



# Prostate Cancer Screening Using the PSA Test

PROVIDER GUIDE

*A Summary Guide for Primary Care Physicians*

## HOW TO USE THIS GUIDE

This *Provider Guide* and the accompanying *Decision Guide* were developed to help clinicians have a meaningful shared decision making conversation with their patients about the choice to screen for prostate cancer with the prostate-specific antigen (PSA) test.

The *Provider Guide* includes updated evidence about the potential benefits and harms of screening with the PSA test and helps prepare primary care physicians for discussions with patients. The *Decision Guide* is intended to introduce patients to the PSA test, the potential benefits and harms of the test, and their responsibility to determine if screening is right for them.

Patients should review and complete pages 1-3 of the *Decision Guide* on their own. During their visit, the patient and provider should review the entire document and complete the last page together. A workflow for incorporating the *Decision Guide* into consultations is available on page 5.

## BACKGROUND

### ROLE OF PRIMARY CARE CLINICIANS

Primary care clinicians provide routine care for adult men on a regular basis, and are often responsible for helping patients determine which screening tests are done to help them reduce their risk of developing disease or to detect existing disease early. Screening for prostate cancer using the PSA test has been controversial for many years and guidelines are evolving based on emerging evidence. This *Provider Guide* and the *Decision Guide* for patients are intended to support primary care clinicians who are a significant component in the front-line decision making process for patients about whether or not to be screened for prostate cancer with the PSA test.

### EPIDEMIOLOGY

Based on 2015 data, about 164,700 American men will be diagnosed with prostate cancer each year and more than 29,400 will die from the disease.<sup>1</sup> Worldwide, roughly 1 million men receive a new diagnosis of prostate cancer annually and more than 300,000 die from the disease.<sup>2</sup> The risk of developing prostate cancer at some point during a man's lifetime is approximately 11.6 percent (about 1 in 9).<sup>3</sup>

1. Siegel, R. L., et al. CA: A Cancer Journal for Clinicians. 2018.
2. Heijnsdijk, E. A.M., et al. Int. J. Cancer. 2017.
3. National Cancer Institute. 2017.

## SYMPTOMS

Symptoms potentially related to prostate disease include: frequent or painful urination; weak urinary stream; urgency to urinate; increased urination during sleeping hours; difficult, reduced or painful ejaculation; and pain or stiffness in lower back, hips or pelvis. These symptoms may or may not be related to prostate cancer, but should be discussed with a health care provider.

## RISK FACTORS

A patient's age, African American heritage, and family history of prostate cancer may increase their risk for developing prostate cancer. The presence of certain lifestyle factors may also impact risk and outcomes from prostate cancer, including: diabetes, heart disease, obesity, a fatty diet, lack of exercise, and smoking regularly.

## OVERVIEW OF THE EVIDENCE

### USPSTF GUIDELINES

Guidelines on prostate cancer screening from the U.S. Preventive Services Task Force (USPSTF)—including draft updates released in 2017—apply to adult men who have not been previously diagnosed with prostate cancer and have no signs or symptoms of the disease.<sup>4,5</sup>

The guidelines recommend that for men:

- Ages 55 to 69 years, the potential benefits and harms of screening for prostate cancer are closely balanced and the decision about whether to be screened should be an individual one.
- Age 70 years and older, the potential harms of screening are greater than the potential benefits, and these men should not be screened for prostate cancer.

The guidelines offer no recommendation on frequency of screening.

Guidelines on prostate cancer screening are also available from the American Cancer Society (ACS), published in 2010.<sup>6</sup>

### REVIEW OF RECENT EVIDENCE

Most recent evidence from U.S. and European studies support some benefit and recognize known harms from screening men ages 55 and 69 years, and men in younger age groups who are at higher risk. An evidence review conducted by the U.S. Preventive Services Task Force (USPSTF) in developing new guideline recommendations focused largely on two major trials, the Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial (PLCO)<sup>7</sup> and the European Randomized Study of Screening for Prostate Cancer (ERSPC) Trial.<sup>8</sup> The conclusion of the USPSTF evidence review was: "PSA screening for prostate cancer may reduce risk of prostate cancer mortality but is associated with harms including false-positive results, biopsy complications, and overdiagnosis in 20 percent to 50 percent of screen-detected prostate cancers."<sup>9</sup> The result of their review is a draft set of guidelines that focus on shared decision making for men ages 55 to 69 years, as summarized above. USPSTF did not make a clear recommendation on screening for men younger than the age of 55 who may be at higher risk.<sup>4</sup>

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4. U.S. Preventive Services Task Force. 2017.
  5. U.S. Preventive Services Task Force. 2012.
  6. Smith, R. A., et al. CA: A Cancer Journal for Clinicians. 2017.

