Medical Policy

Prostate Cancer Screening

Policy Number: PG0031
Last Review: 10/01/2024

PARAMOUNT

HMO AND PPO
ELITE (MEDICARE ADVANTAGE)
MARKETPLACE

GUIDELINES:

- **This policy does not certify benefits or authorization of benefits, which is designated by each individual policyholder terms, conditions, exclusions, and limitations contract. It does not constitute a contract or guarantee regarding coverage or reimbursement/payment. Self-Insured group specific policy will supersede this general policy when group supplementary plan document or individual plan decision directs otherwise.**
- **Paramount applies coding edits to all medical claims through coding logic software to evaluate the accuracy and adherence to accepted national standards.**
- **This medical policy is solely for guiding medical necessity and explaining correct procedure reporting used to assist in making coverage decisions and administering benefits.**

SCOPE:
X Professional
X Facility

DESCRIPTION:
Prostate cancer is the most common cancer in American men and the second leading cause of death in men over 65. In 2022, it is estimated that 268,490 individuals will be diagnosed with prostate cancer and 34,500 will die of this disease. Individuals born in the United States have about 1 chance in 9 of eventually being diagnosed with this malignancy and about 1 chance in 41 of eventually dying of it.

Screening of asymptomatic individuals for prostate cancer has become a widespread practice in the United States. Tests used for prostate cancer screening include digital rectal examination (DRE) and serum prostate specific antigen (PSA). The value of DRE as a stand-alone test for prostate detection is limited, even though DRE picks up some cases of advanced cancer that would otherwise be missed. DRE is recommended to be used as a complementary test with serum PSA in asymptomatic individuals who had a risk/benefit discussion and decided to pursue screening for prostate cancer.

Prostate-specific antigen (PSA) is a glycoprotein that is produced by prostate epithelial cells, is the most widely accepted biomarker for prostate cancer screening, monitoring, diagnosis, and treatment management, such as:

- Staging prostate cancer; or
- Monitoring response to prostate cancer therapy ; or
- Detecting disease recurrence; or
- Individuals with abnormal prostate gland on physical examination; or
- Individuals with lower urinary tract signs and symptoms (i.e., hematuria, slow urine stream, hesitancy, urgency, frequency, nocturia, incontinence)

In normal conditions, PSA is produced as a proenzyme in the prostate and secreted into the lumen. The propeptide is removed to activate the proenzyme; from there, it undergoes proteolysis to inactivate it. This inactive form may enter the bloodstream and circulate as “free” PSA. This process differs in prostate cancer; the basal cells that normally regulate this activation process are missing, which allows the secreted PSA direct access into the bloodstream. This increases the PSA concentration in the serum.

Serum total PSA was the only PSA-based test available in early detection programs for prostate cancer. Since then, several PSA derivatives have been developed and proposed to improve the performance of the PSA

measurement, thus possibly increasing specificity, and decreasing unnecessary biopsies. These PSA derivatives include:

- Percent free PSA (%fPSA) or free-to-total PSA ratio (fPSA/tPSA) versus complexed PSA (cPSA): PSA circulates in the blood freely (fPSA) or bonded to a protein molecule (cPSA). Total PSA is the sum of the free and bound forms. This is what is measured as the standard PSA test. Unless otherwise noted, PSA means tPSA. Benign prostate conditions produce more fPSA, whereas cancer produces more of the cPSA. The free-to-total PSA ratio (fPSA/tPSA) may be a useful measure to be used as an adjunct to PSA testing. The fPSA and cPSA measurements are used when levels are between 4 and 10 ng/mL to decide whether a biopsy is needed.
- PSA velocity (PSAV): PSA velocity is used in younger men who begin early detection programs before age 50. PSA velocity is determined by at least three separate PSA values calculated over at least an 18-month period. When the PSA level is low (PSA ,2 ng/mL), data suggest that a PSA velocity of ≥ 0.35 ng/mL/y is suspicious for the presence of cancer, but it is only one criterion to consider when deciding whether to perform biopsy for individuals with low PSA levels. Other factors to consider include age, comorbidity, ancestry, and family history. In addition to the fact that multiple measurements using the same assay over a relatively long period of time are necessary for accuracy, there is substantial biologic and laboratory variability in PSA testing that may limit the accurate interpretation of PSA velocity. Additional caveats to consider include the predictive value of PSAV can be influenced by PSA level, PSAV is not useful in patients with very high (>10 ng/mL) PSA values, and PSAV measurements can be confounded by prostatitis.
- PSA density (PSAD): PSAD requires measurement of prostate volume by TRUS and is expressed as the PSA value (in nanograms per milliliter) divided by the prostate volume (in cubic centimeters). The lack of precision of measurement of both PSA and prostate volume has prevented the widespread clinical use of PSAD.

