# MEDICAL POLICY

| POLICY TITLE | PROSTATE ARTERY EMBOLIZATION |
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| POLICY NUMBER | MP 4.051 |

| CLINICAL BENEFIT | ☐ MINIMIZE SAFETY RISK OR CONCERN.<br>☒ MINIMIZE HARMFUL OR INEFFECTIVE INTERVENTIONS.<br>☐ ASSURE APPROPRIATE LEVEL OF CARE.<br>☐ ASSURE APPROPRIATE DURATION OF SERVICE FOR INTERVENTIONS.<br>☐ ASSURE THAT RECOMMENDED MEDICAL PREREQUISITES HAVE BEEN MET.<br>☐ ASSURE APPROPRIATE SITE OF TREATMENT OR SERVICE. |
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| **Effective date:** | **7/1/2026** |

## POLICY

Prostate artery embolization is considered **investigational** as a treatment for benign prostatic hyperplasia as there is insufficient evidence to support a general conclusion supporting the health outcomes or benefits associated with this procedure.

***Cross-Reference:***
**MP 1.147 Prostatic Urethral Lift**
**MP 1.164 Temporarily Implanted Nitinol Device (iTind) for Benign Prostatic Hyperplasia**
**MP 4.043 Treatment of the Prostate (Focal, Water Vapor, Aquablation and Hydrogel Spacer)**

## PRODUCT VARIATIONS

This policy is only applicable to certain programs and products administered by Capital Blue Cross and subject to benefit variations. Please see additional information below.

**FEP PPO -** Refer to FEP medical policy manual. The FEP medical policy manual can be found at: fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies.

## DESCRIPTION/BACKGROUND

Benign prostatic hyperplasia (BPH) is a common condition in older men, affecting to some degree 40% of men in their 50s, 70% of those between ages 60 and 69, and almost 80% of those ages 70 years and older. BPH is a histologic diagnosis defined as an increase in the total number of stromal and glandular epithelial cells within the transition zone of the prostate gland. In some men, BPH results in prostate enlargement which can, in turn, lead to benign prostate obstruction and bladder outlet obstruction, which are often associated with lower urinary tract symptoms (LUTS) including urinary frequency, urgency, irregular flow, weak stream, straining, and waking up at night to urinate. LUTS are the most commonly presenting urological complaint and can have a significant impact on quality of life (QOL).

BPH does not necessarily require treatment. The decision on whether to treat BPH is based on an assessment of the impact of symptoms on QOL along with the potential side effects of treatment. Options for treatment include watchful waiting, medication, and minimally invasive surgical procedures. Patients with persistent symptoms despite medical treatment may be considered for surgical treatment. The traditional standard treatment for BPH is transurethral resection of the prostate (TURP). TURP is generally considered the reference standard for comparisons of BPH procedures. A variety of minimally invasive surgical approaches are available as an alternative to TURP for management of LUTS in men with BPH. These methods include water vapor thermal therapy, prostatic urethral lift, and temporary implanted prostatic devices.

Prostate arterial embolization (PAE) is a minimally invasive treatment option that works by reducing blood supply to prostatic arteries. PAE differs from other minimally invasive surgical therapies in treatment approach (endovascular vs transurethral) and mechanism (embolic) and thus requires different considerations. An interventional radiologist injects microspheres through a catheter to the blood vessels around the prostate, reducing the blood supply to multiple different areas. No surgical intervention is required for this procedure and recovery times are often less than that of TURP. PAE requires significant clinician training and is associated with some common side effects such as post-PAE syndrome, blood in urine or semen, rare cases of prostatic or bladder spasms.

