

Medical Coverage Policy | Transcutaneous Electrical Nerve Stimulation (TENS)



EFFECTIVE DATE: 10|01|2015

POLICY LAST UPDATED: 02|03|2021

OVERVIEW

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).

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Prior authorization review is not required.

POLICY STATEMENT

Medicare Advantage Plans

The use of TENS is considered medically necessary for treatment of chronic, intractable pain, acute post-operative pain or low back pain.

Commercial Products

The use of TENS is considered medically necessary for treatment of refractory chronic pain (eg, chronic musculoskeletal or neuropathic pain) that causes significant disruption of function

TENS is considered not medically necessary for the management of acute pain (e.g., postoperative or during labor and delivery).

Medicare Advantage Plans and Commercial Products

The use of TENS for any other condition, including but not limited to the treatment of dementia and prevention of migraine headaches, is considered not medically necessary, as the evidence is insufficient to determine the effects of the technology on health outcomes.

COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement for applicable durable medical equipment benefits/coverage.

BACKGROUND

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 available studies are inconsistent 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. 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 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. 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 post-stroke patients, and prevention of migraine headaches. For the treatment of pain after total knee arthroplasty, 1 large randomized controlled trial (RCT) found no benefit of TENS compared with sham TENS. For the prevention of migraine headaches, 1 small RCT 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 corroboration before conclusions can be made about the efficacy of TENS for preventing migraine headaches. Therefore, TENS is considered not medically necessary for all other indications besides chronic, intractable pain.

CODING

Medicare Advantage Plans

The following code(s) are covered:

E0720 Transcutaneous electrical nerve stimulation (TENS) device, two lead, localized stimulation

E0730 Transcutaneous electrical nerve stimulation (TENS) device, four or more leads, for multiple nerve stimulation

E0731 Form-fitting conductive garment for delivery of TENS or NMES (with conductive fibers separated from the patient's skin by layers of fabric)

Commercial Products

The following code(s) are covered when filed with a covered diagnosis from the list below:

E0720 Transcutaneous electrical nerve stimulation (TENS) device, two lead, localized stimulation

E0730 Transcutaneous electrical nerve stimulation (TENS) device, four or more leads, for multiple nerve stimulation

E0731 Form-fitting conductive garment for delivery of TENS or NMES (with conductive fibers separated from the patient's skin by layers of fabric)

Covered ICD-10 diagnosis codes:

G89.21-G89.8

G90.50-G90.59

M25.50- M25.579

M54.10- M54.18

M54.2

M54.30-M54.32

M54.40-M54.42

M54.5

M54.6

M54.81, M54.89

M54.9

M79.1

M79.2

R52

Medicare Advantage Plans and Commercial Products

The following code(s) are not covered for Medicare Advantage Plans and not medically necessary for Commercial Products:

K1016 Transcutaneous electrical nerve stimulator for electrical stimulation of the trigeminal nerve (new code effective 4/1/2021)

K1018 External upper limb tremor stimulator of the peripheral nerves of the wrist (new code effective 4/1/2021)

RELATED POLICIES

Chiropractic Services

PUBLISHED

Provider Update April 2021

Provider Update April 2020

Provider Update January 2019

Provider Update January 2018

Provider Update February 2017

REFERENCES

1. Food and Drug Administration. De Novo Classification Request for Cefaly Device. 2012; http://www.accessdata.fda.gov/cdrh_docs/reviews/K122566.pdf. Accessed February 10, 2015.
2. Blue Cross and Blue Shield Association Technology Evaluation Center (TEC). TENS or PENS in the treatment of chronic and postoperative pain. TEC Assessments. 1996;Volume 11, Tab 21.
3. Bronfort G, Nilsson N, Haas M, et al. Non-invasive physical treatments for chronic/recurrent headache. *Cochrane Database Syst Rev*. 2004(3):CD001878. PMID 15266458
4. Brosseau L, Judd MG, Marchand S, et al. Transcutaneous electrical nerve stimulation (TENS) for the treatment of rheumatoid arthritis in the hand. *Cochrane Database Syst Rev*. 2003(3):CD004377. PMID 12918009
5. Brosseau LU, Pelland LU, Casimiro LY, et al. Electrical stimulation for the treatment of rheumatoid arthritis. *Cochrane Database Syst Rev*. 2002(2):CD003687. PMID 12076504
6. Cameron M, Lonergan E, Lee H. Transcutaneous electrical nerve stimulation (TENS) for dementia. *Cochrane Database Syst Rev*. 2003(3):CD004032. PMID 12917999
7. Carroll D, Moore RA, McQuay HJ, et al. Transcutaneous electrical nerve stimulation (TENS) for chronic pain. *Cochrane Database Syst Rev*. 2001(3):CD003222. PMID 11687055
8. Dowswell T, Bedwell C, Lavender T, et al. Transcutaneous electrical nerve stimulation (TENS) for pain relief in labour. *Cochrane Database Syst Rev*. 2009(2):CD007214. PMID 19370680
9. Hurlow A, Bennett MI, Robb KA, et al. Transcutaneous electric nerve stimulation (TENS) for cancer pain in adults. *Cochrane Database Syst Rev*. 2012;3:CD006276. PMID 22419313
10. Khadilkar A, Milne S, Brosseau L, et al. Transcutaneous electrical nerve stimulation (TENS) for chronic low-back pain. *Cochrane Database Syst Rev*. 2005(3):CD003008. PMID 16034883
11. Khadilkar A, Odebiyi DO, Brosseau L, et al. Transcutaneous electrical nerve stimulation (TENS) versus placebo for chronic low-back pain. *Cochrane Database Syst Rev*. 2008(4):CD003008. PMID 18843638
12. Kroeling P, Gross A, Goldsmith CH, et al. Electrotherapy for neck pain. *Cochrane Database Syst Rev*. 2009(4):CD004251. PMID 19821322
13. National Coverage Determination (NCD) for Transcutaneous Electrical Nerve Stimulation (TENS) for Acute Post-Operative Pain (10.2)
14. National Coverage Determination (NCD) for Transcutaneous Electrical Nerve Stimulation (TENS) for Chronic Low Back Pain (CLBP) (160.27)
15. National Coverage Determination (NCD) for Transcutaneous Electrical Nerve Stimulators (TENS) (280.13)

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