POLICY:

Paramount Commercial Insurance Plans and Elite (Medicare Advantage) Plans

- **Prostate-specific antigen (PSA) and digital rectal examination (DRE) for prostate cancer screening (84152, 84153, 84154, G0102, G0103) does not require prior authorization when the coverage criteria indicated below is met.**
- **Procedure 81539 requires a prior authorization (PG0367 Genetic and Protein Biomarkers for Diagnosis and Risk Assessment of Prostate Cancer)**

COVERAGE CRITERIA:

Paramount Commercial Insurance Plans and Elite (Medicare Advantage) Plans

Paramount considers prostate-specific antigen (PSA*) screening a medically necessary preventive service for individuals aged 45-75 years who are considered average-risk for prostate cancer, and for individuals aged 40-75 years who are at high-risk for prostate cancer. High-risk groups include African American, personal history of BRCA1 or BRCA2 germline mutation and individuals with a family history of cancer**. Screening for prostate cancer for individuals over 75 years with a total PSA test meets coverage criteria only for individuals with little or no comorbidities.

*Serum total PSA was the only PSA based test available in early detection programs for prostate cancer. Since then, several PSA derivatives have been developed and proposed to improve the performance of the PSA measurement, thus possibly increasing specificity, and decreasing unnecessary biopsies. These PSA derivatives include fPSA, fPSA/tPSA, tPSA, %fPSA, cPSA, PSAD, PSAV and PSADT

**Family history:

- First- second- or third-degree relative with BRCA1 or BRCA2 germline Mutation
- First- or second-degree relative diagnosed with any of the following:
    - Colorectal or endometrial cancer at 50 years of age or younger; OR
    - Female breast cancer at 45 years of age or younger; OR
    - Male breast cancer; OR
    - Metastatic prostate cancer; OR

    - Ovarian cancer; OR
    - Pancreatic cancer; OR
- Two or more first- or second-degree relatives (on the same side of the family) diagnosed at any age with breast, colorectal, endometrial, or prostate cancer.

Degree of Relationship	Relative of the Individual to be Tested
First-degree	Child, full-sibling, parent
Second-degree	Aunt, uncle, grandchild, grandparent, nephew, niece, half-sibling
Third-degree	First cousin, great aunt, great-uncle, great-grandchild, great-grandparent, half-aunt, half-uncle

When used for routine screening, annual PSA screening is considered medically necessary, but additional PSA tests may be considered medically necessary with previously elevated PSAs or signs or symptoms of disease.

Paramount considers diagnostic PSA testing medically necessary for individuals of all ages with signs or symptoms of prostate cancer, and for follow-up of individuals with prostate cancer.

Paramount considers diagnostic PSA testing medically necessary for individuals of all ages with a known neoplasm of contiguous or overlapping sites of the bladder where the point of origin of the tumor cannot be determined.

