



MASSACHUSETTS

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Medical Policy

Percutaneous Tibial Nerve Stimulation

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Policy Number: 583

BCBSA Reference Number: 7.01.106

NCD/LCD: Local Coverage Determination (LCD): Posterior Tibial Nerve Stimulation for Voiding Dysfunction (L33396)

Related Policies

- Biofeedback as a Treatment of Fecal Incontinence or Constipation, #[308](#)
- Biofeedback as a Treatment of Urinary Incontinence, #[173](#)
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Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

Percutaneous tibial nerve stimulation for an initial 12-week course* is considered **MEDICALLY NECESSARY** for individuals with non-neurogenic urinary dysfunction including overactive bladder who have **both**:

- failed behavioral therapy following an appropriate duration of 8 to 12 weeks without meeting treatment goals; **and**
- failed pharmacologic therapy following 4 to 8 weeks of treatment without meeting treatment goals.

Maintenance therapy* using monthly percutaneous tibial nerve stimulation is considered **MEDICALLY NECESSARY** for individuals following a 12-week initial course of percutaneous tibial nerve stimulation that resulted in improved urinary dysfunction meeting treatment goals.

*Management criteria would be **once-per-week for 12 weeks and once-per-month afterward for maintenance treatments**.

*Annual evaluation by a physician may be performed to ensure efficacy is continuing for maintenance percutaneous tibial nerve stimulation treatments.

Percutaneous tibial nerve stimulation is considered **INVESTIGATIONAL** for all other indications, including but not limited to the following:

- Neurogenic bladder dysfunction
- Fecal incontinence.

Medicare HMO BlueSM and Medicare PPO BlueSM Members

Medical necessity criteria and coding guidance for **Medicare Advantage members living in Massachusetts** can be found through the link below.

[Local Coverage Determinations \(LCDs\) for National Government Services, Inc.](#)

Local Coverage Determination (LCD): Posterior Tibial Nerve Stimulation for Voiding Dysfunction (L33396)

Note: To review the specific LCD, please remember to click “accept” on the CMS licensing agreement at the bottom of the CMS webpage.

For medical necessity criteria and coding guidance for **Medicare Advantage members living outside of Massachusetts**, please see the Centers for Medicare and Medicaid Services website at <https://www.cms.gov> for information regarding your specific jurisdiction.

Prior Authorization Information

Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** if the procedure is performed inpatient.

Outpatient

- For services described in this policy, see below for situations where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS)	Prior authorization is not required .
Commercial PPO and Indemnity	Prior authorization is not required .
Medicare HMO Blue SM	Prior authorization is not required .
Medicare PPO Blue SM	Prior authorization is not required .

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above **medical necessity criteria MUST** be met for the following codes to be covered for **Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity:**

CPT Codes

CPT codes:	Code Description
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64566	Posterior tibial neurostimulation, percutaneous needle electrode, single treatment, includes programming
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The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT codes above if medical necessity criteria are met:

ICD-10 Diagnosis Coding

ICD-10-CM-diagnosis codes:	Code Description
N32.81	Overactive bladder
N39.41	Urge incontinence
N39.42	Incontinence without sensory awareness
N39.43	Post-void dribbling
N39.44	Nocturnal enuresis
N39.45	Continuous leakage
N39.46	Mixed incontinence
N39.490	Overflow incontinence
N39.492	Postural (urinary) incontinence
N39.498	Other specified urinary incontinence
R32	Unspecified urinary incontinence
R35.0	Frequency of micturition
R39.15	Urgency of urination

Description

VOIDING DYSFUNCTION

Common causes of voiding dysfunction are pelvic floor neuromuscular changes (eg, from pregnancy, childbirth, surgery), inflammation, medication (eg, diuretics, anticholinergics), obesity, psychogenic factors, and disease (eg, multiple sclerosis, spinal cord injury, detrusor hyperreflexia, diabetes with peripheral nerve involvement).

Altering the function of the posterior tibial nerve with percutaneous tibial nerve stimulation (PTNS) is believed to improve voiding function and control. The mechanism of action is believed to be retrograde stimulation of the lumbosacral nerves (L4-S3) via the posterior tibial nerve located near the ankle. The lumbosacral nerves control the bladder detrusor and perineal floor. Overactive bladder is voiding dysfunction that is characterized by urinary frequency, urgency, urge incontinence, and nonobstructive retention.

Treatment

Approaches to the treatment of incontinence differentiate between urge incontinence and stress incontinence. Conservative behavioral management such as lifestyle modification (eg, dietary changes, weight reduction, fluid management, smoking cessation) along with pelvic floor exercises and bladder training are part of the initial treatment of overactive bladder symptoms and both types of incontinence. Pharmacotherapy is another option, and different medications target different symptoms. Some individuals experience mixed incontinence.

The current indication cleared by the U.S. Food and Drug Administration (FDA) for PTNS is overactive bladder and associated symptoms of urinary frequency, urinary urgency, and urge incontinence.

The procedure for PTNS consists of the insertion of a needle above the medial malleolus into the posterior tibial nerve followed by the application of low-voltage (10 mA, 1-10 Hz frequency) electrical stimulation that produces sensory and motor responses as evidenced by a tickling sensation and plantarflexion or fanning of all toes. Noninvasive PTNS has also been delivered with transcutaneous or surface electrodes. The recommended course of treatment is an initial series of 12 weekly office-based treatments followed by an individualized maintenance treatment schedule.

