

## Medical Coverage Policy | Transcutaneous Electrical Nerve Stimulation (TENS)



**EFFECTIVE DATE:** 10|01|2015  
**POLICY LAST UPDATED:** 05|10|2022

### 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.

The use of TENS for any other condition, including but not limited to the treatment of dementia, management of essential tremor, management of attention deficit hyperactivity disorder, and prevention of migraine headaches, is not covered, as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

#### Commercial Products

The use of TENS is considered medically necessary when filed with a covered indication (see Coding section below).

The use of TENS for any other condition, including but not limited to the treatment of dementia, management of essential tremor, management of attention deficit hyperactivity disorder, and prevention of migraine headaches, is considered not medically necessary, as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

### 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

G89.4

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 2022

Provider Update April 2021

Provider Update April 2020

Provider Update January 2019

## REFERENCES

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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
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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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