Paramount considers diagnostic PSA testing medically necessary for individuals of all ages with secondary and unspecified malignant neoplasms of lymph nodes (excludes Hodgkin's disease and non-Hodgkin's lymphoma) with:
- Tumor of unknown origin involving inguinal region lymph nodes;
- Tumor of unknown origin involving intrapelvic lymph nodes

Repeat screening for prostate cancer with a total PSA test meets coverage criteria for individuals with previous total PSA results with the following frequency:
- For individuals aged <75 years, total PSA <1 ng/ml and DRE normal (if done):
    - Repeat screening at 2- to 4-year intervals.
- For individuals aged <75 years, total PSA 1-3 ng/ml and DRE normal (if done):
    - Repeat screening at 1- to 2-year intervals.
- For individuals aged <75 years, total PSA >3 ng/ml and/or very suspicious DRE:
    - Any one of the following meets coverage criteria
        - TRUS-guided biopsy
        - Follow-up in 6-12 months with total PSA or DRE
        - Percent free PSA
- For individuals aged >75 years, total PSA <4 ng/ml and DRE normal (if done) and no other indications for biopsy:
    - Repeat screening in select patients (very healthy individuals with little or no comorbidity) at 1- to 4- year intervals.
- For individuals aged >75 years, total PSA >4 ng/ml or very suspicious DRE:
    - Any one of the following meets coverage criteria in select patients (very healthy individuals with little or no comorbidity):
        - TRUS-guided biopsy
        - Follow-up in 6-12 months with total PSA or DRE
        - Percent free PSA
- Follow-up testing with percent free PSA meets coverage criteria in patients thought to be at a higher risk despite at least one prior negative prostate biopsy.
- Total PSA testing meets coverage criteria for initial prostate cancer diagnosis in individuals with signs and symptoms of prostate cancer, for follow-up of individuals with a current or previous diagnosis of prostate cancer, for ongoing monitoring of individuals who have undergone tumor resection or prostatectomy, for monitoring response to therapy, and for detecting disease recurrence.

Paramount considers percent free PSA (%fPSA), free-to-total PSA ratio (fPSA/tPSA) testing and/or complexed PSA (cPSA) testing is considered medically necessary for determining the need for prostate biopsy in a man with a normal or equivocal digital rectal examination (DRE) and an elevated tPSA of 4–10 ng/mL.

Paramount considers annual digital rectal examination (DRE) a medically necessary preventive service.

Procedure code G0102 was created by Medicare to report a specialized E/M service for prostate cancer screening. This service includes a comprehensive examination and evaluation of the pelvis, including prostate cancer screening. The prostate is manually examined to check for abnormalities, pain, and/or palpable lumps or masses. It also includes the comprehensive examination component.

The Plan's policy with regard to the allowance of G0102 is as follows:

- A prostate cancer screening with digital rectal exam (G0102) is allowed when billed alone.
- A prostate cancer screening with digital rectal exam (G0102) is not allowed when billed with a preventive medicine exam/service.
- A separately identifiable new or established patient evaluation and management service performed and billed on the same date of service as a prostate cancer screening with digital rectal exam (G0102) procedure may be allowed with appeal. Supporting documentation in the member's medical record must indicate the need for a separately identifiable evaluation and management service.

Procedure 81539 is covered for the 4Kscore test with a prior authorization; refer to medical policy PG0367 Gene Expression Analysis for Prostate Cancer

Coverage Limitations

These are considered experimental/investigational, as they are not identified as widely used and generally accepted for the proposed uses (not an all-inclusive listing):

- MAAAs for prostate cancer including, but may not be limited:
  - ~~4Kscore Test (81539)~~ Refer to medical policy PG0367 Gene Expression Analysis for Prostate Cancer
  - Mi-Prostate Score (MiPS) (0113U)
  - PanGIA Prostate (0228U)
  - Prostate Health Index (PHI) (86316)
- PSA derivative testing including, but may not be limited to:
  - iPSA
  - IsoPSA Assay
  - PSA slope
- Tumor marker tests for prostate cancer including, but may not be limited:
  - CA 50
  - CA 549
  - CA 72-4
  - hK2
  - Ki-67
  - MyProstateScore Assay

The following does not meet coverage criteria due to a lack of available published scientific literature confirming that the test(s) is/are required and beneficial for the diagnosis and treatment of a patient's illness. Measurement of selenium in the blood or in tissues (such as toenail clippings) is considered experimental and investigational to assess the risk of developing prostate cancer because it has no proven value for this indication. The following testing DOES NOT MEET COVERAGE CRITERIA:

- Percent free PSA as a first-line screening test for prostate cancer.
- Percent free PSA, free-to-total PSA ratio, and/or complexed PSA tests for the routine screening of prostate cancer.

