute to let us know how you liked this health education session.

1. Would you suggest that your family or friends come to this health session?

Yes  No

2. Overall, how would you rate this health session?

Poor	Fair	Average	Good	Excellent
1	2	3	4	5

3. Overall, how would you rate the group leader?

Poor	Fair	Average	Good	Excellent
1	2	3	4	5

4. Do you have any ideas about how to make the sessions better? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Thank you for filling out this form! Please pass it in before you leave.

<b>For Internal Use ONLY</b> Organization Name _____ Trainer Name _____
---

## **APPENDIX C**

### **CHARACTERISTICS AND KNOWLEDGE OF TRAINERS**

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Community health workers (CHWs) attended a training session conducted in English in May 2012. All CHWs were male and most were ages 40 to 64 and black non-Hispanic. Most of the CHWs were born in the United States or a U.S. territory; about one-quarter were born in another country. More than half of the CHWs had a college degree. Most CHWs reported having health insurance, one-third had private insurance, and more than half had public insurance (such as Medicaid, MassHealth, CommonHealth, or Medicare). Most CHWs reported having a health care provider and the majority had discussed prostate cancer early detection or screening with their health care providers before the training. Slightly more than half of CHWs reported having had either a digital rectal exam (DRE) or prostate-specific antigen (PSA) screening within the previous 12 months.

**Table C.1. Demographic Characteristics of CHWs**

Characteristic	Number	Percentage
<b>Age</b>		
Younger than 40	7	36.8
40 – 64	12	63.2
65 and older	0	0.0
Unknown	0	0.0
<b>Race<sup>a</sup></b>		
Black/African American	16	84.2
White	1	5.3
Other	1	5.3
Unknown	1	5.3
<b>Ethnicity</b>		
Hispanic/Latino	2	10.5
Not Hispanic/Latino	17	89.5
<b>Language of Demographic Form</b>		
English	19	100
Spanish	0	0.0
<b>Country of Birth</b>		
Born in United States	12	63.2
Born in U.S. territories	1	5.3
Born in other country	5	26.3
Less than 1 year in U.S.	0	0.0
1–5 years in U.S.	1	20.0
More than 5 years in U.S.	3	60.0
Unknown length of time in U.S.	1	20.0
Unknown	1	5.3
<b>Health Insurance</b>		
Yes	18	94.7
Private	6	31.6
Medicare	4	21.1
Medicaid, MassHealth, or CommonHealth	10	52.6
Other public insurance	0	0.0
No	1	5.3
Unknown	0	0.0
<b>Education</b>		
Less than high school	1	5.3
High school/GED/training program	6	31.6
College	11	57.9
Unknown	1	5.3
<b>Have Regular Health Care Provider</b>		
Yes	17	89.5
No	2	10.5
Unknown	0	0.0

Table C.1 (continued)

Characteristic	Number	Percentage
<b>Discussed Prostate Cancer Screening with Health Care Provider</b>		
Yes	14	73.7
No	5	26.3
Unknown	0	0.0
<b>Most Recent Screening</b>		
Less than one year ago	10	52.6
One year but fewer than three years ago	3	15.8
Never had	6	31.6

<sup>a</sup> Participants who self-identified as Black, African American, African, Cape Verdean, Haitian Creole, or some type of multiracial or multiethnic group that includes one of the previously named groups were coded as Black or African American. This was done to match the definition of the target population. Participants who self-identified as White and not Black or African American were coded as White. Participants who did not provide a response were coded as Unknown. All other participants were coded as Other.

GED = general equivalency diploma.

Among CHWs, baseline knowledge of prostate health was high, with the average pre-test score of 4.47 on a five-point scale. After the training, the average score increased to 4.56, though most CHWs saw no increase in their scores between the pre- and post-tests because their baseline scores were already high. For the first four questions on the forms, the percentage of CHWs who responded correctly did not change between the pre- and post-tests (78, 83, 100, and 95 percent, respectively). For question 5, the percentage of CHWs who answered correctly increased from 95 to 100 percent (Table C.2).