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7. Andriole G. L., et al. New England Journal of Medicine. 2009.
  8. Schroder F. H., et al. New England Journal of Medicine. 2009.
  9. Agency for Healthcare Research and Quality. 2017.

## SHARED DECISION MAKING

Shared decision making is a collaborative, patient-centered process in which patients and providers make decisions together, within the context of the best evidence and recommendations, and based on the patient's personal values and preferences.

The decision to screen for prostate cancer with the PSA test is one that is best made by a man after reviewing the best available information about the risks and benefits of screening and discussing these options and his decision with a health care provider.

### TIPS TO PROMOTE A SHARED DECISION

- Step 1: Seek your patient's participation in the decision making process.
- Step 2: Help your patient explore and compare the potential benefits and harms of prostate cancer screening, and assess your patient's level of understanding.
- Step 3: Assess your patient's values and preferences about prostate cancer screening.
- Step 4: Reach a decision about prostate cancer screening with your patient.

## KEY TALKING POINTS FOR PATIENTS

### PROSTATE CANCER

- Prostate cancer is the second most common cancer in men in the United States, after skin cancer.
- About 1 in 9 American men will be diagnosed with prostate cancer during his lifetime.
- Many prostate cancers, though not all, grow very slowly and therefore do not need to be treated.

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*A list of risk factors for prostate cancer, as well as the potential benefits and harms of screening, are included in the Decision Guide.*

### RISK FACTORS

- Risk increases with age. The older you are, the more likely you are to be diagnosed with prostate cancer.
- Unless symptoms or risk factors are present, screening is not generally recommended for men younger than 50.
- Men with a close relative who had prostate cancer, and African American men, are at the highest risk for being diagnosed.
- Men with a family history of prostate cancer are 2 times more likely to be diagnosed. Risk increases if multiple family members have been diagnosed or received diagnoses early in life.
- African American men are 1.5 times more likely to develop prostate cancer and 2.5 times more likely to die from the disease than Caucasian men.
- Patients with diabetes, heart disease, and other chronic conditions are more likely to be diagnosed with prostate cancer.
- A fatty diet, sedentary lifestyle, obesity, and smoking are also potential risk factors.

## SCREENING WITH THE PSA TEST

- Screening can include a blood test and sometimes includes a digital rectal exam.
- The PSA test can provide a more accurate assessment of prostate cancer risk than not testing.
- A PSA level above 4.0 ng/mL is generally considered high.
- PSA level can be high when the prostate is enlarged/inflamed, there is a urinary tract infection, or a patient has prostate cancer.
- There is considerable uncertainty about whether PSA screening is beneficial.
- For these reasons, screening is not recommended for everyone.

## TALKING POINTS TO SUPPORT THE PATIENT'S DECISION

- Screening is a decision that is best made by a man after reviewing the risks and benefit. Some men may wish to include family members and other important people in making this decision.
- There is no right or wrong answer when deciding about screening.
- I can answer all your questions about screening as you work toward a decision.
- You can always take more time to decide or reconsider your decision at a future date.

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*A patient's decision about screening should be recorded in the Decision Guide.*