Measurement of selenium in the blood or in tissues (such as toenail clippings) is considered experimental and investigational to assess the risk of developing prostate cancer because it has no proven value for this indication.

According to the NCCN guidelines, “Testing after 75 years of age should be done only in very healthy men with little or no comorbidity (especially if they have never undergone PSA testing or have a rising PSA) to detect the small number of aggressive cancers that pose a significant risk if left undetected until signs or symptoms develop. Widespread screening in this population would substantially increase rates of over detection and is not recommended (NCCN, 2021).” Additionally, the term individuals in this policy apply to individuals who have a prostate or were born with a prostate.

According to ACS, 2019: “Most prostate cancers are found early, through screening. Early prostate cancer usually causes no symptoms. More advanced prostate cancers can sometimes cause symptoms, such as:

- Problems urinating, including a slow or weak urinary stream or the need to urinate more often, especially at night.
- Blood in the urine or semen
- Trouble getting an erection (erectile dysfunction or ED)
- Pain in the hips, back (spine), chest (ribs), or other areas from cancer that has spread to bones.
- Weakness or numbness in the legs or feet, or even loss of bladder or bowel control from cancer pressing on the spinal cord (ACS, 2019)."

Guidelines and Recommendations:

American Urological Association (AUA)

In 2013, the American Urological Association (AUA) published guidelines for the early detection of prostate cancer, this guideline was reviewed and validated 2018:

Guideline Statements

- The Panel recommends against PSA screening men under age 40 years. (Recommendation; Evidence Strength Grade C). In this age group there is a low prevalence of clinically detectable prostate cancer, no evidence demonstrating benefit of screening and likely the same harms of screening as in other age groups.
- The Panel does not recommend routine screening in men between ages 40 to 54 years at average risk. (Recommendation; Evidence Strength Grade C). For men younger than age 55 years at higher risk (e.g., positive family history or African American race), decisions regarding prostate cancer screening should be individualized. Those at higher risk may include men of African American race; and those with a family history of metastatic or lethal adenocarcinomas (e.g., prostate, male and female breast cancer, ovarian, pancreatic) spanning multiple generations, affecting multiple first-degree relatives, and that developed at younger ages.
- For men ages 55 to 69 years the Panel recognizes that the decision to undergo PSA screening involves weighing the benefits of reducing the rate of metastatic prostate cancer and prevention of prostate cancer death against the known potential harms associated with screening and treatment. For this reason, the Panel strongly recommends shared decision making for men aged 55 to 69 years that are considering PSA screening and proceeding based on a man’s values and preferences. (Standard; Evidence Strength Grade B). The greatest benefit of screening appears to be in men ages 55 to 69 years.
- To reduce the harms of screening, a routine screening interval of two years or more may be preferred over annual screening in those men who have participated in shared decision making and decided on screening. As compared to annual screening, it is expected that screening intervals of two years preserves the majority of the benefits and reduce over-diagnosis and false positives. (Option; Evidence Strength Grade C). Additionally, intervals for rescreening can be individualized by a baseline PSA level.
- The Panel does not recommend routine PSA screening in men over age 70 years or any man with less than a 10- to 15-year life expectancy. (Recommendation; Evidence Strength Grade C).
    - Some men over age 70 years who are in excellent health may benefit from prostate cancer

screening.

The panel concluded that PSA based screening should not be performed in the absence of shared decision-making. Thus, they recommend against organized screening in settings where shared decision-making is not part of routine practice (e.g., including but not limited to health fairs, health system promotions, community organizations).

