

Tailoring Prostate-Specific Antigen (PSA) Screening for Prostate Cancer



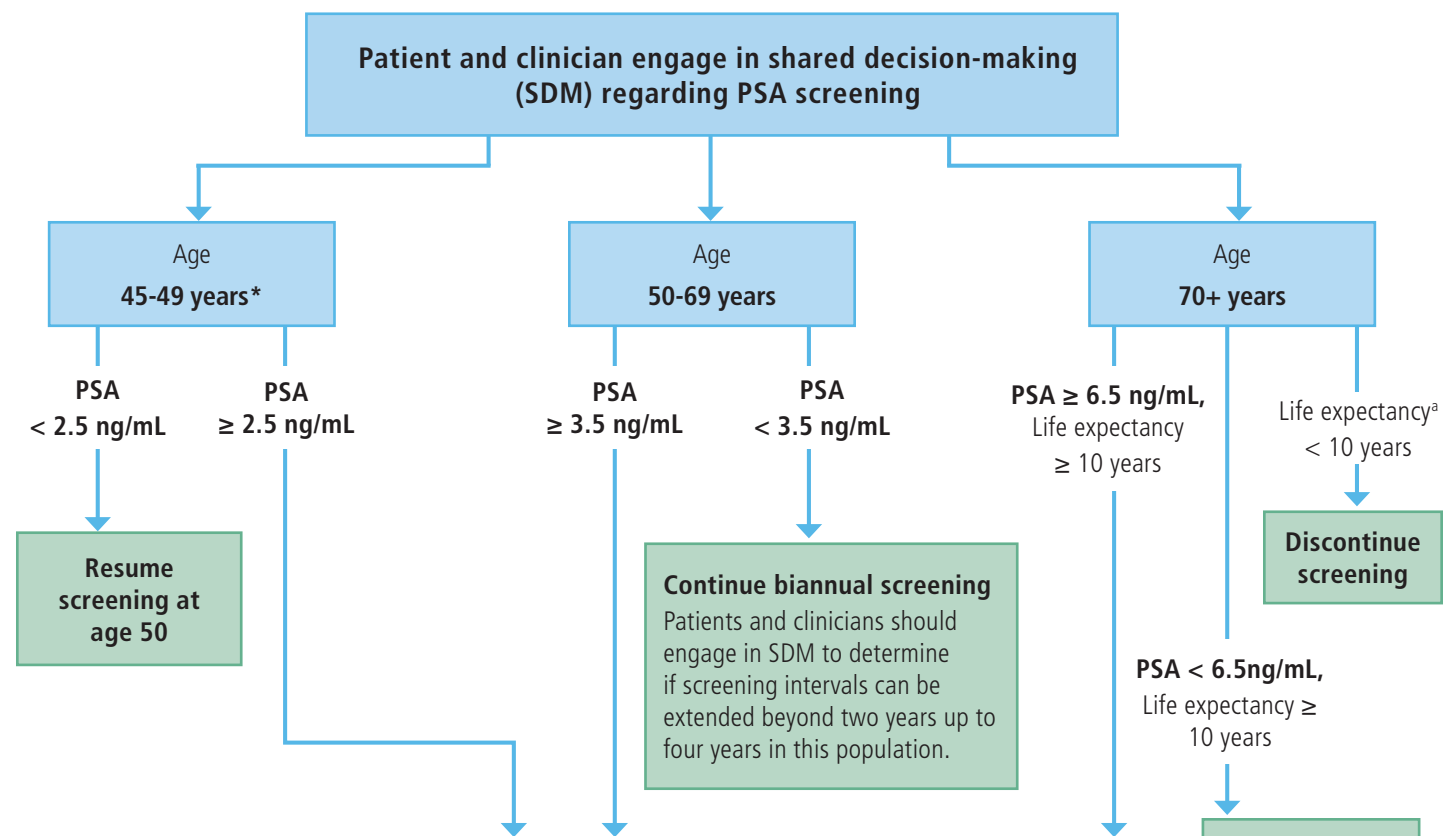
American Urological Association



American Urological Association

Diagnostic excellence is defined as “an optimal process to attain an accurate and precise explanation about a patient’s condition. An optimal process would be timely, cost-effective, convenient, and understandable to the patient. An accurate and precise diagnosis gains clinical value insofar as it leads to better choices in treatment.”¹⁵ The AUA highlighted “enhancing diagnostic excellence” as a top priority in its *National Quality Agenda and Strategies for Urologic Practice*, emphasizing its importance in improving urologic health and urologic health care.

For additional information, visit AUNet.org



***High-Risk Patients**
High-risk patients may choose to initiate biannual screening at age 40. High-risk is defined by:

- Black ancestry OR
- A germline mutation OR
- A strong family history of prostate cancer

Risk calculators are available to aid in risk assessment and inform SDM.

