Medical Policy
Transcutaneous Electrical Nerve Stimulation

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Policy Number: 003
BCBSA Reference Number: 1.01.09
NCD/LCD:
• National Coverage Determination (NCD) for Assessing Patient's Suitability for Electrical Nerve Stimulation Therapy (160.7.1)
• National Coverage Determination for Transcutaneous Electrical Nerve Stimulation (TENS) for Acute Post-Operative Pain (10.2)
• National Coverage Determination for Supplies Used in the Delivery of Transcutaneous Electrical Nerve Stimulation (TENS) and Neuromuscular Electrical Stimulation (NMES) (160.13)

Related Policies
• Percutaneous Electrical Nerve Stimulation (PENS) and Percutaneous Neuromodulation Therapy (PNT), #172
• Interferential Stimulation for Treatment of Pain, #509
• Temporomandibular Joint Dysfunction, #035
• Percutaneous Electrical Nerve Stimulation or Percutaneous Neuromodulation Therapy, #172

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 considered MEDICALLY NECESSARY to establish efficacy for the management of refractory chronic pain (e.g., chronic musculoskeletal or neuropathic pain) that causes significant disruption of function when the following conditions have been met:
• The pain is unresponsive to at least 3 months of conservative medical therapy, AND
• The trial is monitored by a physician.

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.

Documentation for the trial should include:
• Initial assessment/evaluation of the nature, duration, and perceived intensity of pain;
• The types and duration of prior treatments;
• 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 TENS may be considered 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:
• Efficacy has been demonstrated in an initial therapeutic trial; AND
• Compliance has been demonstrated in the therapeutic trial with the device used on a regular basis (eg, 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.

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

The use of TENS for any other condition, including but not limited to the treatment of dementia and prevention of migraine headaches, is INVESTIGATIONAL.

Medicare HMO BlueSM and Medicare PPO BlueSM 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)

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.
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)

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.
N/A indicates that this service is primarily performed in an inpatient setting.

<table>
<thead>
<tr>
<th>Outpatient</th>
<th>Commercial Managed Care (HMO and POS)</th>
<th>No</th>
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<tbody>
<tr>
<td></td>
<td>Commercial PPO and Indemnity</td>
<td>No</td>
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<tr>
<td></td>
<td>Medicare HMO Blue℠</td>
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<tr>
<td></td>
<td>Medicare PPO Blue℠</td>
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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

<table>
<thead>
<tr>
<th>CPT codes:</th>
<th>Code Description</th>
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<tbody>
<tr>
<td>64550</td>
<td>Application of surface (transcutaneous) neurostimulator</td>
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HCPCS Codes

<table>
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<tr>
<th>HCPCS codes:</th>
<th>Code Description</th>
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<tbody>
<tr>
<td>A4595</td>
<td>Electrical stimulator supplies, 2 lead, per month, (e.g., TENS, NMES)</td>
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<tr>
<td>A4630</td>
<td>Replacement batteries, medically necessary, transcutaneous electrical stimulator, owned by patient</td>
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<tr>
<td>E0720</td>
<td>Transcutaneous electrical nerve stimulator (TENS) device, two lead, localized stimulation</td>
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<tr>
<td>E0730</td>
<td>Transcutaneous electrical nerve stimulation (TENS) device, four or more leads, for multiple nerve stimulation</td>
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<tr>
<td>E0731</td>
<td>Form-fitting conductive garment for delivery of TENS or NMES (with conductive fibers separated from the patient's skin by layers of fabric)</td>
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The following CPT code is considered investigational for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

<table>
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<tr>
<th>CPT codes:</th>
<th>Code Description</th>
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<tr>
<td>0278T</td>
<td>Transcutaneous electrical modulation pain reprocessing (eg, scrambler therapy), each treatment session (includes placement of electrodes)</td>
</tr>
</tbody>
</table>

Description

Transcutaneous electrical nerve stimulation (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 (Policy #172) is similar to TENS but uses microneedles that penetrate the skin instead of surface electrodes. Interferential stimulation (Policy #509) uses a modulated waveform for deeper tissue stimulation and is believed to improve blood flow to the affected area. 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).

Summary

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).

The evidence for TENS in individuals who have chronic pain includes numerous randomized controlled trials (RCTs) and systematic reviews. Relevant outcomes are symptoms, functional outcomes, quality of life, and medication use. The overall strength of the evidence is weak. The best evidence exists for treatment of chronic, intractable pain. Available evidence indicates that TENS can improve chronic intractable pain in some patients, and there is support for its use in clinical guidelines by specialty societies. To best direct TENS toward patients who will benefit, a short-term trial of TENS is appropriate,
with continuation only in patients who show an initial improvement. The evidence is sufficient to determine qualitatively that the technology results in a meaningful improvement in the net health outcome.

The evidence for TENS in individuals who have acute pain includes RCTs and systematic reviews. Relevant outcomes are symptoms and medication use. Overall, evidence for the use of TENS from high quality trials remains inconclusive for most indications. A Cochrane review of TENS for acute pain (eg, cervical laser treatment, venipuncture, screening flexible sigmoidoscopy, postpartum uterine contractions, rib fractures) found some evidence that TENS reduces pain intensity over and above that seen with placebo, but the high risk of bias made definitive conclusions impossible. For the treatment of pain after total knee arthroplasty, one large RCT found no benefit of TENS compared with sham TENS. For the prevention of migraine headaches, one small RCT reported a greater proportion of patients achieving at least 50% reduction in migraines with TENS than with sham placebo, and modest reductions in the number of total headache and migraine days. This manufacturer-sponsored trial needs corroboration before conclusions can be made about the efficacy of TENS for preventing migraine headaches. The evidence is insufficient to determine the effects of the technology on health outcomes.

Clinical input was generally in agreement that TENS is investigational for the management of acute pain and for other conditions such as dementia. Clinical input was, for the most part, in agreement that TENS is a generally accepted treatment modality and can be beneficial for the management of chronic pain in some patients. A trial period, similar to that in Medicare Coverage guidelines, was recommended by some.

**Policy History**

<table>
<thead>
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<tr>
<td>8/2016</td>
<td>Clarified coding information.</td>
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<tr>
<td>12/2015</td>
<td>New references added from BCBSA National medical policy.</td>
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<tr>
<td>12/2015</td>
<td>Added coding language.</td>
</tr>
<tr>
<td>6/2015</td>
<td>New references added from BCBSA National medical policy.</td>
</tr>
<tr>
<td>9/2014</td>
<td>BCBSA National medical policy review.</td>
</tr>
<tr>
<td></td>
<td>New investigational indications described. Coding information clarified.</td>
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<tr>
<td></td>
<td>Effective 9/1/2014.</td>
</tr>
<tr>
<td>5/2014</td>
<td>Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.</td>
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<tr>
<td>12/2013</td>
<td>Medically necessary indications clarified.</td>
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<tr>
<td>10/2013</td>
<td>New references from BCBSA National medical policy.</td>
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<td></td>
<td>No changes to policy statements.</td>
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<tr>
<td></td>
<td>No changes to policy statements.</td>
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</tbody>
</table>
References


33. Machin D, Lewith GT, Wylson S. Safety and patients' satisfaction of transcutaneous supraorbital neurostimulation (tNS) with the Cefaly(R) device in headache treatment: a survey of 2,313 headache sufferers in the general population. J Headache Pain. Dec 2013;14:95. PMID 24289825


