

Medical Policy



Independent Licensee of the
Blue Cross and Blue Shield Association

Title: Electrical Stimulation Devices for Home Use

See also: Functional Neuromuscular Stimulation to Provide Ambulation policy

Professional

Original Effective Date: July 1, 2006

Revision Date(s): January 1, 2009

Current Effective Date: February 11, 2009

Institutional

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DESCRIPTION

- A. Transcutaneous Electrical Nerve Stimulation Devices (TENS) - Electrodes are applied to the skin to stimulate sensory nerves to block pain signals and generate endorphins.
- B. Form Fitting Conductive Garment – Is a garment used for delivering TENS.
- C. Neuromuscular Electrical Stimulation Devices (NMES) - Attempts to stimulate motor nerves to cause contraction of muscles rather than alter the perception of pain. NMES are used to prevent disuse atrophy, relax muscle spasm, increase blood circulation, improve range of motion and re-educate muscles.
- D. Interferential Therapy (such as RS-4i) - Uses paired electrodes so that current flowing between each pair intersects at the underlying target thus maximizing the current permeating the tissues while reducing to a minimum unwanted stimulation of cutaneous nerves. The results of placebo-controlled trials have reported negative finding for interferential therapy. (BCBSA.)
- E. Galvanic Stimulation Devices - High voltage, pulsed stimulation used primarily for local edema reduction through muscle pumping and polarity effect. Edema is comprised of negatively charged plasma proteins. Placing electrodes over the edematous site disperses the negatively charged proteins.
- F. Microcurrent Stimulation Devices (MENS) - Uses a reduced electrical stimulation compared to TENS and acts on naturally occurring electrical impulses to decrease pain.
- G. H-wave Stimulation Devices - Differs from other types of electrical stimulation in terms of its waveform. Used in treatment of pain from various etiologies and for wound healing.

- H. Functional Neuromuscular Stimulation to Provide Ambulation - Attempts to replace stimuli from destroyed nerves with sequential electrical stimulation of muscles to enable spinal cord injured patients to stand or walk or to maintain muscle tone and strength. Health outcomes such as ability to perform activities of daily living or quality of life have not been reported. (*see Functional Neuromuscular Stimulation to Provide Ambulation policy*)
- I. Sympathetic Therapy for the Treatment of Pain (Dynatron STS) - Designed to stimulate the sympathetic nervous system to induce a systemic effect on sympathetically induced pain rather than to treat local pain. There is lack of evidence of improved health outcomes.
- J. Electrostimulation and Electromagnetic Therapy for the treatment of chronic wounds in the home setting.
- K. Pulsed Electrical Stimulation for the treatment of osteoarthritis (BioniCare BIO-1000).

POLICY

- A. Transcutaneous Electrical Nerve Stimulation Devices (TENS):
 - 1. May be considered **medically necessary** for the treatment of chronic intractable or acute post op musculoskeletal pain.
 - 2. **Is not medically necessary** for non-musculoskeletal pain, including but not limited to headache, visceral abdominal pain, and pelvic pain.

This policy reflects the long standing accepted standard of care despite lack of evidence of effectiveness.
- B. Form Fitting Conductive Garment:

Is considered **medically necessary** when it meets the indications outlined in Transcutaneous Electrical Nerve Stimulation Devices (TENS) and the patient:

 - 1. Is unable to manage without the garment due to large area or large number of sites; or
 - 2. Has skin conditions that preclude the application of conventional electrodes, adhesive tapes and lead wires; or
 - 3. Is applying electrical stimulation beneath a cast for disuse atrophy.
- C. Neuromuscular Electrical Stimulation Devices (NMES):

Are considered **investigational** when used in the home setting.

 - Evidence is lacking regarding improved health outcomes.
- D. Interferential Therapy (such as RS-4i):

Is denied **experimental/investigational**.
- E. Galvanic Stimulation Devices:

Are denied **experimental/investigational**.