American Urological Association/
Society of Urologic Oncology Early
Detection of Prostate Cancer
Guideline (2023):

Refer to urology following confirmatory PSA

Confirmatory PSA
In patients with a newly elevated PSA, clinicians should **repeat the PSA prior to proceeding with further workup** to confirm elevation. The AUA recommends conducting a repeat PSA within a few months, though the time period can be shortened or lengthened depending on other clinical factors. Digital rectal exam (DRE) should not be used as an initial screening mechanism but may provide value in patients with confirmed PSA elevation. Empiric antibiotics should not be utilized to treat an elevated PSA in an asymptomatic patient.

Next Steps/Biopsy Discussion
Clinicians should engage patients in SDM when deciding about next steps (magnetic resonance imaging (MRI), additional lab tests, and/or biopsy).
With the goal of detecting **clinically significant cancer**, clinicians may utilize additional tools (e.g., urine or serum markers, imaging) to provide further information to inform the prostate biopsy discussion. Validated risk calculators, such as the Prostate Cancer Prevention Trial (PCPT) risk calculator (<https://riskcalc.org/PCPTRC/>), may incorporate patient information and provide value in determining whether to proceed with biopsy or rescreen at a later date.

SHARE Approach for SDM

- **SEEK** patient participation
- **HELP** the patient explore and compare options
- **ASSESS** patient values and preferences
- **REACH** a decision together with the patient
- **EVALUATE** the patient’s decision

The SHARE Approach. Content last reviewed March 2023. Agency for Healthcare Research and Quality, Rockville, MD. <https://www.ahrq.gov/health-literacy/professional-training/shared-decision/index.html>

References

1. American Cancer Society. Key statistics for prostate cancer. <https://www.cancer.org/cancer/types/prostate-cancer/about/key-statistics.html>. Accessed August 20, 2024.
2. Urology Care Foundation. Early-stage prostate cancer. <https://www.urologyhealth.org/educational-resources/early-stage-prostate-cancer>. Accessed August 20, 2024.
3. Bigler SA, Pound CR and Zhou X. A retrospective study on pathologic features and racial disparities in prostate cancer. *Prostate Cancer* 2011; 2011: 239460.
4. Tewari A, Horninger W, Pelzer AE et al. Factors contributing to the racial differences in prostate cancer mortality. *BJU Int* 2005; 96: 1247.
5. Tsodikov A, Gulati R, De Carvalho TM et al. Is prostate cancer different in black men? Answers from 3 natural history models. *Cancer* 2017; 123: 2312.
6. Jain MA, Leslie SW and Sapra A. Prostate cancer screening. <https://www.ncbi.nlm.nih.gov/books/NBK556081/>. Accessed August 20, 2024.
7. U.S. Preventive Services Task Force. Screening for prostate cancer: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med* 2012; 157: 120.
8. Fleschner K, Carlsson SV and Roobol MJ. The effect of the USPSTF PSA screening recommendation on prostate cancer incidence patterns in the USA. *Nat Rev Urol* 2017; 14: 26.
9. U.S. Preventive Services Task Force. Screening for prostate cancer: U.S. Preventive Services Task Force recommendation statement. *JAMA* 2018; 319: 1901.
10. Shungu N, Diaz VA, Perkins S et al. Physician attitudes and self-reported practices toward prostate cancer screening in Black and White men. *Fam Med* 2022; 54: 30.
11. National Cancer Institute. Prostate cancer screening. https://progressreport.cancer.gov/detection/prostate_cancer. Accessed August 20, 2024.
12. Wei JT, Barocas D, Carlsson S et al. Early detection of prostate cancer: AUA/SUO guideline part I: prostate cancer screening. *J Urol* 2023; 210:45.
13. Cooperberg MR, Meeks W, Fang R et al. Time trends and variation in the use of active surveillance for management of low-risk prostate cancer in the US. *JAMA Netw Open* 2023; 6: e231439.
14. Eastham JA, Auffenberg GB, Barocas DA et al. Clinically localized prostate cancer: AUA/ASTRO guideline, part I: introduction, risk assessment, staging, and risk-based management. *J Urol* 2022; 208: 10.
15. Yang D, Fineberg HV and Cosby K. Diagnostic excellence. *JAMA* 2021; 326: 1905.

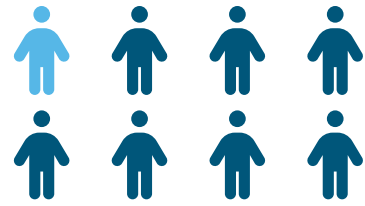
The development of this infographic and algorithm are funded by the Gordon and Betty Moore Foundation and The John A. Hartford Foundation through a grant program administered by the Council of Medical Specialty Societies.



**ADVANCING DIAGNOSTIC EXCELLENCE AND HEALTH EQUITY:
The Role of PSA Screening in Early Detection of Prostate Cancer**

^aEstimates of life expectancy may be ascertained using Social Security Administration Life Tables or online calculators.

