

## The Department of Vermont Health Access Medical Policy

**Subject:** Neuromuscular Stimulator

**Last Review:** January 4, 2012

**Revision 3:**

**Revision 2:**

**Revision 1:** January 4, 2012

**Original Effective:** 2004

### Description of Service or Procedure

Neuromuscular stimulators are devices that are used to provide active exercise and/or sensory feedback to muscles that are unable to contract voluntarily, can only contract weakly, or can only contract together with other muscles that are unnecessary or improperly recruited for the desired motor activity. Neuromuscular stimulation promotes blood flow to the tissue, decreases fibrotic changes in the muscle, can improve mobility, prevent or reverse disuse atrophy, provide proprioceptive feedback, and strengthen muscle tissue.

### Disclaimer

Coverage is limited to that outlined in Medicaid Rule that pertains to the beneficiary's aid category. Prior Authorization (PA) is only valid if the beneficiary is eligible for the applicable item or service on the date of service.

### Medicaid Rule

[7102.2](#) Prior Authorization Determination

[7103](#) Medical Necessity

Medicaid Rules can be found at <http://humanservices.vermont.gov/on-line-rules>

### Coverage Position

A neuromuscular stimulator may be covered for those individuals:

- When the neuromuscular stimulator is prescribed by a licensed medical provider operating within their scope of practice and State Practice Act, and VT Medicaid regulation, who is knowledgeable in the use of neuromuscular stimulation and who provides medical care to the beneficiary AND
- Who meet the clinical guidelines below.



## **Coverage Guidelines**

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Nonimplantable neuromuscular stimulation devices are appropriate for beneficiaries:

- Who have a medical condition that results in weakness or disuse atrophy of particular motor groups needed for functional activity which are accessible from the exterior body AND
- Who have undergone a comprehensive evaluation to determine the etiology of the weakness and the prognosis for recovery of strength AND
- Where neuromuscular stimulation is part of a comprehensive program of treatment including therapeutic exercise, education, and functional training carried out by a physical or occupational therapist. There must be documentation demonstrating a successful trial of the device under the supervision of a physical or occupational therapist, including measurable gain and motivation to utilize the device.

Note: Nonimplantable neuromuscular stimulation includes the use of electromyographic (EMG) biofeedback for the re-education of specific muscles, to isolate those muscles in order to improve the function of the muscles.

A form fitting garment for delivery of NMES is appropriate for beneficiaries who:

- Meet all the criteria for NMES as listed above AND
- Have a medical condition where the need for NMES stimulation covers more area than is suitable for coverage with electrodes, or is in a site not accessible by electrodes.

Implantable neuromuscular stimulation devices are appropriate for beneficiaries:

- Who have a medical condition that results in weakness or disuse atrophy of particular motor groups needed for functional activity AND
- Who have undergone a comprehensive evaluation to determine the etiology of the weakness/disuse atrophy and have a reasonable prognosis for recovery of strength AND
- Where there is documented evidence that the implantable device is the least expensive, most appropriate treatment for the condition AND
- Where neuromuscular stimulation is part of a comprehensive program of treatment including therapeutic exercise, education, and functional training carried out by a physician and/or physical or occupational therapist. There must be documentation demonstrating a successful trial of the device under the supervision of a physical or occupational therapist, including measurable gain and motivation to utilize the device.

## **Clinical guidelines for repeat service or procedure**

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When repair of the device is more than 50% of the price of a new device.

## **Type of service or procedure covered**

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Neuromuscular stimulation devices for non-psychological/psychogenic medical conditions that are amenable to treatment with neuromuscular stimulation, including: peripheral nerve injuries, tendon transplants, upper motor neuron lesions such as stroke, disuse atrophy, casted or splinted limbs where immobility has led to contracture and disuse atrophy; urge, stress, or mixed incontinence, incomplete spinal cord injury, contracture due to burns, and salivary and physiologic dysphagic disorders.

## **Type of service or procedure not covered (this list may not be all inclusive)**

Neuromuscular stimulation for psychological/psychogenic conditions. There is inadequate medical evidence for coverage for NMES as a treatment for morphologic dysphagia, post ACL or hip fracture or replacement surgery, cerebral palsy, osteoarthritis, complete spinal cord injury, COPD, or CHF (Hayes 2008, Cochrane 2007 and 2010).

### **CAUTIONS:**

Contraindications:

- When active motion is contraindicated (for example, unfixated fracture or a fusion)
- Individuals with cardiac pacemakers
- Stimulation directly over metal implants
- Active bleeding in the treatment area
- Malignancies in the treatment area

Precautions:

- Care should be taken over anesthetic skin, areas with open wounds, and areas of extreme edema.

There is always risk of infection with implantable devices.

## **Coding/Billing Information**

Devices may be billed as rental or purchase. There are many specific device codes, care should be taken to bill the most HIPAA compliant code(s).

## **References**

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