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The Department of Vermont Health Access Clinical Criteria

Subject: Neuromuscular Stimulator
Last Review: March 22, 2023*
Past Revisions: December 21, 2021, January 28, 2020, July 6, 2017, June 6, 2016, June 2, 2015, October 2, 2014, June 6, 2013, October 10, 2012, January 4, 2012, and 2004

***Please note: Most current content changes will be highlighted in yellow.**

Description of Service or Procedure

Neuromuscular electrical stimulators (NMES) are devices that apply electricity to the body. Devices can be used for many purposes, including motor facilitation and re-education, strengthening, edema control, spasticity management, wound healing, and pain management. Neuromuscular stimulation may promote blood flow to tissue, decrease fibrotic changes in muscle, improve function, prevent or reverse disuse atrophy, provide proprioceptive feedback, improve motor control, decrease pain, and strengthen muscle tissue. Devices that are purchased through Medicaid are typically the type of device that is primarily used to improve motor function. An electric current is directed through the skin via electrodes, causing nerve depolarization. This activates muscle fibers.

DVHA follows InterQual criteria for other forms of electrical stimulation, including TENS, bone growth stimulation, invasive electrical stimulation with implanted electrodes, and trigeminal and vagus nerve stimulation. These can be accessed by logging into the Vermont Medicaid Portal at https://vtmedicaid.com/secure/logon.do

Disclaimer

Coverage is limited to that outlined in Medicaid Rule or Health Care Administrative Rules 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

Medicaid and Health Care Administrative Rules can be found at https://humanservices.vermont.gov/rules-policies/health-care-rules/health-care-administrative-rules-hcar/adopted-rules

7102.2	Prior Authorization Determination
4.101	Medical Necessity for Covered Services

4.104 Medicaid Non-Covered Services
4.209 Durable Medical Equipment

Coverage Position

A neuromuscular stimulator may be covered for members:

- When the device is prescribed by a licensed medical provider, enrolled in the Vermont Medicaid program, operating within their scope of practice as described on the Vermont Office of Professional Regulation's website*, Statute, or Rule who is knowledgeable regarding neuromuscular stimulators, and who provides medical care to the member AND
- When the clinical criteria below are met.

* Vermont's Office of Professional Regulation's website: https://sos.vermont.gov/opr/

Coverage Criteria

Non-implantable neuromuscular stimulation devices may be covered for members 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 or orifices which allow access 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 non 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 physical or occupational therapist or speech language pathologist. There must be documentation demonstrating a successful trial of the device under the supervision of a physical or occupational therapist or a speech language pathologist, including measurable gain and motivation to utilize the device.

Note: Non implantable 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.

For purposes other than improvement in motor control, all of the above criteria apply, specific to the bodily system requiring treatment.

A form fitting garment for delivery of NMES may be covered for members 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 but can be covered by a form fitting garment.

Early and Periodic Screening, Diagnostic and Treatment (EPSDT): Vermont Medicaid will provide comprehensive services and furnish all Medicaid coverable, appropriate, and medically necessary services needed to correct and ameliorate health conditions for Medicaid members under age 21.

Please note, Vermont Medicaid Clinical Criteria is reviewed based on available literature, evidence- based guidelines/standards, Medicaid rule and policy, and Medicare coverage determinations that may be appropriate to incorporate when applicable.

Clinical criteria for repeat service or procedure

Repeat services are covered when the durable medical equipment (DME) requires replacement before the DME limitation time frame (see DME Limitations list on the VT Medicaid Portal under Provider Resources at http://vtmedicaid.com/#/resources) for one of the following reasons:

- When the device no longer meets the medical needs of the member 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 stimulators for psychological/psychogenic conditions are not covered.

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

- Morphologic (structural) dysphagia,
- Post knee ligament or hip fracture/ replacement surgery,
- Bell's palsy
- Cerebral palsy,
- Osteoarthritis,
- Congestive heart failure
- Post operative treatment of radical retropubic prostatectomy,
- Men with urinary urge incontinence

There is inadequate medical evidence for coverage for Microcurrent electrical therapy for the following:

- lateral epicondylitis
- low back pain
- Achille's tendinopathy

- temporomandibular joint dysfunction
- bruxism
- post-operative pain

There is inadequate medical evidence for coverage of cranial electrical stimulation for:
- migraines/headaches
- chronic pain
- fibromyalgia

There is inadequate medical evidence for coverage of implanted electrical stimulation for:
- Gastric electrical stimulation for gastroparesis

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 to avoid skin irritation and chemical or electrical skin burn.
- Care must be taken over anesthetic skin, areas with open wounds, and areas of extreme edema.

Coding guidelines

Devices may be billed as rental or purchase. There are many specific device codes; care should be taken to bill the most appropriate code. Codes K1016, K1017, and K1020 are not covered by Vermont Medicaid at this time.

References

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