Table C.2. Prostate Health Knowledge, by Pre-Test and Post-Test Questions Among CHWs

	Number	Correct Answers on Pre-Test	Correct Answers on Post-Test	Percentage Change
		Percentage	Percentage	
1. Men are more likely to get prostate cancer when they are younger	18	77.8	77.8	0.0
2. Starting at age 65, men should start talking to their doctor about testing for prostate cancer	18	83.3	83.3	0.0
3. Men of African descent are at high risk for getting prostate cancer	19	100	100	0.0
4. Difficulty or pain during urination are signs of prostate problems	19	94.7	94.7	0.0
5. PSA test results are typically higher in men with prostate cancer	19	94.7	100	5.6

Note: Number indicates the number of CHWs who answered the specific question on both the pre- and post-test. Some CHWs did not answer all questions on the test and, therefore, numbers are not consistent across questions.

PSA = prostate-specific antigen.

Among the CHWs who completed the pre- and post-tests, 50 percent answered all five questions correctly on both tests; all questions were answered correctly by 55.6 and 66.7 percent of CHWs on pre- and post-tests, respectively. No CHWs answered fewer than three questions correctly on either a pre- or post-test (Table C.3).

**Table C.3. Percentage of Correct Answers on Pre-Tests and Post-Tests among CHWs**

	Correct Answers on Post-Test		
	3	4	5
Correct Answers on Pre-Test			
3	0.0	0.0	5.6
4	5.6	22.2	11.1
5	5.6	0.0	50.0

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**APPENDIX D**  
**SUPPLEMENTAL TABLES**

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**Table D.1. Receipt of Digital Rectal Exams (DREs) Among Male Workshop Participants Ages 40 and Older, by Demographic Characteristics and Interactions with Health Care Providers**

	Number	Previous DRE		
		Yes	No	Unknown
		Percentage		
<b>Total</b>	115	60.9	35.7	3.5
<b>Age</b>				
40 to 64	112	60.7	36.6	2.7
65 and older	3	66.7	0.0	33.3
<b>Race<sup>a</sup></b>				
Black/African American	72	61.1	34.7	4.2
White	17	70.6	29.4	0.0
Other	6	66.7	16.7	16.7
Unknown	20	50.0	50.0	0.0
<b>Ethnicity</b>				
Hispanic/Latino	28	50.0	46.4	3.6
Not Hispanic/Latino	84	66.7	31.0	2.4
Unknown	3	0.0	66.7	33.3
<b>Language of Demographic Form</b>				
English	103	63.1	34.0	2.9
Spanish	12	41.7	50.0	8.3
<b>Country of Birth</b>				
Born in United States	75	60.0	36.0	4.0
Born in U.S. territories	19	63.2	36.8	0.0
Born in other country	18	72.2	27.8	0.0
Unknown	3	0.0	66.7	33.3
<b>Health Insurance</b>				
Yes	104	64.4	34.6	1.0
Private	26	73.1	26.9	0.0
Medicare	11	54.6	45.5	0.0
Medicaid, MassHealth, or CommonHealth	72	62.5	36.1	1.4
Other public insurance	4	100	0.0	0.0
No	8	37.5	62.5	0.0
Unknown	3	0.0	0.0	100
<b>Education</b>				
Less than high school	21	52.4	47.6	0.0
High school/GED/training program	47	53.2	44.7	2.1
College	45	73.3	22.2	4.4
Other/Unknown	2	50.0	0.0	50.0
<b>Have Regular Health Care Provider</b>				
Yes	90	66.7	33.3	0.0
No	19	47.4	52.6	0.0
Unknown	6	16.7	16.7	66.7
<b>Discussed Prostate Cancer Screening with Health Care Provider</b>				
Yes	63	76.2	23.8	0.0
No	38	42.1	57.9	0.0
Unknown	14	42.9	28.6	28.6

Note: Men participating in this workshop were not randomly selected and represent a convenience sample. As a result, the sample of participating men is not representative of a larger population. Therefore, statistical tests were not conducted to assess differences between subgroups, as the purpose of these tests is to assess whether the differences in estimates from two subgroups are statistically significant—that is, likely not due to random variation.

Table D.1 (continued)

<sup>a</sup> Participants who self-identified as Black, African American, African, Cape Verdean, Haitian Creole, or some type of multiracial or multiethnic group that includes one of the previously named groups were coded as Black or African American. This was done to match the definition of the target population. Participants who self-identified as White and not Black or African American were coded as White. Participants who did not provide a response were coded as Unknown. All other participants were coded as Other.

GED = general equivalency diploma.

