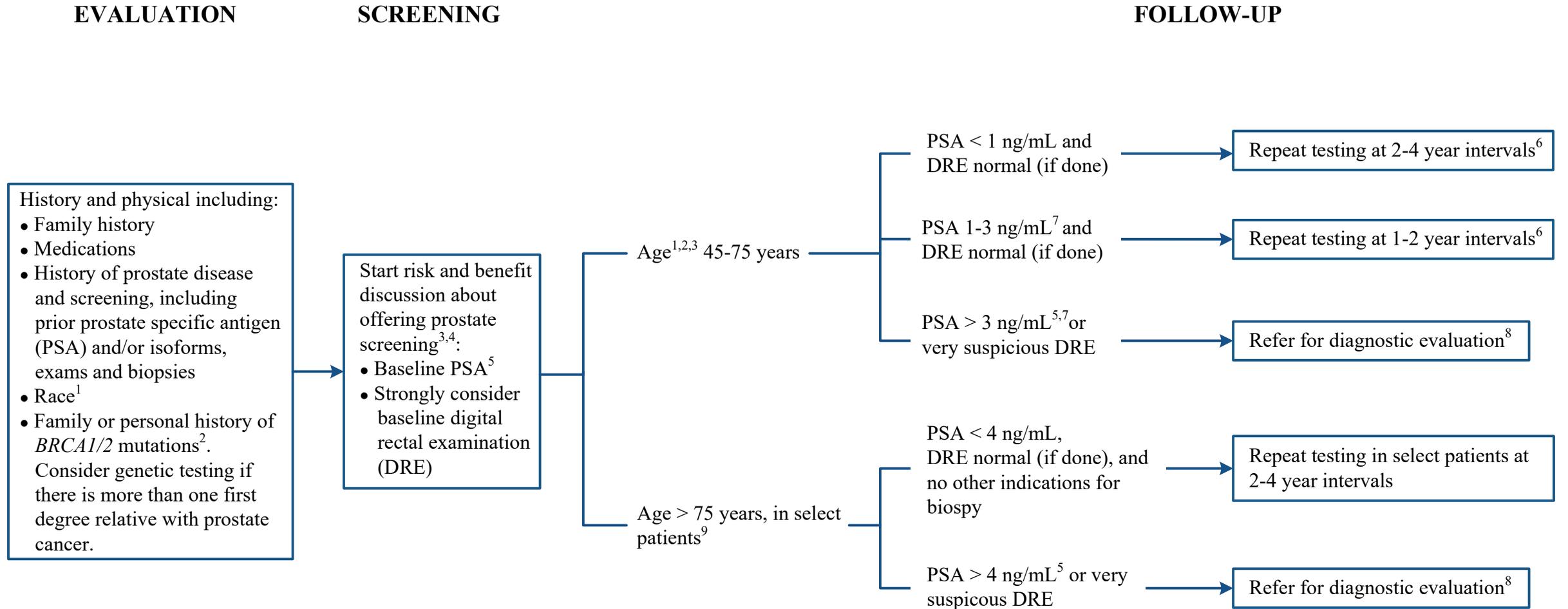


Disclaimer: *This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care.*

The objective of this guideline is to maximize the detection of CLINICALLY SIGNIFICANT prostate cancer; it does not address whether or not early detection is appropriate. An inherent result of increasing overall prostate detection is the discovery of both clinically significant and clinically insignificant prostate cancers, as they are currently defined. Due to the unique biology of prostate cancer, over-treatment is of concern because the results can potentially impact quality of life. The value of prostate cancer screening is controversial. These general guidelines are based on the majority recommendations according to patient preference and expert opinion at the University of Texas MD Anderson Cancer Center. They are intended for those men who elect to undergo early detection (after informed consent).

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See Footnotes on Page 3

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FOOTNOTES

- ¹ Black/African-American men have a higher incidence of prostate cancer, increased prostate cancer mortality, and earlier age of diagnosis compared to Caucasian-American men. This is attributable to a greater risk of developing preclinical prostate cancer and a higher likelihood that a preclinical tumor will spread. Consequently, it is reasonable for Black/African-American men to begin discussing PSA screening with their providers at 40 years of age and to consider screening at annual intervals rather than every other year.
- ² If there is a known or suspected cancer susceptibility gene mutation, referral to a cancer genetics professional is recommended. *BRCA1/2* pathogenic mutation carriers are associated with an increased risk of prostate cancer before age 65 years, and prostate cancer in men with germline *BRCA2* mutations occurs earlier and is more likely to be associated with prostate cancer mortality. Information regarding *BRCA1/2* gene status should be used as part of the discussion about prostate cancer screening.
- ³ May begin at 40 years of age for men with more than one first-degree relative who had prostate cancer at an early age
- ⁴ The best evidence supports the use of serum PSA for the early detection of prostate cancer. Digital rectal exam (DRE) should not be used as a stand-alone test, but should be performed in those with an elevated serum PSA. DRE may be considered as a baseline test in all patients as it may identify high-grade cancers associated with “normal” serum PSA values. Consider referral for biopsy if DRE is very suspicious. Medications such as 5 α -reductase inhibitors (finasteride and dutasteride) are known to decrease PSA by approximately 50%. PSA values in these men should be corrected accordingly.
- ⁵ Repeat PSA testing if PSA is elevated. In people with a newly elevated PSA, it will return to a normal level in 20-40% upon rechecking. Depending on the clinical circumstances related to suspicion of prostate cancer versus other conditions that could cause a spurious rise in PSA the repeat test should be performed within 8 weeks.
- ⁶ Men age greater than or equal to 60 years with serum PSA less than 1.0 ng/mL have a very low risk of metastases or death due to prostate cancer and may not benefit from further testing. A PSA cut point of 3.0 ng/mL at age 75 years also carries a low risk of poor outcome.
- ⁷ The reported median PSA values for men aged 40-49 year range from 0.5-0.7 ng/mL, and the 75th percentile values range from 0.7-0.9 ng/mL. Therefore, the PSA value of 1.0 ng/mL selects for the upper range of PSA values. Men who have a PSA above the median for their age group are at a higher risk for prostate cancer and for the aggressive form of the disease. The higher above the median, the greater the risk.
- ⁸ For diagnostic evaluation refer to NCCN Prostate Cancer Early Detection guideline
- ⁹ Testing above 75 years of age should be done with caution and only in very healthy men with little or no comorbidity as a large proportion may harbor cancer that would be unlikely to affect their life expectancy, and screening in this population would substantially increase rates of over-detection. However, a clinically significant number of men in this age group may present with high-risk cancers that pose a significant risk if left undetected until signs or symptoms develop. Consider omitting PSA testing in men above the age of 75 years as very few will benefit.

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SUGGESTED READINGS

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