Benign Prostatic Hyperplasia Treatments

Humana

Medical Coverage Policy

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Disclaimer

Description

Benign prostatic hyperplasia (BPH) is caused by the abnormal growth of benign (noncancerous) prostate cells which enlarge the prostate gland. The gland may push against the bladder and urethra, causing lower urinary tract symptoms (LUTS) that include increased frequency of urination, hesitancy, nocturia (urinating at night), urgency and weak urinary stream. These symptoms typically appear slowly and progress gradually over time. The likelihood of being affected by BPH increases with age and is common in males over 50 years of age.

There is no cure for BPH; treatment focuses on reducing the symptoms. Early nonsurgical management options include, but may not be limited to, the following:

- Alter lifestyle modifiable factors such as alcohol, caffeine and fluid intake and contributing medications when possible

AND/OR

- Prescription medication when medically appropriate and not contraindicated

If symptoms worsen, other treatment options include, but may not be limited to, the following:

Minimally Invasive Therapies

Transurethral electrical vaporization of the prostate (TUEVP, TUVP, TVP) or transurethral vapor resection (TUVRP), is performed using a grooved roller-ball electrode with a large surface area that uses a cutting current. During the procedure, the ball is rolled over the prostate tissue multiple times to vaporize the tissue to the desired depth.

Transurethral microwave thermotherapy (TUMT) heats the prostate using a microwave antennae mounted on a urethral catheter. The catheter is inserted into the urethra where low-energy or high-energy microwave heat destroys excess prostate tissue.

Transurethral needle ablation (TUNA) or radiofrequency needle ablation (RFNA) uses low-level radiofrequency energy to treat the prostate. Using a cystoscope-like device, inserted through the urethra, twin needles are placed on either side of the prostate. Each needle emits radiofrequency energy that burns away a defined region of the prostate while shielding the urethra from heat. **(Refer to Coverage Limitations section)**

Water Vapor Thermal Therapy (WVTT) (Rezum System) delivers sterile water vapor (steam) transurethrally directly into hyperplastic tissue. Heat is released as the vapor condenses, causing cell death.

Surgical Treatments

Open or laparoscopic prostatectomy is performed when the prostate is greatly enlarged, when there are other complicating factors or if the bladder has been

damaged and needs repair. In this procedure, an incision is made in the lower abdomen or perineum and the enlarged tissue is removed from the gland.

Transurethral incision of the prostate (TUIP) does not remove prostate tissue. The urethra is widened by making several small cuts into the prostate and the neck of the bladder where the urethra and the bladder join. This reduces the pressure on the urethra and makes urination easier. TUIP is utilized when the prostate is not greatly enlarged.

Transurethral resection of the prostate (TURP) has long been considered the gold standard for BPH treatment. The physician inserts a resectoscope through the urethra to deliver fluids to the prostate during the procedure. The resectoscope uses an electrical loop to cut and vaporize tissue and seal blood vessels. The excised tissue is carried to the bladder and flushed out of the body by irrigation fluids.

Laser Therapy

Laser therapy is minimally invasive and uses laser generated heat to vaporize or coagulate obstructing prostate tissue. The device is passed through the urethra to the prostate using a cystoscope to deliver bursts of energy which destroy and shrink the prostate tissue. There are several types of lasers that can be used to treat the prostate: neodymium:yttrium-aluminum-garnet (Nd:YAG), potassium-titanyl-phosphate (KTP), holmium:yttrium-aluminum-garnet (Ho:YAG), thulium:yttrium-aluminum-garnet (Tm:YAG), lithium borate:yttrium-aluminum-garnet (LBO:YAG) and diode. Laser surgery results in little blood loss. Types of laser therapy include, but may not be limited to:

- Contact laser ablation of the prostate (CLAP)
- Holmium laser ablation/enucleation/resection (HoLAP, HoLEP, HoLRP)
- Interstitial laser coagulation (ILC)
- Noncontact visual ablation (VLAP)
- Photoselective vaporization of the prostate (PVP)
- Thulium laser enucleation of the prostate (ThuLEP)