### RATIONALE

For individuals who have benign prostatic hyperplasia (BPH) and lower urinary tract symptoms (LUTS) who receive prostate artery embolization (PAE), the evidence includes systematic reviews, randomized controlled trials (RCTs) and noncomparative studies. The outcomes of interest are symptoms, functional outcomes, quality of life, and procedure-related morbidity. A Cochrane meta-analysis of 7 RCTs comparing PAE with transurethral resection of the prostate (TURP) or a sham procedure in men with LUTS due to BPH reported similar improvements in symptom scores and quality of life across procedures over both short-term (≤12 months) and long-term (13-24 months) follow-up. There remained significant uncertainty about major adverse events (very low-certainty evidence), but PAE was associated with a higher likelihood of retreatment (moderate-certainty evidence). The long-term effect on erectile function was minimal (low-certainty evidence), and PAE may continue to lower the incidence of ejaculatory disorders (low-certainty evidence). A qualitative systematic review of 5 RCTs and two observational studies found that PAE and TURP resulted in comparable symptom and quality of life improvements at 12 months. TURP offered greater increases in urine flow and prostate volume reduction, while PAE had shorter hospital stays and fewer complications. Three RCTs, published following the systematic reviews, have assessed the efficacy of PAE relative to conventional therapies for BPH. One RCT conducted in Switzerland (2024) reported that TURP demonstrated superior efficacy to PAE in improving LUTS and urinary flow rates at 5-years of follow-up, although erectile function outcomes favored PAE. Another RCT from Australia (2024) indicated that PAE, when utilized as a first-line therapy, resulted in greater reductions in prostate volume, improved symptom scores, and enhanced quality of life relative to medical therapy, with a lower incidence of adverse events. The third RCT, performed in France (2023),

found that PAE was more effective than combined medical therapy for patients with moderate LUTS, yielding greater improvements in both symptoms and erectile function, with no major adverse events and a decreased need for retreatment. All three trials were open-label and characterized by high loss to follow-up and significant patient crossover between study arms. A retrospective, single-center study of 317 men with moderate to severe BPH found bilateral PAE had lower recurrence rates than a unilateral approach at over 2-years of follow-up. There is a paucity of direct comparative data between PAE and other minimally invasive therapies for BPH, such as transurethral water vapor thermal therapy, water jet ablation, prostatic urethral lift, and temporarily implanted nitinol devices; these modalities are addressed in separate evidence reviews. Future studies should specifically assess outcomes related to repeat interventions and unilateral PAE procedures. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

## DEFINITIONS/BACKGROUND

Prostate arterial embolization (PAE) has been investigated as a minimally invasive alternative to transurethral resection of the prostate (TURP), considered the traditional standard treatment for benign prostatic hyperplasia (BPH). PAE differs from other minimally invasive surgical therapies in treatment approach (endovascular vs transurethral) and mechanism (embolic) and thus requires different considerations. An interventional radiologist injects microspheres through a catheter to the blood vessels around the prostate, reducing the blood supply to multiple different areas. No surgical intervention is required for this procedure and recovery times are often less than that of TURP.

## DISCLAIMER

*Capital Blue Cross' medical policies are used to determine coverage for specific medical technologies, procedures, equipment, and services. These medical policies do not constitute medical advice and are subject to change as permitted by law or applicable clinical evidence from independent treatment guidelines. Treating providers are solely responsible for medical advice and treatment of members. These policies are not a guarantee of coverage or payment. Payment of claims is subject to a determination regarding the member's benefit program and eligibility on the date of service, and a determination that the services are medically necessary and appropriate. Final processing of a claim is based upon the terms of contract that applies to the members' benefit program, including benefit limitations and exclusions. If a provider or a member has a question concerning this medical policy, please contact Capital Blue Cross' Provider Services or Member Services.*

## CODING INFORMATION

**Note:** This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

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**Investigational when used for benign prostatic hyperplasia:**

| Procedure Codes | | | | | | | |
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| 37243 | | | | | | | |

| ICD-10-CM Diagnosis Code | Description |
|---|---|
| N40.1 | Benign prostatic hyperplasia with lower urinary tract symptoms |
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**POLICY HISTORY**

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| **MP 4.051** | **01/02/2026 New policy adoption** |

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