

CHAPTER 7
SECTION 3.17

NEUROMUSCULAR ELECTRICAL STIMULATION (NMES) DEVICES

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I. DESCRIPTION

Neuromuscular electrical stimulation (NMES) devices contain a power supply (general rechargeable batteries), a signal generator, a control circuit, a modulating circuit and output circuit, and electrodes. Electrodes may be superficial, percutaneous, or implanted. Functional electrical stimulation is artificial electrical stimulation of muscles to produce movements such as standing, walking, and grasping. NMES is used to facilitate voluntary motor control and temporarily reduce spasticity in patients suffering from spinal cord injury, cerebral palsy, or other upper motor neuron disorders. NMES units are considered class II devices.

II. POLICY

A. When used in a program approved by the attending physician, NMES may be cost-shared for the following indications:

1. For prevention and/or treatment of disuse atrophy resulting from the casting of a limb or contracture due to burn scarring, and following prolonged immobilization, injury, or surgery, or
2. For spinal cord injury and other motor neuron disorders; such as cerebral palsy, or
3. For idiopathic scoliosis in pediatric and adolescent patients.

B. The device is approved by the Food and Drug Administration (FDA) for commercial marketing for a specific application and must be medically necessary for the treatment of the condition for which the device is intended to be used.

C. NMES devices approved by FDA (e.g., Parastep I System, Respond II, etc.) may be cost-share on an inpatient or outpatient basis.

D. For other conditions, the medical necessity of the equipment is required.

III. POLICY CONSIDERATIONS

A. Claims must be sufficiently documented to confirm that a proper evaluation of the patient's medical and physical condition have been made ascertaining that the patient requires such a device and is capable of handling it safely.

B. Contractors are not required to research their files for previously denied claims which may qualify under this new policy. If previously denied claims are brought to the attention of the contractor, the contractor shall readjudicate the claim in accordance with this policy.

C. Medically necessary appropriate NMES services may be cost-shared. Refer to [Chapter 1, Section 25.1](#) (Physical Therapy).

D. The neuromuscular electrical stimulator will be cost-shared under the durable medical equipment guidelines. See [Chapter 7, Section 3.1](#).

E. For other information and requirement for FDA approval for medical devices, see [Chapter 7, Section 10.1](#).

IV. EXCLUSIONS

A. Neuromuscular stimulators used by spinal cord-injured patients who have epilepsy, cognitive deficiencies, osteoporosis, spasticity or other conditions that could interfere with its safe use is excluded.

B. Claims for neuromuscular stimulators used on denervated muscle should be denied as unproven medical treatment or procedure. See [Chapter 8, Section 14.1](#).

C. Claims for neuromuscular stimulators used as part of an exercise program of healthy individuals (i.e., athletes) cannot be considered for cost-sharing as this is not medically necessary service and supply required in the diagnosis and treatment of an illness or injury.

D. The treatment of scoliosis with implanted electrical muscle stimulation is considered unproven and is not a covered benefit.

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