Transperineal laser ablation (TPLA) involves percutaneous insertion of laser fibers, through the perineal skin and into the prostate. The delivery of laser generated heat is used to purportedly vaporize obstructing prostate tissue. The insertion of the

fibers and monitoring are carried out under ultrasound guidance. The system has a dedicated transrectal ultrasound probe. **(Refer to Coverage Limitations section)**

Stents

Permanent urethral stents are placed into the urethra and expanded to relieve the obstruction. Complications associated with stents include bladder calculi, chronic pain, encrustation and infection. **(Refer to Coverage Limitations section)**

Temporary (removable or biodegradable) prostatic urethral stents (iTind) perform in a similar manner and function but do not remain in the body permanently. **(Refer to Coverage Limitations section)**

Additional Therapies

Absolute ethanol injection into the prostate is a technique theorized to cause coagulation necrosis (chemoablation), which destroys the tissue. **(Refer to Coverage Limitations section)**

Cryosurgical ablation, also known as cryotherapy or cryosurgery, proposes the use of extreme cold temperatures by liquid nitrogen or argon gas to destroy tissue. When used internally, the liquid nitrogen or argon gas is circulated through a cryoprobe which freezes the surrounding cells. After the destroyed cells thaw, they are absorbed by the body. **(Refer to Coverage Limitations section)**

High-intensity focused ultrasound (HIFU) is the use of imaging ultrasound to deliver targeted high-intensity ultrasound that rapidly elevates the temperature in a precise focal zone. The increased tissue temperature is suggested to kill excess prostate tissue. Ablatherm, Sonablate and TULSA-PRO system are examples of US Food & Drug Administration (FDA) approved high-intensity ultrasound systems. **(Refer to Coverage Limitations section)**

Plasma kinetic vaporization (PKVP) or **button procedure** proposes the use of two mutually isolated electrodes (active and return) to form a complete circuit with the tissue lying between them. The electrical conduction path is formed by a saline irrigant. Radiofrequency energy is used to convert the conductive medium into a plasma field, which vaporizes tissue upon contact. A resectoscope, an instrument that contains the electrodes and is equipped with a wide-angle telescope, is passed

retrograde through the urethra to the prostate. **(Refer to Coverage Limitations section)**

Prostate artery embolization aims to reduce the blood supply to the prostate gland causing tissue death and subsequent shrinkage. The procedure is performed using a percutaneous transfemoral approach with microcatheters introducing embolization agents such as polyvinyl alcohol (PVA), gelatin sponge and other synthetic biocompatible materials which expand once delivered within the artery, blocking blood flow. Embosphere Microspheres and SwiftNINJA are examples of FDA-approved methods. **(Refer to Coverage Limitations section)**

Prostatic Urethral Lift (PUL) is an implantable transprostatic tissue retractor system consisting of a delivery device inserted through the urethra, which then deploys an implant through the prostate. Implant increases urethral patency by providing prostate lobe tissue retraction while preserving the potential for future procedures. An example of an FDA-approved device is the UroLift System.

Transrectal thermotherapy purportedly heats the prostate using a catheter inserted into the rectum. Various types of energy, such as microwave, radiofrequency or electrothermal, are delivered via the catheter to heat and thereby destroy excess prostate tissue. **(Refer to Coverage Limitations section)**

Transurethral balloon dilatation involves the insertion of a balloon catheter through the urethra into the prostatic urethra where it is inflated, theoretically pushing back prostate tissue and stretching the urethra where it has been narrowed by the prostate. An example of this includes, but may not be limited to the Optilume Basic. **The Optilume drug-coated balloon** combines urethral dilation with circumferential topical delivery of paclitaxel. **(Refer to Coverage Limitations section)**

Transurethral ultrasound guided laser induced prostatectomy (TULIP) is similar to TUIP except that cuts are made with a laser. Laser energy is delivered under ultrasound guidance, producing tissue necrosis. **(Refer to Coverage Limitations section)**

Water induced thermotherapy (WIT) purportedly combines compression and high temperature to kill and shrink prostatic tissue surrounding the urethra. A heat-

transmitting balloon catheter full of heated water (60 degrees Celsius) is introduced into the urethra, destroying prostate tissue. **(Refer to Coverage Limitations section)**

Waterjet ablation (AquaBeam) is an endoscopic device intended to resect the prostate. The system is guided robotically using transrectal ultrasound imaging enabling the removal of the enlarged prostate tissue using a pressurized fluid jet.