## REFERENCES

1. Siegel R. L., Miller K. D., Jemal A. *Cancer statistics, 2018*. CA: A Cancer Journal for Clinicians. 68(1). January 4, 2018. doi: 10.3322/caac.21442
2. Heijnsdijk, E. A.M., Bangma, C. H., Borràs, J. M., de Carvalho, T. M., Castells, X., Eklund, M., Espinàs, J. A., Graefen, M., Grönberg, H., Lansdorp-Vogelaar, I., Leeuwen, P. J. v., Nelen, V., Recker, F., Roobol, M. J., Vandenbulcke, P., de Koning, H. J. (2017), Summary statement on screening for prostate cancer in Europe. *Int. J. Cancer*. doi:10.1002/ijc.31102.
3. National Cancer Institute Surveillance, Epidemiology, and End Results Program. *Cancer Stat Facts: Prostate Cancer*. Available at <https://seer.cancer.gov/statfacts/html/prost.html>. Accessed 12/20/2017.
4. US Preventive Services Task Force Draft Guidelines, *Prostate Cancer Screening, 2017*. Available at <https://www.uspreventiveservicestaskforce.org/Page/Document/draft-recommendation-statement/prostate-cancer-screening1>. Accessed 12/20/2017.
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6. Smith, R. A., Andrews, K. S., Brooks, D., Fedewa, S. A., Manassaram-Baptiste, D., Saslow, D., Brawley, O. W., Wender, R. C. (2017), *Cancer screening in the United States, 2017: A review of current American Cancer Society guidelines and current issues in cancer screening*. CA: A Cancer Journal for Clinicians, 67: 100–121. doi:10.3322/caac.21392
7. Andriole G. L., Crawford E. D., Grubb R. L., et al. *Mortality Results from a Randomized Prostate-Cancer Screening Trial*. *New England Journal of Medicine*. 360:1310-1319. 2009. doi: 10.1056/NEJMoa0810696
8. Schroder F. H., Hugosson J., Roobol M. J., et al. *Screening and Prostate-Cancer Mortality in a Randomized European Study*. *New England Journal of Medicine*. 360:1320-1328. 2009. doi: 10.1056/NEJMoa0810084
9. Agency for Healthcare Research and Quality. *Evidence Synthesis Number 154. Prostate-Specific Antigen-Based Screening for Prostate Cancer: A Systematic Evidence Review for the US Preventive Services Task Force*. Rockville, MD. April, 2017. Available at <https://www.uspreventiveservicestaskforce.org/Home/GetFileByID/3031>. Accessed 12/20/2017.

# PSA SCREENING DISCUSSION DOCUMENTS AND WORKFLOW

PROVIDER'S RESPONSIBILITIES

JOINT ACTIVITIES

PATIENT'S RESPONSIBILITIES

## BEFORE VISIT

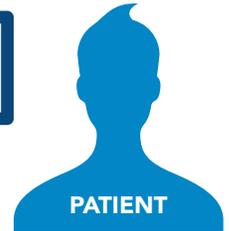
### 1. SCREENING IS CONSIDERED



4. PROVIDER REVIEWS PATIENT'S MEDICAL CHART

2. PATIENT RECEIVES **DECISION GUIDE** PRIOR TO VISIT

3. PATIENT COMPLETES PAGES 1, 2 AND 3 OF DECISION GUIDE BEFORE VISIT OR IN WAITING ROOM



## DURING VISIT



5. PATIENT BRINGS PARTIALLY-COMPLETED DECISION GUIDE TO VISIT

6. PATIENT AND PROVIDER REVIEW DECISION GUIDE PAGES 1, 2 AND 3

7. PATIENT AND PROVIDER COMPLETE DECISION GUIDE PAGE 4 TOGETHER

8. PATIENT AND PROVIDER REACH A DECISION:  
DON'T WANT SCREENING · NEED MORE TIME · WANT SCREENING

9. PROVIDER AND PATIENT BEGIN TO IMPLEMENT THE PATIENT'S DECISION (REQUIREMENTS LISTED ON DECISION GUIDE PAGE 4)

## AFTER VISIT



10. WHEN A DECISION IS MADE, PROVIDER MAKES A COPY OF PAGE 4 OF THE DECISION GUIDE AND GIVES TO THE PATIENT

11. PROVIDER RECORDS THE DECISION AND DISCUSSION IN THE PATIENT'S MEDICAL CHART AND UPLOADS COMPLETED DECISION GUIDE INTO EMR

12. PROVIDER PROVIDES ADDITIONAL MEDICAL ADVICE AS NEEDED

13. PATIENT TAKES HOME THE DECISION GUIDE IF MORE TIME IS NEEDED OR A COPY OF PAGE 4 IF A DECISION IS MADE

14. PATIENT COMPLETES ALL REQUIREMENTS LISTED ON PAGE 4 OF DECISION GUIDE

15. PATIENT CONSULTS WITH PROVIDER IF DECISION OR HEALTH STATUS CHANGES

