

Electrical Stimulators – Neuromuscular/Functional

Policy Number: **M20130117012**
Effective Date: **4/1/2013**
Sponsoring Department: **Health Care Services**
Impacted Department(s): **Health Care Services**

Type of Policy: ☒ Internal ☒ External

Data Classification: ☐ Confidential ☐ Restricted ☒ Public

Applies to (Line of Business):

- ☐ Corporate (All)
☒ State Products, if yes which plan(s): ☒ MediSource; ☒ MediSource Connect; ☒ Child Health Plus; ☒ Essential Plan
☒ Medicare, if yes, which plan(s): ☒ MAPD; ☐ PDP; ☒ ISNP; ☒ CSNP
☒ Commercial, if yes, which type: ☒ Large Group; ☒ Small Group; ☒ Individual
☒ Self-Funded Services *(Refer to specific Summary Plan Descriptions (SPDs) to determine any pre-authorization or pre-certification requirements and coverage limitations. In the event of any conflict between this policy and the SPD of a Self-Funded Plan, the SPD shall supersede the policy.)*

Excluded Products within the Selected Lines of Business (LOB)

Applicable to Vendors? Yes ☐ No ☒

Purpose and Applicability:

To set forth the medical necessity criteria for neuromuscular/functional electrical stimulators.

Policy:

Examples of Functional Electric Stimulators:

NESS H200 (formerly The Handmaster) – a surface or percutaneous device for upper extremity that combines a wrist/hand orthosis with integrated surface electrodes to activate muscles of the paralyzed forearm and hand (upper extremity FES devices are most effective when used soon after spinal cord injury – acute phase of rehabilitation)

Parastep I® - a surface FES device intended to allow patients with lower extremity paralysis to stand and walk short distances.

WalkAide – is a FES device utilized to the walking ability of people suffering from foot drop. It uses sensory technology to analyze the movement of the leg and foot, sending electrical signals to the peroneal nerve which activates the muscles to raise the foot at the appropriate time during the step cycle.

Commercial and Self-Funded: Due to the current lack of peer reviewed and adequate literature to support the appropriateness and efficacy of neuromuscular electrical stimulation (NMES) for the treatment of disuse atrophy, neuromuscular electrical stimulation for the treatment of disuse atrophy is considered experimental/investigational and not covered.

Due to the current lack of peer reviewed and adequate literature to support the appropriateness and efficacy of neuromuscular electrical stimulation (NMES) for the treatment of chronic pain, neuromuscular electrical stimulation for the treatment of chronic pain is considered experimental/investigational and not covered.

Functional electrical stimulation (FES) has also not been proven medically effective and is considered investigational for all indications, including ambulation in members with spinal cord injury, stroke rehabilitation, treatment of dysphagia and gait training.

Medicare Advantage:

There is currently a National Coverage Determination (NCD) for neuromuscular electrical stimulation. Please refer to the links listed in the Reference section for Medicare Advantage members.

MediSource, MediSource Connect, Child Health Plus and Essential Plan: covers electrical stimulators utilizing the criteria below.

Clinical Indications

Per New York State criteria for State product members, MediSource, MediSource Connect, Child Health Plus and Essential Plan will continue to cover electrical stimulators if medically necessary for **1 or more** of the following:

Restricted

- For those patients with electrodes and/or stimulators implanted prior to October 1, 2013, Medicaid will continue to cover the devices and supplies, and provide reimbursement to replace/revise/remove devices as medically necessary, regardless of patient diagnosis
- Diaphragmatic/phrenic pacing device and related services and supplies
- Vagus nerve stimulator device and related services and supplies
- Sacral nerve stimulator device and related services and supplies

For Commercial and Self-Funded members, **NOT COVERED** for **ANY** of the following:

- Due to the current lack of peer reviewed and adequate literature to support the appropriateness and efficacy of neuromuscular electrical stimulation (NMES) for the treatment of disuse atrophy, neuromuscular electrical stimulation for the treatment of disuse atrophy is considered experimental/investigational and not covered
- Due to the current lack of peer reviewed and adequate literature to support the appropriateness and efficacy of neuromuscular electrical stimulation (NMES) for the treatment of chronic pain, neuromuscular electrical stimulation for the treatment of chronic pain is considered experimental/investigational and not covered
- Functional electrical stimulation (FES) has also not been proven medically effective and is considered investigational for all indications, including ambulation in members with spinal cord injury, stroke rehabilitation, treatment of dysphagia and gait training

For State product members, **NOT COVERED** for **ANY** of the following:

- Functional electrical stimulation (FES) for spinal cord and head injury
- Functional electrical stimulation (FES) for cerebral palsy
- Functional electrical stimulation (FES) for upper motor neuron disease, including Parkinson's disease, late effects of acute poliomyelitis, anterior horn cell diseases, or multiple sclerosis

Pre-Authorization Required? Yes ☒ No ☐

Due to the experimental / investigational status of this device, pre-authorization is required.