For information regarding **Cialis (tadalafil)**, please refer to Cialis (tadalafil) Pharmacy Coverage Policy.

For information regarding **Step Therapy**, please refer to BPH Agents Pharmacy Coverage Policy.

Coverage Determination

Please refer to the member's applicable pharmacy benefit to determine benefit availability and the terms and conditions of coverage for medication for the treatment of BPH.

Humana members may be eligible under the Plan for BPH treatment using the following methods when nonsurgical management has failed:

- Laparoscopic or open prostatectomy; **OR**

- Laser therapies, including the following:
  - Contact laser ablation of the prostate (CLAP); **OR**
  - Holmium laser ablation/enucleation/resection (HoLAP, HoLEP, HoLRP); **OR**
  - Interstitial laser coagulation (ILC); **OR**
  - Noncontact visual ablation (VLAP); **OR**
  - Photoselective vaporization of the prostate (PVP); **OR**
  - Thulium laser enucleation of the prostate (ThuLEP); **OR**

- Prostatic urethral lift (PUL) (UroLift) in individuals 45 years of age and older with prostate volume between 30-80cc and verified absence of an obstructive middle lobe; **OR**

- Transurethral electrical vaporization of the prostate (TUEVP, TUVP, TVP) or transurethral vapor resection (TUVRP); **OR**

- Transurethral incision of the prostate (TUIP) in individuals with a prostate volume less than or equal to 30cc; **OR**
- Transurethral microwave thermotherapy (TUMT); **OR**
- Water Vapor Thermal Therapy (WVTT) (Rezum System) in individuals 50 years of age and older with a prostate volume between 30-80cc; **OR**
- Transurethral resection of the prostate (TURP); **OR**
- Waterjet ablation (AquaBeam) in individuals with a prostate volume between 30-80cc

Coverage Limitations

Humana members may **NOT** be eligible under the Plan for **BPH treatment** using any procedures other than those listed above including, but may not be limited to, the following:

- Absolute ethanol injection; **OR**
- Cryosurgical ablation; **OR**
- High-intensity focused ultrasound (HIFU); **OR**
- Permanent urethral stent; **OR**
- Plasma kinetic vaporization (PKVP); **OR**
- Prostate artery embolization; **OR**
- Temporary prostatic urethral stent (iTind); **OR**
- Transperineal laser ablation (TPLA); **OR**
- Transrectal thermotherapy; **OR**
- Transurethral balloon dilatation (eg, Optilume Basic or drug-coated balloon); **OR**
- Transurethral needle ablation (TUNA)/radiofrequency needle ablation (RFNA); **OR**
- Transurethral ultrasound guided laser induced prostatectomy (TULIP); **OR**
- Water induced thermotherapy (WIT)

These are considered experimental/investigational as they are not identified as widely used and generally accepted for the proposed uses as reported in nationally recognized peer-reviewed medical literature published in the English language.

Background

Additional information about **BPH** may be found from the following websites:

- American Urological Association
- National Library of Medicine

Medical Alternatives

Physician consultation is advised to make an informed decision based on an individual's health needs.

Provider Claims Codes

Any CPT, HCPCS or ICD codes listed on this medical coverage policy are for informational purposes only. Do not rely on the accuracy and inclusion of specific codes. Inclusion of a code does not guarantee coverage and or reimbursement for a service or procedure.

