

Transcutaneous Electrical Nerve Stimulation (TENS) and Transcutaneous Afferent Patterned Stimulation (TAPS) Corporate Medical Policy

File Name: Transcutaneous Electrical Nerve Stimulation (TENS)
File Code: 1.01.VT09
Origination: 09/1997
Last Review: 06/2025
Next Review: 06/2026
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Description/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). TENS consists of an electrical pulse generator, usually battery operated, connected by wire to two or more electrodes, which are applied to the surface of the skin at the site of the pain.

Transcutaneous Afferent Patterned Stimulation (TAPS) describes the application of patterned electrical stimulation to the surface of the skin over peripheral nerves, typically at the wrist. TAPS is used in various outpatient settings, including at home, and involves a wearable, battery-operated device that delivers sequences of electrical pulses to targeted nerve sites, such as the median and radial nerves. The stimulation is delivered in a time-locked, alternating pattern designed to modulate abnormal neural activity in the central nervous system. TAPS is primarily used to reduce symptoms in patients with movement disorders, such as essential tremor.

Policy

Coding Information

There is no specific code for reporting the Cefaly device, a transcutaneous electrical nerve stimulator (TENS) for migraine treatment. Coding would most likely be reported using HCPCS E1399 (Durable medical equipment, miscellaneous.)

[Click the links below for attachments, coding tables & instructions.](#)
[Attachment I](#)

When a service may be considered medically necessary

TENS is considered **medically necessary** for the following conditions.

- Postoperative pain and 1 or more of the following:
 - Conventional pain control techniques fail to adequately reduce pain.
 - Medication-related adverse events are unacceptable.
 - Opioid dosage reduction is needed.
- Dysmenorrhea, as indicated by **ALL** of the following:
 - No response to treatment with NSAIDs or hormonal therapy (eg, oral contraceptives)
 - Secondary causes of dysmenorrhea have been ruled out (eg, endometriosis).
- Chronic refractory musculoskeletal or neuropathic pain with **ALL** of the following:
 - The pain is unresponsive to at least three months of conservative medical therapy including non-steroidal anti-inflammatory medications, ice, rest and/or physical therapy;
 - Efficacy of the use of a TENS unit has been documented in a provider setting;
 - Documentation of member education on the use of TENS therapy

NOTE: Refractory chronic pain is defined in this policy as pain that causes significant disruption of function and has not responded to at least three months of conservative therapy, including non-steroidal anti-inflammatory medications, ice, rest, and/or physical therapy.

A 90-day trial of TENS may be considered medically necessary to establish the efficacy of pain management for the above conditions. A 90-day trial may be considered medically necessary when the following conditions have been met:

- The trial is monitored by a clinician; **AND**
- The pain is unresponsive to at least three months of conservative medical therapy (e,g, use of NSAIDs, -Physical Therapy, Occupational Therapy, - Chiropractic, stretching); **AND**
 - Documentation for the trial includes **ALL** of the following:
 - 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.

NOTE: Significant disruption of functioning is documented as difficulty in at least two of the following (adapted from the RAND SF-20):

- 1) Eating, dressing, bathing or using the toilet
- 2) Sleeping
- 3) Walking one block
- 4) Working at a job, attending school or performing household tasks
- 5) Limiting social activities
- 6) Causing depression and/or anxiety requiring treatment

NOTE: Intensity of pain best illustrated when scored on the Visual Analogue Scale (VAS) or Quadruple VAS recommended.

A trial of three months is required before the full purchase will be considered:

Continued use of TENS beyond the initial 90-day trial may be considered medically necessary: When a clinical summary of the trial to determine efficacy is submitted, that includes:

- The management of the above types of pain that causes significant disruption of function.
- Perceived intensity of pain with and without TENS (e.g., 2 point or 30% improvement in visual analog scale);
- Ongoing medication requirements for pain relief (if any);
- Other modalities (if any) in use for pain control;
- Actual use of TENS on a daily basis (frequency and duration of application). A form-fitting conductive garment will be considered medically necessary in place of conventional electrodes for one of the above categories when the following is met:
 - It has received permission or approval for marketing by the Food and Drug Administration; **AND**
 - It has been prescribed by a physician for use in delivering covered TENS treatment; **AND**
 - One of the medical indications outlined below is met:
 - 1) 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;
 - 2) 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;

- 3) The patient has a documented medical condition such as skin problems that preclude the application of conventional electrodes, adhesive tapes and lead wires;
- 4) 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
- 5) 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.

We consider the following a benefit exclusion and therefore, not covered:

- Extra batteries that can be purchased over the counter for the TENS unit, as it is considered a convenience item.