Testing Frequency:
The Panel believes that annual PSA screening as a routine should be discouraged for those who choose to be screened, that two-year PSA intervals are reasonable approach and will be unlikely to miss a curable prostate cancer in most men, and that for men over 60 with PSA levels below 1.0ng/ml, longer PSA screening intervals (e.g., of four years) could be considered. Men with PSA below 3 ng/mL at age 70 to 75 years, PSA screening could be safely discontinued if a man at this age is still being screened.

The American Cancer Society (ACS)
In 2021, the American Cancer Society reaffirmed their recommendation that men make an informed decision with their health care provider about whether to be screened for prostate cancer. The decision should be made after getting information about the uncertainties, risk, and potential benefits of prostate cancer screening. Men should not be screened unless they have received this information. The discussion about screening should take place at:

- Age 50 for men who are at average risk of prostate cancer and are expected to live at least 10 more years.
- Age 45 for men at high risk of developing prostate cancer. This includes African Americans and men who have a first degree relative (father, brother, or son) diagnosed with prostate cancer at an early age (younger than age 65)
- Age 40 for men at even higher risk (those with more than one first degree relative who had prostate cancer at an early age)

After this discussion men who want to be screened should be tested with the prostate specific antigen (PSA) blood test. The digital rectal exam (DRE) may also be done as part of screening.

If, after this discussion, a man is unable to decide if testing is right for him, the screening decision can be made by the health care provider, who should take into account the man's general health preferences and values.

If no prostate cancer is found as a result of screening, the time between future screenings depends on the results of the PSA blood test:

- Men who choose to be tested who have a PSA of less than 2.5 ng/mL may only need to be retested every 2 years.
- Screening should be done yearly for men whose PSA level is 2.5 ng/mL or higher.

Because prostate cancer often grows slowly, men without symptoms of prostate cancer who do not have a 10-year life expectancy should not be offered testing since they are not likely to benefit. Overall health status, and not age alone, is important when making decisions about screening.

Even after a decision about testing has been made, the discussion about the pros and cons of testing should be repeated as new information about the benefits and risks of testing becomes available. Further discussions are also needed to take into account changes in a man's health, values, and preferences.

National Comprehensive Cancer Network (NCCN)
Prostate Cancer Early Detection Version 1.2022
The panel supports the continued use of prostate-specific antigen (PSA) testing for the early detection of prostate cancer in informed, healthy individuals in certain age groups. The panel basis this recommendation on level I evidence from randomized trials that observed a reduction in prostate cancer-specific mortality in those who underwent PSA screening. However, the panel also uniformly acknowledge the risk of over detection of

otherwise indolent disease and the attendant risk of overtreatment that exposes patients to the potential morbidity of treatment without benefit.

The Panel members favor informed testing beginning at age 45 years. The Panel recommends repeat testing every 2 to 4 years if PSA is <1 ng/ml and every 1 to 2 years if PSA is 1 to 3 ng/ml in individuals aged 45 to 75 years. Panelists uniformly agreed that PSA testing should only be offered to individuals with a 10 or more-year life expectancy. However, panelists did not agree as to when to discontinue routine testing in asymptomatic older individuals.

U.S. Preventative Services Task Force (USPSTF)

In 2018, The USPSTF published updated recommendations regarding prostate cancer screening that states the following: For men aged 55 to 69 years, the decision to undergo periodic prostate-specific antigen (PSA)–based screening for prostate cancer should be an individual one. Before deciding whether to be screened, men should have an opportunity to discuss the potential benefits and harms of screening with their clinician and to incorporate their values and preferences in the decision. Screening offers a small potential benefit of reducing the chance of death from prostate cancer in some men. However, many men will experience potential harms of screening, including false-positive results that require additional testing and possible prostate biopsy; over diagnosis and overtreatment; and treatment complications, such as incontinence and erectile dysfunction. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of family history, race/ethnicity, comorbid medical conditions, patient values about the benefits and harms of screening and treatment-specific outcomes, and other health needs. Clinicians should not screen men who do not express a preference for screening.
Grade C Recommendation

Men aged 70 and older The USPSTF recommends against PSA-based screening for prostate cancer in men aged 70 years and older.
Grade D Recommendation

This recommendation applies to adult men in the general U.S. population without symptoms or a previous diagnosis of prostate cancer. It also applies to men at increased risk of death from prostate cancer because of race/ethnicity or family history of prostate cancer.

