

The Department of Vermont Health Access Medical Policy

Subject: Neuromuscular Stimulator

Last Review: June 6, 2016

Revision 5: June 2, 2015

Revision 4: October 2, 2014

Revision 3: June 6, 2013

Revision 2: October 10, 2012

Revision 1: January 4, 2012

Original Effective: 2004

Description of Service or Procedure

Neuromuscular electrical stimulators (NMES) are devices that cause muscle contraction and/or sensory feedback. The stimulator is applied to muscles that are unable to contract voluntarily, can only contract weakly, or can only contract together with other muscles that are improperly recruited for the desired motor activity. Neuromuscular stimulation may promote blood flow to the tissue, decrease fibrotic changes in the muscle, improve function, prevent or reverse disuse atrophy, provide proprioceptive feedback, improve motor control, decrease pain, and strengthen muscle tissue.

Disclaimer

Coverage is limited to that outlined in Medicaid Rule that pertains to the member's aid category. Prior Authorization (PA) is only valid if the member 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 beneficiaries:

- When the neuromuscular stimulator is prescribed by a licensed medical provider, enrolled in the Vermont Medicaid program, operating within their scope of practice in accordance with the



Vermont State Practice Act, who is knowledgeable in the use of neuromuscular stimulation and who provides medical care to the beneficiary. AND

- When the clinical criteria below are met.

Coverage Criteria

Nonimplantable neuromuscular stimulation devices may be covered for beneficiaries who:

- Have a medical condition which results in weakness or disuse atrophy of particular motor groups needed for functional activity, when those muscles are accessible to stimulation from the exterior body AND
- 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 nonimplantable 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 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 may be covered 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 standard electrodes.

Implantable neuromuscular stimulation devices may be covered for beneficiaries:

- Who have a medical condition which 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 a similar non-implantable device if available and appropriate, 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

Repeat services are covered the durable medical equipment (DME) requires replacement before the DME restriction time frame, for one of the following reasons:

- When the device no longer meets the medical needs of the beneficiary OR
- When the device is no longer functional through normal wear and tear OR
- When repair of the device is more than 50% of the price of a new device.

Type of service or procedure covered

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)

Duplicate devices for multiple locations are not covered.

Neuromuscular stimulation for psychological/psychogenic conditions are not covered.

There is inadequate medical evidence for coverage for NMES as a treatment for the following:

- Morphologic dysphagia,
- Post knee ligament or hip fracture/ replacement surgery,
- Cerebral palsy,
- Osteoarthritis,
- Complete spinal cord injury,
- Chronic obstructive pulmonary disease, or
- Congestive heart failure.

CAUTIONS:

Contraindications:

- When active motion is contraindicated (for example, unstable 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 must 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 NCCI compliant code(s).

References

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