When a service is considered investigational

We consider TENS **investigational** when used to treat any of the following without a co-occurring condition above:

- Dementia
- Depression
- Anxiety
- Cancer and cancer treatment-related pain
- Dysphagia
- Fibromyalgia
- MS-associated pain
- Prevention and treatment of migraine headaches
- Phantom Limb
- Rheumatoid Arthritis
- Scleroderma and GI symptoms
- Slow transit constipation in children
- Stroke-related motor dysfunction
- Stress incontinence post prostatectomy
- Urge incontinence in children
- Neurogenic incontinence
- Enuresis in children
- Tinnitus
- Lichen simplex pruritis
- Acute and chronic headaches (e.g. Cefaly Technology)
- Chronic deep abdominal pain
- Chronic pelvic pain syndrome
- Temporomandibular joint (TMJ) pain
- Use as sympathetic therapy including when delivered using the Dynatron STS and Dynatron STS Rx device.
- Use as cranial electrical stimulation, transcranial electrical stimulation, or electrical

- stimulation therapy (e.g. Alpha-Stim)
- Use as electrical stimulation of auricular acupuncture points
- Pain during labor and delivery
- Management of essential tremor
- Management of action tremor of Parkinson's Disease
- Management of attention deficit hyperactivity disorder (ADHD)

We consider TENS investigational for all other indications that are not listed as medically necessary, not medically necessary or an exclusion.

We consider all other modalities including ultrasonic heat treatments, or other transdermal modalities not explicitly mentioned above to be investigational.

We consider TAPS investigational for essential tremor and intention tremor of Parkinson's Disease. We consider TAPS investigational for all other indications.

Replacement of lost, stolen or destroyed Durable Medical Equipment

We will replace one lost, stolen or destroyed Durable Medical Equipment, prosthetic or orthotic per Plan Year if not covered by an alternative entity (including but not limited to homeowners insurance and automobile insurance) if:

- the Durable Medical Equipment, prosthetic or orthotic absence would put the member at risk of death, disability or significant negative health consequences such as a hospital admission;
- the Durable Medical Equipment is still under warranty.

Note: In order to replace a stolen item we require you to submit documentation, such as a police report, with the request.

Exclusions

We do not cover the replacement of a lost, stolen or destroyed Durable Medical Equipment, prosthetic or orthotic:

- if the criteria above have not been met; and
- for more than one lost, stolen or destroyed Durable Medical Equipment, prosthetic or orthotic per Plan Year.

Reference Resource:

1. Blue Cross and Blue Shield Association. Transcutaneous Electrical Nerve Stimulation, MPRM 1.01.09. Last Reviewed January 2025. Accessed June 2025.

Related Policies

Durable Medical Equipment, Prosthetics, Orthotics and Supplies (DMEPOS)
Neuromuscular Electrical Stimulation (NMES)

Document Precedence

Blue Cross and Blue Shield of Vermont (Blue Cross VT) Medical Policies are developed to provide clinical guidance and are based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. The applicable group/individual contract and member certificate language, or employer's benefit plan if an ASO group, determines benefits that are in effect at the time of service. Since medical practices and knowledge are constantly evolving, Blue Cross VT reserves the right to review and revise its medical policies periodically. To the extent that there may be any conflict between medical policy and contract/employer benefit plan language, the member's contract/employer benefit plan language takes precedence.

Audit Information

Blue Cross VT reserves the right to conduct audits on any provider and/or facility to ensure compliance with the guidelines stated in the medical policy. If an audit identifies instances of non-compliance with this medical policy, Blue Cross VT reserves the right to recoup all non-compliant payments.

Administrative and Contractual Guidance

Benefit Determination Guidance

Prior approval is required and benefits are subject to all terms, limitations and conditions of the subscriber contract.

Incomplete authorization requests may result in a delay of decision pending submission of missing information. To be considered complete, see policy guidelines above.

NEHP/ABNE members may have different benefits for services listed in this policy. To confirm benefits, please contact the customer service department at the member's health plan.

Federal Employee Program (FEP): Members may have different benefits that apply. For further information please contact FEP customer service or refer to the FEP Service Benefit Plan Brochure. It is important to verify the member's benefits prior to providing the service to determine if benefits are available or if there is a specific exclusion in the member's benefit.

Coverage varies according to the member's group or individual contract. Not all groups are required to follow the Vermont legislative mandates. Member Contract language takes precedence over medical policy when there is a conflict.

If the member receives benefits through an Administrative Services Only (ASO) group, benefits may vary or not apply. To verify benefit information, please refer to the member's employer benefit plan documents or contact the customer service department. Language in the employer benefit plan documents takes precedence over medical policy when there is

a conflict.