- F. Microcurrent Stimulation Devices (MENS):
Are denied **experimental/investigational**.
- G. H-wave Stimulation Devices:
Are denied **experimental/investigational**.
- H. Functional Neuromuscular Stimulation to Provide Ambulation:
Is denied **experimental/investigational**.
(see *Functional Neuromuscular Stimulation to Provide Ambulation policy*)
- I. Sympathetic Therapy for the Treatment of Pain (Dynatron STS):
Is denied **experimental/investigational**.
- J. Electrostimulation and Electromagnetic Therapy for the treatment of chronic wounds in the home setting:
Is denied **experimental/investigational**.
- K. Pulsed Electrical Stimulation for the treatment of osteoarthritis (BioniCare BIO-1000):
Is denied **experimental/investigational**.

CODING

The following codes for treatment and procedures applicable to this policy are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) 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 of these services as it applies to an individual member.

HCPCS

A4556	Electrodes (e.g., apnea monitor), per pair
A4557	Lead wires (e.g., apnea monitor), per pair
A4558	Conductive gel or paste, for use with electrical device (e.g., TENS, NMES), per oz.
A4595	Electrical stimulator supplies, 2 leads, per month (e.g., TENS, NMES)
A4630	Replacement batteries, medically necessary, transcutaneous electrical stimulator, owned by patient
E0720	Transcutaneous electrical nerve stimulation (TENS) device, 2 lead, localized stimulation
E0730	TENS, 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)
E0744	Neuromuscular stimulator for scoliosis
E0745	Neuromuscular stimulator, electronic shock unit
E0761	Nonthermal pulsed high frequency radiowaves, high peak power electromagnetic energy treatment device
E0762	Transcutaneous electrical joint stimulation device system, includes all accessories

- E0764 Functional neuromuscular stimulator, transcutaneous stimulation of muscles of ambulation with computer control, used for walking by spinal cord injured, entire system, after completion of training program
- E0765 FDA approved nerve stimulator, with replaceable batteries, for treatment of nausea and vomiting
- E0769 Electrical stimulation or electromagnetic wound treatment device, not otherwise classified
- E0770 Functional electrical stimulator, transcutaneous stimulation of nerve and/or muscle groups, any type, complete system, not otherwise specified

DIAGNOSIS

- 716.13 Traumatic arthropathy, forearm
- 719.41 Pain in joint, shoulder region
- 719.42 Pain in joint, upper arm
- 719.43 Pain in joint, forearm
- 719.44 Pain in joint, hand
- 719.45 Pain in joint, pelvic region and thigh
- 719.46 Pain in joint, lower leg
- 719.47 Pain in joint, ankle and foot
- 722.4 Degeneration of cervical intervertebral disc
- 722.51 Degeneration of thoracic or thoracolumbar intervertebral disc
- 722.52 Degeneration of lumbar or lumbosacral intervertebral disc
- 722.83 Postlaminectomy syndrome, lumbar region
- 722.93 Other and unspecified disc disorder of lumbar region
- 723.1 Cervicalgia
- 723.4 Brachial neuritis or radiculitis nos
- 724.02 Spinal stenosis of lumbar region
- 724.2 Lumbago
- 724.3 Sciatica
- 724.4 Thoracic or lumbosacral neuritis or radiculitis, unspecified
- 727.61 Complete rupture of rotator cuff
- 729.5 Pain in limb
- 805.4 Closed fracture of lumbar vertebra without mention of spinal cord injury
- 839.69 Closed dislocation, other location
- 927.20 Crushing injury of hand(s)
- 928.20 Crushing injury of foot
- 953.0 Injury to cervical nerve root
- 955.1 Injury to median nerve
- 955.2 Injury to ulnar nerve
- 959.09 Injury of face and neck, other and unspecified

REVISIONS

01-01-2009	<p>In Description and Policy section:</p> <ul style="list-style-type: none"> ▪ Added reference to See Also Functional Neuromuscular Stimulation to Provide Ambulation policy.
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	In Coding section: <ul style="list-style-type: none"> ▪ Added HCPCS codes: A4556, A4557, A4558, A4630, E0764. ▪ Added new HCPCS code: E0770
02-11-2009	<ul style="list-style-type: none"> ▪ Added HCPCS codes: E0720, E0744, E0745, E0761, E0762, E0765, E0769.

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Web site

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3. Medicare Coverage Policy. http://www.cms.hhs.gov/mcd/index_list.asp?list_type=ncd#PE .