**Table D.2. Receipt of Prostate-Specific Antigen (PSA) Tests Among Male Workshop Participants Ages 40 and Older, by Demographic Characteristics and Interactions with Health Care Providers**

	Number	Previous PSA		
		Yes	No	Unknown
		Percentage		
<b>Total</b>	115	46.1	47.0	7.0
<b>Age</b>				
40 to 64	112	45.5	48.2	6.3
65 and older	3	66.7	0.0	33.3
<b>Race<sup>a</sup></b>				
Black/African American	72	50.0	41.7	8.3
White	17	41.2	52.9	5.9
Other	6	33.3	66.7	0.0
Unknown	20	40.0	55.0	5.0
<b>Ethnicity</b>				
Hispanic/Latino	28	35.7	60.7	3.6
Not Hispanic/Latino	84	51.2	41.7	7.1
Unknown	3	0.0	66.7	33.3
<b>Language of Demographic Form</b>				
English	103	47.6	45.6	6.8
Spanish	12	33.3	58.3	8.3
<b>Country of Birth</b>				
Born in United States	75	44.0	49.3	6.7
Born in U.S. territories	19	47.4	47.4	5.3
Born in other country	18	61.1	33.3	5.6
Unknown	3	0.0	66.7	33.3
<b>Health Insurance</b>				
Yes	104	49.0	46.2	4.8
Private	26	65.4	30.8	3.9
Medicare	11	36.4	45.5	18.2
Medicaid, MassHealth, or CommonHealth	72	44.4	52.8	2.8
Other public insurance	4	75.0	0.0	25.0
No	8	25.0	62.5	12.5
Unknown	3	0.0	33.3	66.7
<b>Education</b>				
Less than high school	21	28.6	61.9	9.5
High school/GED/training program	47	38.3	57.5	4.3
College	45	62.2	28.9	8.9
Other/unknown	2	50.0	50.0	0.0
<b>Have Regular Health Care Provider</b>				
Yes	90	52.2	45.6	2.2
No	19	21.1	63.2	15.8
Unknown	6	33.3	16.7	50.0
<b>Discussed Prostate Cancer Screening with Health Care Provider</b>				
Yes	63	66.7	30.2	3.2
No	38	18.4	76.3	5.3
Unknown	14	28.6	42.9	28.6

Note: Men participating in this workshop were not randomly selected and represent a convenience sample. As a result, the sample of participating men is not representative of a larger population. Therefore, statistical tests were not conducted to assess differences between subgroups, as the purpose of these tests is to assess whether the differences in estimates from two subgroups are statistically significant—that is, likely not due to random variation.

Table D.2 (continued)

<sup>a</sup> Individuals are identified as Black/African American here if they self-identified as Black, African American, African, Cape Verdean, Haitian Creole, or some type of multiracial or multiethnic group that includes one of the previously named groups. Other individuals who selected more than one race are reported here as Other. This was done to match the definition of the target population.

GED = general equivalency diploma.

**Table D.3. Percentage of Correct Answers on Pre-Tests and Post-Tests Among Workshop Participants**

	Correct Answers on Post-Test					
	0	1	2	3	4	5
Correct Answers on Pre-Test						
0	0.4	0.0	0.0	0.0	0.0	0.0
1	0.0	0.4	0.0	0.0	0.4	0.0
2	0.0	0.9	0.4	1.7	4.4	6.1
3	0.0	0.9	0.0	7.4	8.3	10.9
4	0.0	0.0	0.9	3.0	14.8	15.2
5	0.0	0.0	0.4	1.3	5.2	17.0

**Table D.4. Prostate Knowledge on Pre-Tests and Post-Tests, by Community-Based Organization for Workshop Participants**

	Number	Pre-Test		Post-Test		
		Mean Score	Mean Score	Percentage with Increased Score	Percentage with Decreased Score	Percentage with No Change in Score
<b>Total</b>	230	3.7	4.2	47.0	12.6	40.4
<b>Community-Based Organization</b>						
MCC	100	3.4	4.2	56.0	10.0	34.0
YMCA	88	4.0	4.3	33.0	18.2	48.9
RIAC	42	3.5	4.2	54.8	7.1	38.1

Notes: This analysis included 230 men who answered all questions on both the pre- and post-test.

Number is the number of workshop participants who answered all five questions on both pre- and post-tests. Participants that did not respond to a question on either pre- or post-test are not included in the analysis.

MCC = Mosaic Cultural Complex, Inc.; RIAC = Refugee and Immigrant Assistance Center; YMCA = YMCA of Greater Springfield.

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