CPT® Code(s)	Description	Comments
37242	Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; arterial, other than hemorrhage or tumor (eg, congenital or acquired arterial malformations, arteriovenous malformations, arteriovenous fistulas, aneurysms, pseudoaneurysms)	**Not Covered if used to report prostate artery embolization**
52282	Cystourethroscopy, with insertion of permanent urethral stent	**Not Covered if used to report any treatment outlined in Coverage Limitations section**
52441	Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; single implant	
52442	Cystourethroscopy, with insertion of permanent adjustable transprostatic implant; each additional permanent adjustable transprostatic implant (List separately in addition to code for primary procedure)	
52450	Transurethral incision of prostate	

52601	Transurethral electrosurgical resection of prostate, including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, and internal urethrotomy are included)	
52630	Transurethral resection; residual or regrowth of obstructive prostate tissue including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, and internal urethrotomy are included)	
52647	Laser coagulation of prostate, including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, and internal urethrotomy are included if performed)	
52648	Laser vaporization of prostate, including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, internal urethrotomy and transurethral resection of prostate are included if performed)	
52649	Laser enucleation of the prostate with morcellation, including control of postoperative bleeding, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, internal urethrotomy and transurethral resection of prostate are included if performed)	
53850	Transurethral destruction of prostate tissue; by microwave thermotherapy	
53852	Transurethral destruction of prostate tissue; by radiofrequency thermotherapy	**Not Covered**
53854	Transurethral destruction of prostate tissue; by radiofrequency generated water vapor thermotherapy	
53855	Insertion of a temporary prostatic urethral stent, including urethral measurement	**Not Covered**
55801	Prostatectomy, perineal, subtotal (including control of postoperative bleeding, vasectomy, meatotomy, urethral calibration and/or dilation, and internal urethrotomy)	

55821	Prostatectomy (including control of postoperative bleeding, vasectomy, meatotomy, urethral calibration and/or dilation, and internal urethrotomy); suprapubic, subtotal, 1 or 2 stages	
55831	Prostatectomy (including control of postoperative bleeding, vasectomy, meatotomy, urethral calibration and/or dilation, and internal urethrotomy); retropubic, subtotal	
55880	Ablation of malignant prostate tissue, transrectal, with high intensity-focused ultrasound (HIFU), including ultrasound guidance	**Not Covered**
55899	Unlisted procedure, male genital system	**Not Covered if used to report any treatment outlined in Coverage Limitations section**
CPT® Category III Code(s)	**Description**	**Comments**
0421T	Transurethral waterjet ablation of prostate, including control of post-operative bleeding, including ultrasound guidance, complete (vasectomy, meatotomy, cystourethroscopy, urethral calibration and/or dilation, and internal urethrotomy are included when performed)	
0619T	Cystourethroscopy with transurethral anterior prostate commissurotomy and drug delivery, including transrectal ultrasound and fluoroscopy, when performed	**Not Covered**
0714T	Transperineal laser ablation of benign prostatic hyperplasia, including imaging guidance	**Not Covered** **New Code Effective 07/01/2022**
HCPCS Code(s)	**Description**	**Comments**
C2596	Probe, image guided, robotic, waterjet ablation	
C9739	Cystourethroscopy, with insertion of transprostatic implant; one to three implants	
C9740	Cystourethroscopy, with insertion of transprostatic implant; four or more implants	

C9769	Cystourethroscopy, with insertion of temporary prostatic implant/stent with fixation/anchor and incisional struts	**Not Covered**

References

1. American Urological Association (AUA). Guideline. Management of lower urinary tract symptoms attributed to benign prostatic hyperplasia. https://www.auanet.org. Published August 2021. Accessed December 2, 2021.

2. ECRI Institute. Clinical Evidence Assessment. Aquabeam Robotic System (Procept BioRobotics Corp.) for treating benign prostatic hyperplasia. https://www.ecri.org. Published October 20, 2018. Updated July 26, 2021. Accessed December 1, 2021.

3. ECRI Institute. Clinical Evidence Assessment. Overview of two systems for treating benign prostatic hyperplasia. https://www.ecri.org. Published April 1, 2020. Accessed December 1, 2021.