Definitions

Neuromuscular electrical stimulation (NMES) involves the use of a device that transmits an electrical impulse to activate muscle groups by way of electrodes. There are two broad categories of NMES. One type of device stimulates the muscle when the patient is in a resting state to treat muscle atrophy. The second type is used to enhance functional activity of neurologically impaired patients.

Autonomic dysreflexia: a syndrome affecting persons with a spinal cord lesion above the midthoracic level (tetraplegics and some paraplegics) that is characterized by hypertension, bradycardia, severe headaches, pallor below and flushing above the cord lesions, and convulsions. It is the result of impaired function of the autonomic nervous system caused by simultaneous sympathetic and parasympathetic activity, such as may occur with bowel or bladder distension pain or a pressure ulcer. It is usually a medical emergency requiring care in an intensive care unit. A cerebrovascular accident and death may occur during an attack.

Functional electrical stimulation (FES) is the direct application of electric current to intact nerve fibers in a coordinated fashion to cause involuntary but purposeful muscle contraction. FES bypasses the central nervous system and targets motor neurons innervating either skeletal muscle or other organ systems. When used for rehabilitation of patients with spinal cord injury, FES is used to improve general health and fitness through exercise and to enable functional use of partially or completely paralyzed limbs (Hayes).

References

Related Policies, Processes and Other Documents

N/A

Non-Regulatory references

Barkoudah E, et al. Cerebral palsy: Treatment of altered motor tone and associated orthopedic conditions. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on June 5, 2026.)

Guo P, Wang JW, Tong A. Therapeutic effectiveness of neuromuscular electrical stimulation for treating patients with chronic low back pain. *Medicine (Baltimore)*. 2018 Nov;97(48):e13197.

National Institute for Health and Care Excellence (NICE) [web site]. Chronic pain (primary and secondary) in over 16s: assessment of all chronic pain and management of chronic primary pain. NICE guideline NG193. April 2021. Available at: https://www.ncbi.nlm.nih.gov/books/NBK569985/pdf/Bookshelf_NBK569985.pdf. Accessed June 5, 2026.

Pomeroy VM, King L, Pollock A, Baily-Hallam A, Langhorne P. Electrostimulation for promoting recovery of movement or functional ability after stroke. *Cochrane Database Syst Rev*. 2006 Apr 19;(2):CD003241.

Symplr, Inc. Evidence Analysis Research Brief. Functional Electrical Stimulation for Rehabilitation Following Spinal Cord Injury, Houston, TX. April 2026.

Symplr, Inc. Medical Technology Directory Report. Functional Electrical Stimulation for Rehabilitation Following Spinal Cord Injury, Houston, TX. November 2017.

Symplr, Inc. Medical Technology Directory Report. Neuromuscular Electrical Stimulation for Muscle Rehabilitation, Houston, TX. January 2008.

Regulatory References

Centers for Medicare and Medicaid (CMS) [web site]. National Coverage Determination (NCD) for Neuromuscular Electrical Stimulation (NMES) (160.12). Available at: <https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=175&ncdver=2&DocID=160.12&kq=true&bc=gAAAABAAAA&> Accessed June 5, 2026.

New York State Department of Health, Division of Managed Care Response to Coverage Question (CovQuest).MA-00191. April 17, 2003.

New York State Medicaid Update Newsletter September 2013 Volume 29 - Number 10;[web site]
Available at: http://www.health.ny.gov/health_care/medicaid/program/update/2013/2013-09.htm
Accessed June 5, 2026.

This policy contains medical necessity criteria that apply for this service. Please note that payment for covered services is subject to eligibility criteria, contract exclusions and the limitations noted in the member's contract at the time the services are rendered.

Version Control

Signature / Approval on File? Yes ☒ No ☐

Revision Date	Owner	Notes
8/1/2026	Health Care Services	Reviewed
12/1/2025	Health Care Services	Revised - formatting only
9/1/2025	Health Care Services	Reviewed
9/1/2024	Health Care Services	Reviewed
9/1/2023	Health Care Services	Revised
10/1/2022	Health Care Services	Revised
5/1/2022	Health Care Services	Reviewed
5/1/2021	Health Care Services	Revised
5/1/2020	Health Care Services	Revised
6/1/2019	Medical Management	Revised
6/1/2018	Medical Management	Revised
6/1/2017	Medical Management	Revised
7/1/2016	Medical Management	Revised
6/1/2015	Medical Management	Revised
1/1/2014	Medical Management	Revised