MASSACHUSETTS

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Medical Policy

# Transcutaneous Electrical Nerve Stimulation

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## Policy Number: 003

BCBSA Reference Number: 1.01.09

## Related Policies

- Percutaneous Electrical Nerve Stimulation (PENS) and Percutaneous Neuromodulation Therapy (PNT), #172
- Interferential Stimulation for Treatment of Pain, #509

## Policy

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

A trial of transcutaneous electrical nerve stimulation (TENS) of at least 30 days may be **MEDICALLY NECESSARY** to establish efficacy for the management of refractory chronic pain (e.g., chronic musculoskeletal or neuropathic pain) when the following conditions have been met:

- The pain is causing significant disruption of function
- The pain is unresponsive to at least 3 months of conservative medical therapy, AND
- The trial is monitored by a physician.

Documentation for the trial should include:

- Description of how the pain adversely affects the member's day-to-day activities
- Initial assessment/evaluation of the nature, duration, and perceived intensity of pain,
- The types and duration of prior treatments, and
- Treatment plan including ongoing medications and proposed use of TENS unit including the frequency and duration of treatment.

Clinical summary of the trial to determine efficacy should include:

- Perceived intensity of pain with and without TENS (e.g., 2 point or 30% improvement in visual analog scale [VAS]),
- Ongoing medication requirements for pain relief (if any),
- Other modalities (if any) in use for pain control, and
- Actual use of TENS on a daily basis (frequency and duration of application).

Continued use of transcutaneous electrical nerve stimulation (TENS) may be **MEDICALLY NECESSARY** for treatment of refractory chronic pain (e.g., chronic musculoskeletal or neuropathic pain) that causes significant disruption of function when the following conditions have been met:

- Documentation of an initial therapeutic trial period meeting all criteria described above
- Documentation that TENS used in the trial period has shown a positive effect, AND
- TENS has been used on a regular basis (e.g., daily or near daily use) throughout the trial period.

*Note: A TENS billed as a purchased unit (modifier NU) must meet above criteria for continued use.*

Refractory chronic pain is defined in this policy as pain that:

- Causes significant disruption of function, and
- Has not responded to at least 3 months of conservative therapy, including:
  - Nonsteroidal anti-inflammatory medications, ice, rest, and/or
  - Physical therapy.

The use of TENS for any other condition, including the treatment of dementia and prevention of migraine headaches is **INVESTIGATIONAL**.

TENS for the management of acute pain (e.g., postoperative or during labor and delivery) is **INVESTIGATIONAL**.

## Medicare HMO Blue[SM] and Medicare PPO Blue[SM] Members

In accordance with CMS NCD, BCBSMA covers the following techniques when used to determine the potential therapeutic usefulness of an electrical nerve stimulator:

**Transcutaneous Electrical Nerve Stimulation (TENS)**
This technique involves attachment of a transcutaneous nerve stimulator to the surface of the skin over the peripheral nerve to be stimulated. It is used by the patient on a trial basis and its effectiveness in modulating pain is monitored by the physician, or physical therapist.

If TENS significantly alleviates pain, it may be considered as primary treatment; if it produces no relief or greater discomfort than the original pain electrical nerve stimulation therapy is ruled out. However, where TENS produces incomplete relief, further evaluation with percutaneous electrical nerve stimulation may be considered to determine whether an implanted peripheral nerve stimulator would provide significant relief from pain.

***National Coverage Determination (NCD) for Assessing Patient's Suitability for Electrical Nerve Stimulation Therapy (160.7.1)***
https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=63&ncdver=2&bc=AgAAgAAAAAAA&

BCBSMA covers TENS for acute post-operative pain for the following indications for Medicare HMO Blue and Medicare PPO Blue members in accordance with CMS NCD:

- The use of TENS for the relief of acute post-operative pain is covered under Medicare. TENS may be covered whether used as an adjunct to the use of drugs, or as an alternative to drugs, in the treatment of acute pain resulting from surgery, and
- TENS devices, whether durable or disposable, may be used in furnishing this service. When used for the purpose of treating acute post-operative pain, TENS devices are considered supplies. As such they may be hospital supplies furnished inpatient covered under Part A, or supplies incident to a physician's service when furnished in connection with surgery done on an outpatient basis, and covered under Part B.

***National Coverage Determination for Transcutaneous Electrical Nerve Stimulation (TENS) for Acute Post-Operative Pain (10.2)***
*https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=145&ncdver=1&bc=AgAAgAAAAAAA&*

BCBSMA covers a form-fitting conductive garment (and medically necessary related supplies) for the delivery of TENS and NMES for the following indication(s) for Medicare HMO Blue and Medicare PPO Blue members in accordance with CMS NCD:

1. It has received permission or approval for marketing by the Food and Drug Administration,
2. It has been prescribed by a physician for use in delivering covered TENS or NMES treatment, and
3. One of the medical indications outlined below is met:
    - The patient cannot manage without the conductive garment because there is such a large area or so many sites to be stimulated and the stimulation would have to be delivered so frequently that it is not feasible to use conventional electrodes, adhesive tapes, and lead wires,
    - The patient cannot manage without the conductive garment for the treatment of chronic intractable pain because the areas or sites to be stimulated are inaccessible with the use of conventional electrodes, adhesive tapes, and lead wires,
    - The patient has a documented medical condition such as skin problems that preclude the application of conventional electrodes, adhesive tapes, and lead wires,
    - The patient requires electrical stimulation beneath a cast either to treat disuse atrophy, where the nerve supply to the muscle is intact, or to treat chronic intractable pain, or
    - The patient has a medical need for rehabilitation strengthening (pursuant to a written plan of rehabilitation) following an injury where the nerve supply to the muscle is intact.