4. ECRI Institute. Clinical Evidence Assessment. Rezum System (Boston Scientific Corp.) for treating benign prostatic hyperplasia. https://www.ecri.org. Published November 18, 2016. Updated April 5, 2019. Accessed December 1, 2021.

5. ECRI Institute. Clinical Evidence Assessment. Transperineal laser ablation for treating benign prostatic hyperplasia. https://www.ecri.org. Published May 10, 2022. Accessed May 11, 2022.

6. ECRI Institute. Clinical Evidence Assessment. UroLift system (NeoTract, Inc.) for treating benign prostatic hyperplasia. https://www.ecri.org. Published July 1, 2019. Accessed December 1, 2021.

7. ECRI Institute. Hotline Response (ARCHIVED). High-intensity focused ultrasound for treating benign prostatic hyperplasia. https://www.ecri.org. Published November 10, 2011. Accessed December 1, 2021.

8. ECRI Institute. Hotline Response (ARCHIVED). Holmium laser enucleation versus transurethral resection of the prostate for treating benign prostatic

hyperplasia. https://www.ecri.org. Published May 1, 2019. Accessed December 1, 2021.

9. ECRI Institute. Hotline Response (ARCHIVED). Photoselective vaporization of the prostate for treating benign prostatic hyperplasia. https://www.ecri.org. Published May 12, 2004. Updated May 17, 2012. Accessed December 1, 2021.

10. ECRI Institute. Hotline Response (ARCHIVED). Prostate artery embolization for treating benign prostatic hyperplasia. https://www.ecri.org. Published April 25, 2019. Accessed December 1, 2021.

11. ECRI Institute. Hotline Response (ARCHIVED). Water-induced thermotherapy for treating benign prostatic hyperplasia. https://www.ecri.org. Published April 7, 2004. Updated May 18, 2012. Accessed December 1, 2021.

12. ECRI Institute. Product Brief. Embosphere microspheres (Merit Medical Systems, Inc.) for prostate artery embolization to treat benign prostate hyperplasia. https://www.ecri.org. Published April 22, 2019. Accessed December 1, 2021.

13. ECRI Institute. Product Brief. SwiftNinja steerable microcatheter (Merit Medical Systems, Inc.) for prostate artery embolization to treat benign prostate hyperplasia. https://www.ecri.org. Published April 30, 2019. Accessed December 1, 2021.

14. ECRI Institute. Product Brief (ARCHIVED). Plasma-oval button (Olympus America) for treating benign prostatic hyperplasia. https://www.ecri.org. Published September 12, 2016. Accessed December 1, 2021.

15. ECRI Institute. Product Brief (ARCHIVED). Spanner Prostatic Stent (SRS Medical) for maintaining urine flow after treatment for benign prostatic hyperplasia. https://www.ecri.org. Published April 20, 2018. Accessed December 1, 2021.

16. Hayes, Inc. Comparative Effectiveness Review. Comparative effectiveness review of prostatic artery embolization (PAE) for treatment of benign prostatic

hypertrophy (BPH). https://evidence.hayesinc.com. Published February 11, 2019. Updated April 27, 2021. Accessed December 1, 2021.

17. Hayes, Inc. Health Technology Assessment. Aquablation for treatment of benign prostatic hyperplasia. https://evidence.hayesinc.com. Published March 30, 2021. Updated April 7, 2021. Accessed December 1, 2021.

18. Hayes, Inc. Health Technology Assessment. Prostatic urethral lift (UroLift System) for treatment of symptoms associated with benign prostatic hyperplasia. https://evidence.hayesinc.com. Published June 9, 2020. Updated July 9, 2021. Accessed December 1, 2021.

19. Hayes, Inc. Health Technology Assessment. Rezum system (Boston Scientific Corp.) for benign prostatic hyperplasia. https://evidence.hayesinc.com. Published October 18, 2021. Accessed December 1, 2021.

20. Hayes, Inc. Health Technology Brief (ARCHIVED). Bipolar plasmakinetic electrovaporization for benign prostatic hyperplasia (BPH). https://evidence.hayesinc.com. Published March 31, 2011. Updated April 1, 2013. Accessed December 1, 2021.

