



SURFACE NEUROMUSCULAR ELECTRICAL STIMULATORS  
DME102.005

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COVERAGE:

Neuromuscular Electrical Stimulators ARE ELIGIBLE FOR COVERAGE when prescribed by a physician for the following indications:

- chronic pain management
- promote wound healing
- increase local blood circulation (to prevent skin breakdowns and decubitus ulcers)
- assist in function (paraplegics and quadriplegics)

**NOTE:** Functional neuromuscular stimulators used for the RESTORATION of function in spinal injured patients are considered investigational and therefore are not eligible for coverage.

- relaxation of muscle spasm
- muscle re-education
- maintaining or increasing range of motion.

Neuromuscular electrical stimulators used for indications other than the ones mentioned above ARE NOT ELIGIBLE FOR COVERAGE. Stimulators are being promoted by some health spas and figure salons for new uses (i.e, remove wrinkles, perform face lifts, reduce breast size, and to remove cellulite). The FDA considers the promotion of muscle stimulators used for these conditions to be fraudulent.

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DESCRIPTION:

Surface Neuromuscular Electrical Stimulators are devices that transmit electrical impulses to the skin over selected muscle groups by way of electrodes. Electrical Stimulation involves two primary systems- the bioelectric stimulator and biosystem (patient) to which the device is applied.

Following is a listing of different types of surface neuromuscular electrical stimulators and their uses.

**INTERFERENTIAL STIMULATORS**

This stimulation method is characterized by the crossing of two medium independent frequencies which work together to effectively stimulate large muscle fibers. This is thought to have deep tissue penetration.

Uses: Pre and post-orthopedic surgery, joint injury syndrome, cumulative trauma disorders, increasing circulation, and pain management.

**MICROCURRENT STIMULATORS**

Microcurrent stimulation is the use of any electrical device that

produces less than one milliampere. Transcutaneous electrical neuromuscular stimulation (TENS) units use milliamperage.

Uses: Pain management (acute and chronic), to reduce edema and inflammation, to promote wound healing, and to treat anxiety disorders.

Examples: Alpha 100 Stimulator, Galvanic Stimulator (high voltage pulsed stimulator (HVPS), Electro Acuscope, and others.

### **FUNCTIONAL STIMULATORS**

Functional neuromuscular stimulation attempts to replace stimuli from destroyed nerve pathways with computer-controlled sequential electrical stimulation of muscles to enable spinal-cord-injured patients to stand or walk independently, or at least maintain healthy muscle tone and strength.

Uses: Aid in strengthening of muscles, improvement of range of motion, reduction of spasticity, muscle re-education, and prevention of decubitus ulcers.

### **H-WAVE STIMULATION**

H-Wave stimulation is a unique form of electrical stimulation that uses a bi-polar and exponentially decaying wave form resulting in a pulse width measured in milliseconds rather than microseconds. H-Wave stimulation is said to accomplish reduction of edema and the reduction or elimination of pain.

Uses: Pain management and healing of wounds.

### **CRANIAL ELECTROTHERAPY STIMULATION**

Cranial electrotherapy stimulation (CES) is the application of low level, pulsed electrical currents applied to the head for medical and/or psychological purposes. It is most often used to treat situational and chronic anxiety.

Uses: Pain and anxiety disorders

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### **RATIONALE:**

There are many neuromuscular electrical stimulators on the market today. The FDA states that muscle stimulators are a legitimate medical device approved for certain conditions.

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### **DISCLAIMER:**

State and federal law, as well as contract language, including definitions and specific inclusions/exclusions, takes precedence over Medical Policy and must be considered first in determining coverage. The member's contract benefits in effect on the date that services are rendered must be used. Any benefits are subject to the payment of premiums for the date on which services are rendered. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.

HMO Blue Texas physicians who are contracted/affiliated with a capitated IPA/medical group must contact the IPA/medical group for information regarding HMO claims/reimbursement information and other

general policies and procedures.

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