Policy Implementation/Update information

10/2005	This policy replaces TENS policy signed by Dr. Pekins and Dr. Provato in 2005 and 2004, Dr. Perkins 11/01/1998, and supersedes the memorandum 09/26/1997 from Dr. Allard; memorandum dated 07/10/1997 from Dr. Allard and memorandum from Dr. Van Buren dated 11/06/1989.
10/2006	Updated to add referral guidelines for NEHP and updated HCPCS codes.
08/2007	Minor updates. Reviewed by CAC 09/2007, 07/2008 annual review.
08/2008	Format changes made; reviewed by CAC 09/2008.
08/2009	Annual review. Adopted BCBSA medical policy with minor changes; reviewed by CAC 09/2009.
07/09/2009	Replaced policy; updated with literature review through December 2008; references added and reordered; clinical input reviewed. Policy statement revised; TENS may be medically necessary for chronic pain if effective during a therapeutic trial; other uses of TENS considered investigational.
01/2010	Updated with minor editing; reviewed and approved by CAC 01/2010.
11/2011	Updated and transferred to new format; language added regarding sympathetic therapy. Language added concerning additional information required to approve TENS garments. Coding table updated regarding sympathetic therapy. Coder reviewed and approved codes-SAF.
04/2012	Replaced with new coding table; corrected format and language-SAF
05/2017	Clarifying language for medical necessity investigational criteria and benefit exclusion, formatting changes, TENS trial up to 90 days from 30 days. Added clarification for objective tools to define disruptive functioning, removed neuropathy as investigational, updated references, updated policy implementation table, updated reference, and removed CPT® 64550 code from requiring PA. HCPCS Code E1399 removed from investigational to requiring PA.
11/2018	No change to policy, added lost/stolen equipment language. Code 64550 removed deleted effective 01/01/2019.
11/2019	Policy reviewed no changes to policy statement. Code E1399 removed from requiring prior approval to suspend for medical review.
11/2020	No change to policy statement. Updated references.
12/2021	No change to policy statement. Updated references.

11/2022	Policy reviewed. Reference updated and related policy section. Investigational policy statements for the use of specific TENS devices for essential tremor and ADHD indications added to policy statements. Removed codes A4556 & A4557 from coding table. Added code 97799 as Investigational.
10/2023	Policy reviewed. No changes to policy statement. Reference updated.
10/2024	Policy reviewed. Addition of indication of prevention and treatment of migraine headaches as investigational. Minor formatting and language changes for clarity and consistency.
06/2025	Policy Reviewed. Policy name changed from 'Transcutaneous Electrical Nerve Stimulation (TENS)' to 'Transcutaneous Electrical Nerve Stimulation (TENS) and Transcutaneous Afferent Patterned Stimulation (TAPS'. Addition of policy statement for the indication of TAPS as investigational for essential tremor and intention tremor of Parkinson's Disease. TAPS is considered investigational for all other indications. Updated coding section to include the Cefaly device for treatment of migraines. Added codes A4541, A4542, E0733, E0734 to coding table as investigational.

Eligible providers

Qualified healthcare professionals practicing within the scope of their license(s).

Approved by Blue Cross VT Medical Directors

Tom Weigel, MD, MBA
Vice President & Chief Medical Officer

Tammaji P. Kulkarni, MD
Senior Medical Director

Attachment I

Code Type	Number	Brief Description	Policy Instructions
The following codes will be considered as medically necessary when applicable criteria have been met.			
HCPCS	A4595	TENS supply 2 lead per month	Requires Prior Authorization
HCPCS	E0720	Tens unit two lead, localized	Requires Prior Authorization
HCPCS	E0730	Tens four or more leads	Requires Prior Authorization
HCPCS	E0731	Conductive garment for delivery of TENS or NMES	Requires Prior Authorization
HCPCS	E1399	Durable medical equipment; miscellaneous	Will suspend for Medical Review
The following codes will be denied as Not Medically Necessary, Non- Covered or Investigational			
CPT®	97799	Unlisted physical medicine/ rehabilitation service or procedure	Investigational
HCPCS	A4541	Monthly supplies for use of device coded at E0733	Investigational
HCPCS	A4542	Supplies and accessories for external upper limb tremor stimulator of the peripheral nerves of the wrist	Investigational
HCPCS	A4630	Replacement batteries TENS units; patient owned	Non- Covered
HCPCS	E0733	Transcutaneous electrical nerve stimulator for electrical stimulation of the trigeminal nerve	Investigational
HCPCS	E0734	External upper limb tremor stimulator of the peripheral nerves of the wrist	Investigational