21. Hayes, Inc. Medical Technology Directory (ARCHIVED). Laser therapy for benign prostatic hyperplasia. https://evidence.hayesinc.com. Published March 5, 2010. Updated April 4, 2014. Accessed December 1, 2021.

22. Hayes, Inc. Medical Technology Directory (ARCHIVED). Transurethral microwave thermotherapy. https://evidence.hayesinc.com. Published August 23, 2007. Updated July 14, 2011. Accessed December 1, 2021.

23. Hayes, Inc. Medical Technology Directory (ARCHIVED). Transurethral needle ablation therapy. https://evidence.hayesinc.com. Published July 9, 2001. Updated September 18, 2006. Accessed December 1, 2021.

24. Hayes, Inc. Medical Technology Directory (ARCHIVED). Water-induced thermotherapy (WIT) for benign prostatic hyperplasia. https://evidence.hayesinc.com. Published October 7, 2002. Updated August 19, 2007. Accessed December 1, 2021.

25. MCG Health. Laser surgery, prostate. 25th edition. https://www.mcg.com. Accessed November 8, 2021.

26. MCG Health. Prostatectomy, transurethral resection (TURP). 25th edition. https://www.mcg.com. Accessed November 8, 2021.

27. MCG Health. Transurethral electrovaporization, prostate (TUVP). 25th edition. https://www.mcg.com. Accessed November 8, 2021.

28. MCG Health. Transurethral incision, prostate (TUIP). 25th edition. https://www.mcg.com. Accessed November 8, 2021.

29. MCG Health. Transurethral microwave therapy (TUMT). 25th edition. https://www.mcg.com. Accessed November 8, 2021.

30. MCG Health. Transurethral needle ablation (TUNA), prostate. 25th edition. https://www.mcg.com. Accessed November 8, 2021.

31. MCG Health. Water induced thermotherapy. 25th edition. https://www.mcg.com. Accessed November 8, 2021.

32. UpToDate, Inc. Surgical treatment of benign prostatic hyperplasia (BPH). https://www.uptodate.com. Updated October 22, 2021. Accessed December 2, 2021.

33. US Food & Drug Administration (FDA). 510(k) summary: Ablatherm fusion. https://www.fda.gov. Published October 3, 2017. Accessed January 15, 2018.

34. US Food & Drug Administration (FDA). 510(k) summary: Optilume Basic Urological Balloon Dilation (Optilume Basic). https://www.fda.gov. Published January 2, 2020. Accessed April 27, 2020.

35. US Food & Drug Administration (FDA). 510(k) summary: Rezum system. https://www.fda.gov. Published April 19, 2016. Accessed January 15, 2018.

36. US Food & Drug Administration (FDA). 510(k) summary: Sonablate. https://www.fda.gov. Published December 21, 2016. Accessed January 12, 2017.

37. US Food & Drug Administration (FDA). 510(k) summary: SwiftNINJA Microcatheter. https://www.fda.gov. Published November 4, 2016. Accessed November 19, 2019.

38. US Food & Drug Administration (FDA). 510(k) summary: TULSA-PRO system. https://www.fda.gov. Published August 15, 2019. Accessed September 13, 2019.

39. US Food & Drug Administration (FDA). 510(k) summary: UroLift system. https://www.fda.gov. Published December 20, 2013. Accessed March 18, 2014.

40. US Food & Drug Administration (FDA). De novo summary: Aquabeam system. https://www.fda.gov. Published December 21, 2017. Accessed December 27, 2017.

41. US Food & Drug Administration (FDA). De novo summary: Embosphere microspheres. https://www.fda.gov. Published June 21, 2017. Accessed January 16, 2018.

42. US Food & Drug Administration (FDA). De novo summary: iTind system. https://www.fda.gov. Published February 25, 2020. Accessed December 21, 2020.

43. US Food & Drug Administration (FDA). Summary of safety and effectiveness data: Optilume urethral drug coated balloon. https://www.fda.gov. Published December 3, 2021. Accessed December 20, 2021.