CODING/BILLING INFORMATION:

The appearance of a code in this section does not necessarily indicate coverage. Codes that are covered may have selection criteria that must be met. Payment for supplies may be included in payment for other services rendered.

CPT CODES	
81479	Unlisted molecular pathology procedure **Not Covered if used to report any testing outlined in the Coverage Limitations above**
81539	Oncology (high-grade prostate cancer), biochemical assay of four proteins (Total PSA, Free PSA, Intact PSA, and human kallikrein-2 [hK2]), utilizing plasma or serum, prognostic algorithm reported as a probability score Covered for the ALL product lines-which requires a prior authorization.
81599	Unlisted multianalyte assay with algorithmic analysis **Not Covered if used to report any testing outlined in the Coverage Limitations above**
84152	Prostate specific antigen (PSA); complexed (direct measurement)
84153	Prostate specific antigen (PSA); total
84154	Prostate specific antigen (PSA); free
84999	Unlisted chemistry procedure Not **Covered if used to report any testing outlined in the Coverage Limitations above**
HCPCS CODES	
G0102	Prostate cancer screening; digital rectal examination
G0103	Prostate cancer screening; prostate specific antigen test (PSA)

REVISION HISTORY EXPLANATION: ORIGINAL EFFECTIVE DATE: 09/30/2005

Date	Explanation & Changes
01/01/07	• No change
01/01/08	• No change
04/15/09	• Updated references
02/01/11	• No change
10/14/14	• Policy combined with PG0160 Digital Rectal Exams • Added codes 84152, 84153, 84154, & G0103 • Policy reviewed and updated to reflect most current clinical evidence per Medical Policy Steering Committee
11/23/16	• Gender verbiage changes completed per Meaningful Access Section 1557 of the Affordable Care Act
12/14/2020	• Medical policy placed on the new Paramount Medical Policy Format
11/01/2022	• Policy review completed • Descriptions updated • Policy coverage statements unchanged • Added scope of coverage to include Facility, along with Professional
02/01/2023	• Medical Policy updated to reflect Medicaid coverage to Anthem as of 02/01/2023
02/01/2024	• Medical Policy placed on the new Paramount Medical Policy format
10/01/2024	• Medical Policy reviewed and Updated • No changes to coverage criteria

Paramount reserves the right to review and revise our policies periodically when necessary. When there is an update, we will publish the most current policy to https://www.paramounthealthcare.com/providers/medical-policies/policy-library

REFERENCES/RESOURCES

Centers for Medicare and Medicaid Services, CMS Manual System and other CMS publications and services https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs

American Medical Association, *Current Procedural Terminology (CPT®)* and associated publications and services https://www.ama-assn.org/amaone/cpt-current-procedural-terminology

Centers for Medicare and Medicaid Services, Healthcare Common Procedure Coding System, HCPCS Release and Code Sets https://www.cms.gov/Medicare/Coding/HCPCSReleaseCodeSets/HCPCS-Quarterly-Update

U.S. Preventive Services Task Force, https://www.uspreventiveservicestaskforce.org/uspstf/
Industry Standard Review

Hayes, Inc., https://www.hayesinc.com/

Industry Standard Review

ASC.(2019).Signs and Symptoms of Prostate Cancer. https://www.cancer.org/cancer/prostate-cancer/detection-diagnosis-staging/signs-symptoms.html

NCCN. (2021, 1/5/2021). Prostate Cancer Early Detection Version1.2021. Retrieved 1/5/2021 from https://www.nccn.org/professionals/physician_gls/pdf/prostate_detection.pdf