Prostate Cancer Disparities



1 IN 8

MEN

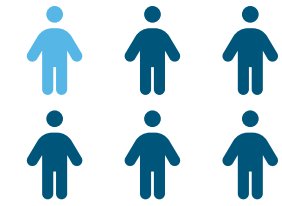
IN THE U.S. OVERALL

WILL BE
**DIAGNOSED WITH
PROSTATE CANCER**
IN THEIR LIFETIME.¹

Black men are **1.8x** more likely to be diagnosed compared to their White counterparts.^{3,4}

Black men are **2.1x** more likely to die from prostate cancer than their White counterparts.³

Black men are **44-75%** more likely than the general population to have advanced disease at the time of diagnosis.⁵



1 IN 6

BLACK MEN

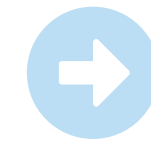
IN THE U.S. OVERALL

WILL BE
**DIAGNOSED WITH
PROSTATE CANCER**
IN THEIR LIFETIME.²

Prostate Cancer Screening

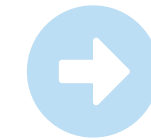
Since the introduction of Prostate-Specific Antigen (PSA) screening, there has been a **72%** reduction in the number of men with metastatic disease at the time of diagnosis.⁶

In 2012, the U.S. Preventive Services Task Force (USPSTF) recommended against PSA screening for men of all ages.⁷



In the years immediately following this recommendation, **rates of PSA screening decreased**, and the diagnosis of **advanced prostate cancer increased**.⁸

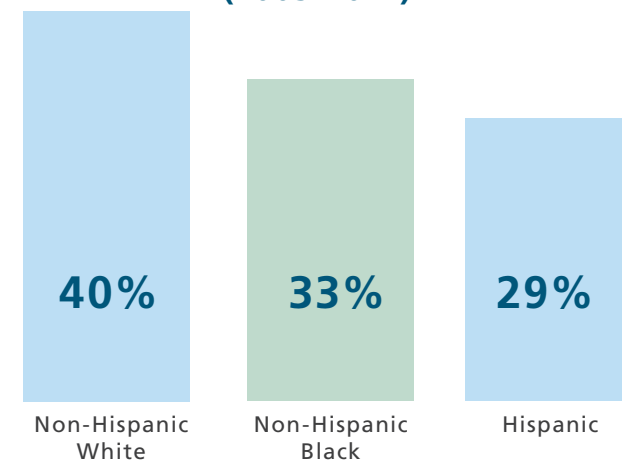
In 2018, the USPSTF recommended that clinicians inform Black men about their increased risk of developing and dying from prostate cancer.⁹



In 2022, **only 30%** of family physicians report **routinely informing Black men of their increased prostate cancer risk**.¹⁰

Even though Black men are **more than twice as likely to die** from prostate cancer, they are **screened at lower rates** than their White counterparts.

% OF MEN AGED 55-69 WHO HAD A PSA TEST WITHIN THE PAST YEAR (2005-2021)¹¹



Some studies recommend starting PSA screening **3-9 years earlier** in Black men.⁵

Due to the increased prostate cancer risk, the American Urological Association (AUA) recommends that clinicians offer prostate cancer screening to Black men beginning at

age 40-45.¹²

Risks and Benefits of PSA Screening

The AUA recommends engaging in shared decision-making with people considering prostate cancer screening, so they can make an informed choice.

PSA screening may help to detect the cancer early .	Some prostate cancers are slow-growing and unlikely to cause harm (overdiagnosis).
If caught early, it is easier to treat and more likely to be cured.	There can be side effects associated with treatment, and not all prostate cancers require treatment (overtreatment).
Some patients prefer to have more information about their health.	An elevated PSA can be anxiety-provoking for some patients.

Reducing the Harms of Diagnosis and Treatment

Strategies to mitigate the harm associated with unnecessary biopsies and the overdiagnosis and overtreatment of prostate cancer:

TOOLS TO AID IN THE DETECTION OF CLINICALLY SIGNIFICANT PROSTATE CANCER:

Conducting **confirmatory PSA tests** and using **age-specific PSA cutoffs** can help reduce the number of unnecessary biopsies.

Prostate magnetic resonance imaging (MRI), prostate cancer **risk calculators**, other tests, and **digital rectal exam (DRE)** may be used to determine appropriate candidates for biopsy.

MANAGEMENT STRATEGIES TO PREVENT OVERTREATMENT OF PROSTATE CANCER:

Active surveillance is the recommended management strategy for low-risk disease. Active surveillance rates in low-risk prostate cancer increased from 27% in 2014 to 60% in 2021.¹³

Watchful waiting is the recommended management strategy for men with asymptomatic prostate cancer and a limited life expectancy.¹⁴