In accordance with CMS NCD, BCBSMA does not cover the conductive garment used in the delivery of TENS and NMES for Medicare HMO Blue and Medicare PPO Blue members **unless**:

1. The patient has a documented skin problem prior to the start of the trial period, and
2. The carrier's medical consultants are satisfied that use of such an item is medically necessary for the patient.

***National Coverage Determination for Supplies Used in the Delivery of Transcutaneous Electrical Nerve Stimulation (TENS) and Neuromuscular Electrical Stimulation (NMES) (160.13)***
*https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=151&ncdver=1&bc=AAAAQAAAAAAA&*

## Prior Authorization Information

Pre-service approval is required for all inpatient services for all products.
See below for situations where prior authorization may be required or may not be required for outpatient services.
Yes indicates that prior authorization is required.
No indicates that prior authorization is not required.

| | **Outpatient** |
|---|---|
| **Commercial Managed Care (HMO and POS)** | No |
| **Commercial PPO and Indemnity** | No |
| **Medicare HMO Blue℠** | No |
| **Medicare PPO Blue℠** | No |

## CPT Codes / HCPCS Codes / ICD-9 Codes

The following codes are included below for informational purposes. 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. *A draft of future ICD-10 Coding related to this document, as it might look today, is included below for your reference.*

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

### CPT Codes

| **CPT codes:** | **Code Description** |
|---|---|
| 64550 | Application of surface (transcutaneous) neurostimulator |

| | |
|---|---|
| 0278T | Transcutaneous electrical modulation pain reprocessing (eg, scrambler therapy), each treatment session (includes placement of electrodes) |

## HCPCS Codes

| HCPCS codes: | Code Description |
|---|---|
| E0720 | Transcutaneous electrical nerve stimulator (TENS) device, two lead, localized stimulation |
| E0730 | Transcutaneous electrical nerve stimulation (TENS) device, four or more leads, for multiple nerve stimulation |

## Description

Transcutaneous electrical nerve stimulation (TENS) describes the application of electrical stimulation to the surface of the skin at the site of pain. TENS may be applied in a variety of settings (in the patient's home, a physician's office, or in an outpatient clinic).

**Background**

TENS has been used to treat chronic intractable pain, postsurgical pain, and pain associated with active or posttrauma injury unresponsive to other standard pain therapies. It has been proposed that TENS may provide pain relief through the release of endorphins in addition to potential blockade of local pain pathways. TENS has also been used to treat dementia by altering neurotransmitter activity and increasing brain activity that is thought to reduce neural degeneration and stimulate regenerative processes. Percutaneous electrical nerve stimulation (PENS) (Policy No. 7.01.29) is similar to TENS but uses microneedles that penetrate the skin instead of surface electrodes. Interferential stimulation (Policy No. 1.01.24) uses a modulated waveform for deeper tissue stimulation and is believed to improve blood flow to the affected area.

## Summary

Overall, evidence for the use of transcutaneous electrical nerve stimulation (TENS) from high-quality trials remains inconclusive for most indications. The available studies are not consistent on whether TENS improves outcomes, and the overall strength of the evidence is weak for all indications. On the other hand, the best evidence exists for treatment of chronic, intractable pain, and there is strong clinical support for this indication. The available evidence indicates that TENS can improve chronic intractable pain in some patients, and there is also support for its use in clinical guidelines by specialty societies. To best target TENS toward patients who will benefit, a short-term trial of TENS is appropriate, with continuation only in patients who show an initial improvement. Therefore, TENS may be considered medically necessary for the treatment of chronic pain if shown to be effective during a 30-day therapeutic trial.

For indications other than chronic, intractable pain, the evidence does not permit conclusions on the efficacy of TENS. This includes acute pain, treatment of poststroke patients, and prevention of migraine headaches. For the prevention of migraine headaches, 1 small randomized controlled trial reported a greater proportion of patients achieving at least 50% reduction in migraines with TENS compared with sham placebo, and modest reductions in the number of total headache and migraine days. This manufacturer-sponsored trial needs to be corroborated before conclusions can be made on the efficacy of TENS for preventing migraine headaches. Therefore, TENS is considered investigational for all other indications besides chronic, intractable pain.

## Policy History

| Date | Action |
|---|---|
| 9/2014 | BCBSA National medical policy review.<br>New investigational indications described. Coding information clarified. Effective 9/1/2014. |
| 5/2014 | Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015. |
| 12/2013 | Medically necessary indications clarified. |

| | |
|---|---|
| 10/2013 | New references from BCBSA National medical policy. |
| 11/2011-<br>4/2012 | Medical policy ICD 10 remediation: Formatting, editing and coding updates.<br>No changes to policy statements. |
| 1/2012 | Reviewed - Medical Policy Group - Neurology and Neurosurgery.<br>No changes to policy statements. |
| 6/2011 | Reviewed - Medical Policy Group - Orthopedics, Rehabilitation Medicine and Rheumatology.<br>No changes to policy statements. |
| 1/2011 | Reviewed - Medical Policy Group - Neurology and Neurosurgery.<br>No changes to policy statements. |
| 7/2010 | Reviewed - Medical Policy Group - Orthopedics, Rehabilitation Medicine and Rheumatology.<br>No changes to policy statements. |
| 3/01/2010 | BCBSA National medical policy review.<br>Changes to policy statements. |
| 2/11/2010 | BCBSA National medical policy review.<br>Changes to policy statements. |
| 07/09/2009 | BCBSA National medical policy review.<br>Changes to policy statements. |

## 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

## References


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