PTNS is less invasive than traditional sacral nerve neuromodulation (see policy #153), which has been successfully used in the treatment of urinary dysfunction but requires implantation of a permanent device. In sacral root neuromodulation, an implantable pulse generator that delivers controlled electrical impulses is attached to wire leads that connect to the sacral nerves, most commonly the S3 nerve root that modulates the neural pathways controlling bladder function. PTNS has been proposed as a treatment for non-neurogenic and neurogenic bladder syndromes and fecal incontinence.

Summary

Percutaneous tibial nerve stimulation (PTNS; also known as posterior tibial nerve stimulation) is a technique of electrical neuromodulation used primarily for treating voiding dysfunction.

For individuals who have non-neurogenic urinary dysfunction including overactive bladder who have failed behavioral and pharmacologic therapy who receive an initial course of PTNS, the evidence includes randomized sham-controlled trials, randomized controlled trials (RCTs) with an active comparator, and systematic reviews. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. The Sham Effectiveness in Treatment of Overactive Bladder Symptoms and the Overactive Bladder Innovative Therapy trials are 2 key industry-sponsored RCTs. Systematic reviews that include these trials and other published trials have found short-term improvements with PTNS. The largest, highest quality study was the double-blinded, sham-controlled Sham Effectiveness in Treatment of Overactive Bladder Symptoms trial. It reported a statistically significant benefit of PTNS vs sham at 12 weeks. In an additional small sham-controlled trial, a 50% reduction in urge incontinent episodes was attained in 71% of PTNS group compared with 0% in the sham group. The nonblinded Overactive Bladder Innovative Therapy trial found that PTNS was noninferior to medication treatment at 12 weeks. Adverse events were limited to local irritation effects. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

Clinical input obtained in 2018 supports that the following indication provides a clinically meaningful improvement in net health outcome and is consistent with generally accepted medical practice.

- Use of monthly maintenance PTNS for individuals with non-neurogenic urinary dysfunction including overactive bladder who have failed behavioral and pharmacologic therapy who respond to an initial course of percutaneous tibial nerve stimulation.

Thus, the above indication may be considered medically necessary considering the evidence and clinical input support.

For individuals who have overactive bladder syndrome that has failed behavioral and pharmacologic therapy who respond to an initial course of PTNS who receive maintenance PTNS, the evidence includes observational studies and systematic reviews. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. The Sham Effectiveness in Treatment of Overactive Bladder Symptoms and the Overactive Bladder Innovative Therapy trials each included extension studies that followed individuals who responded to the initial course of PTNS and continued to receive periodic maintenance therapy. There is variability in the interval between and frequency of maintenance treatments, and an optimal maintenance regimen remains unclear. There are up to 36 months of observational data available, reporting that there is a durable effect for some of these patients. While comparative data are not available after the initial 12-week treatment period, the observational data support a clinically meaningful benefit for use in individuals who have already failed behavioral and pharmacologic therapy and who respond to the initial course of PTNS. PTNS may allow such individuals to avoid more invasive interventions. Adverse events appear to be limited to local irritation for both short and long-term PTNS use. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have neurogenic bladder dysfunction who receive PTNS, the evidence includes several RCTs and a systematic review of RCTs and observational data. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity.

Only a few RCTs evaluating tibial nerve stimulation for treating neurogenic bladder have been published to date, and all but one performed transcutaneous stimulation rather than PTNS. Studies varied widely in factors, such as the study populations and comparison interventions. Study findings have not reported that tibial nerve stimulation significantly improved incontinence symptoms and other outcomes. The evidence is insufficient to determine the effects of the technology on health outcomes.

For individuals who have fecal incontinence who receive PTNS, the evidence includes several RCTs and systematic reviews. Relevant outcomes are symptoms, change in disease status, functional outcomes, quality of life, and treatment-related morbidity. The available RCTs have not found a clear benefit of PTNS. Neither of the sham-controlled trials found that active stimulation was superior to sham for achieving the primary outcome, at least a 50% reduction in mean weekly fecal incontinence episodes. The larger sham-controlled randomized trial did find a significantly greater decrease in the absolute number of weekly incontinence episodes in the active treatment group, but the overall trial findings did not suggest the superiority of PTNS over sham treatment. Systematic reviews have not conducted pooled analyses. The evidence is insufficient to determine the effects of the technology on health outcomes.

Policy History

Date	Action
9/2018	BCBSA National medical policy review. New medically necessary indications described. Prior Authorization Information reformatted. Clarified coding information. Effective 9/1/2018.
3/2016	New references added from BCBSA National medical policy.
6/2015	BCBSA National medical policy review. New investigational indications described. Effective 6/1/2015.
1/2015	Clarified coding information.
9/2014	New indications for coverage for Medicare HMO and PPO Blue. Effective 8/10/2014.
4/2014	New references added from BCBSA National medical policy.
11/2013	Not medically necessary indications described for Medicare HMO and PPO Blue. Effective 10/25/2013. Removed ICD-9 diagnosis codes 596.51, 788.31, 788.33, 788.34, 788.39, 788.41, 788.63, changed LCD to L31391 as L31523 is no longer effective and changed prior authorization information for Medicare HMO and PPO Blue as 64566 is not covered per LCD: L31391.
6/2013	New references from BCBSA National medical policy.
2/2013	BCBSA National policy review. New investigational indications described. Effective 2/4/2013.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
9/2011	Reviewed - Medical Policy Group - Urology and Obstetrics/Gynecology. No changes to policy statements.
4/2011	BCBSA National medical policy review. No changes to policy statements.
1/19/2011	New policy describing covered and non-covered indications. Effective 1/19/2011,.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

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