

KAISER PERMANENTE®

Mid-Atlantic State

Transcutaneous Tibial Nerve Stimulation

Utilization *ALERT*

- Prior to use of this MCP for evaluation of medical necessity, benefit coverage MUST be verified in the member's EOC or benefit document.
- Please refer to CMS guidelines: National Coverage Determination (NCD) or Local Coverage Determination (LCD) for Medicare members. This MCP applies if no CMS criteria are available.
- Note: After searching the Medicare Coverage Database, if no NCD/LCD/LCA is found, then use the policy referenced above for coverage guidelines
- I. Service or Procedure: Transcutaneous Tibial Nerve Stimulation (TTNS)
- II. Specialty: Uro-Gynecology, Urology, DME

III. Clinical Indication for Referral:

The use of TTNS as treatment is considered medically necessary when ALL of the following are met:

A. Age 18 and above; and

- B. Primary diagnoses of non-neurogenic urinary dysfunction such as:
 - 1. Overactive bladder (OAB) syndrome; and/or
 - 2. Urgency urinary incontinence (UUI)

IV. Limitation, Contraindication and Exclusion

TTNS is considered experimental and investigational for the following indication due to insufficient scientific evidence to support the effectiveness of this treatment:

- A. Neurogenic bladder dysfunction such as post-stroke incontinence;
- B. Fecal incontinence; and
- C. All other indications except those cited in section III of the policy

V. Background

Transcutaneous Tibial Nerve Stimulation (TTNS) is a non-invasive neuromodulation treatment for overactive bladder (OAB); and/or urgency urinary incontinence (UUI).

TTNS can be self-administered at home or by a clinician in an outpatient setting. The frequency of TTNS treatment may vary from once daily to once or twice per week, ranging between 4 to 12-week duration.

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TTNS is considered a second-line modality for overactive bladder and/or urge-incontinence prior to use of other treatment options such as in-office Percutaneous Tibial Nerve Stimulation (PTNS), second-line medications, in-office physical therapy, bladder Botox, and/or sacral nerve root stimulation.

The electrical stimulation of afferent sacral nerves is accomplished through an external pulse generator connected to surface electrodes which are placed on the skin adjacent to the medial malleolus to stimulate the sacral nerves via posterior tibial nerve in the lower extremities. Tibial nerve stimulation of afferent sacral nerves will bring about increase inhibitory stimuli to the efferent pelvic nerve, suppress bladder afferent nerve activity, reduce detrusor contractility, and increase bladder capacity.

VI. Definition

Overactive bladder syndrome (OAB) is a set of symptoms characterized by urinary urgency, may or may not be accompanied by increased frequency, nocturia, and urgency urinary incontinence in the absence of obvious pathology.

Urgency Urinary Incontinence (UUI) is the urinary leakage associated with urinary urgency.

Percutaneous tibial nerve stimulation (PTNS) is a low-risk, non-surgical treatment for overactive bladder by indirectly providing mild electrical stimulation, called neuromodulation through a slim needle electrode inserted in the ankle near the tibial nerve & connected to a battery-powered stimulator to deliver mild electrical impulses that travel via tibial nerve to the sacral nerve, responsible for bladder function & control.

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Approval History

The Regional Utilization Management Committee received delegated authority in 2011 to review and approve designated Utilization Management and Medical Coverage Policies by the Regional Quality Improvement Committee.

Date Approved by RUMC*	Date of Implementation
07/22/2021	07/22/2021
06/20/2022	06/20/2022
05/29/2023	05/29/2023
05/23/2024	05/23/2024

Effective June 01, 2016, state filing no longer required per Maryland House Bill HB 798 – Health Insurance – Reporting

Note: Kaiser Permanente Mid-Atlantic States (KPMAS) include referral and authorization criteria to support primary care and specialty care practitioners, as appropriate, in caring for members with selected conditions. Whenever possible, Medical Coverage Policies are evidence-based and may also include expert opinion. Medical Coverage Policies are not intended or designed as a substitute for the reasonable exercise of independent clinical judgment by a practitioner in any particular set of circumstances for an individual member.

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