

Neuromuscular Electrical Stimulation (NMES) (NCD 160.12)

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[Terms and Conditions](#)

Table of Contents	Page
Policy Summary	1
Applicable Codes	2
References	2
Guideline History/Revision Information	3
Purpose	3
Terms and Conditions	3

Related Medicare Advantage Policy Guideline

- [Electrotherapy for Treatment of Facial Nerve Paralysis \(Bell's Palsy\) \(NCD 160.15\)](#)

Related Medicare Advantage Coverage Summary

- [Stimulators: Electrical, Osteogenic and Ultrasonic](#)

Policy Summary

[See Purpose](#)

Overview

Neuromuscular Electrical Stimulation (NMES) involves the use of a device which transmits an electrical impulse to the skin over selected 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.

Guidelines

Treatment of Muscle Atrophy

Coverage of NMES to treat muscle atrophy is limited to the treatment of disuse atrophy where nerve supply to the muscle is intact, including brain, spinal cord and peripheral nerves, and other non-neurological reasons for disuse atrophy. Some examples would be casting or splinting of a limb, contracture due to scarring of soft tissue as in burn lesions, and hip replacement surgery (until orthotic training begins). (See §160.13 of the NCD Manual for an explanation of coverage of medically necessary supplies for the effective use of NMES.)

Use for Walking in Patients with Spinal Cord Injury (SCI)

The type of NMES that is used to enhance the ability to walk of SCI patients is commonly referred to as functional electrical stimulation (FES). These devices are surface units that use electrical impulses to activate paralyzed or weak muscles in precise sequence. Coverage for the use of NMES/FES is limited to SCI patients for walking, who have completed a training program which consists of at least 32 physical therapy sessions with the device over a period of three months. The trial period of physical therapy will enable the physician treating the patient for his or her spinal cord injury to properly evaluate the person's ability to use these devices frequently and for the long term. Physical therapy necessary to perform this training must be directly performed by the physical therapist as part of a one-on-one training program.

The goal of physical therapy must be to train SCI patients on the use of NMES/FES devices to achieve walking, not to reverse or retard muscle atrophy.

Coverage for NMES/FES for walking will be covered in SCI patients with all of the following characteristics:

- Persons with intact lower motor units (L1 and below) (both muscle and peripheral nerve);

- Persons with muscle and joint stability for weight bearing at upper and lower extremities that can demonstrate balance and control to maintain an upright support posture independently;
- Persons that demonstrate brisk muscle contraction to NMES and have sensory perception electrical stimulation sufficient for muscle contraction;
- Persons that possess high motivation, commitment and cognitive ability to use such devices for walking;
- Persons that can transfer independently and can demonstrate independent standing tolerance for at least 3 minutes;
- Persons that can demonstrate hand and finger function to manipulate controls;
- Persons with at least 6-month post recovery spinal cord injury and restorative surgery;
- Persons without hip and knee degenerative disease and no history of long bone fracture secondary to osteoporosis; and
- Persons who have demonstrated a willingness to use the device long-term.

NMES/FES for walking will not be covered in SCI patient with any of the following:

- Persons with cardiac pacemakers;
- Severe scoliosis or severe osteoporosis;
- Skin disease or cancer at area of stimulation;
- Irreversible contracture; or
- Autonomic dysreflexia.

The only settings where therapists with the sufficient skills to provide these services are employed, are inpatient hospitals; outpatient hospitals; comprehensive outpatient rehabilitation facilities; and outpatient rehabilitation facilities. The physical therapy necessary to perform this training must be part of a one-on-one training program.

Additional therapy after the purchase of the DME would be limited by our general policies in converge of skilled physical therapy.

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

HCPSC Code	Description
E0744	Neuromuscular stimulator for scoliosis
E0745	Neuromuscular stimulator, electronic shock unit
E0764	Functional neuromuscular stimulation, transcutaneous stimulation of sequential muscle groups of ambulation with computer control, used for walking by spinal cord injured, entire system, after completion of training program
E0770	Functional electrical stimulator, transcutaneous stimulation of nerve and/or muscle groups, any type, complete system, not otherwise specified

References

CMS National Coverage Determinations (NCDs)

[NCD 160.12 Neuromuscular Electrical Stimulation \(NMES\)](#)

Reference NCD: [NCD 160.13 Supplies Used in the Delivery of Transcutaneous Electrical Nerve Stimulation \(TENS\) and Neuromuscular Electrical Stimulation \(NMES\)](#)

CMS Benefit Policy Manual

[Chapter 15: § 220 Coverage of Outpatient Rehabilitation Therapy Services \(Physical Therapy, Occupational Therapy, and Speech-Language Pathology Services\) Under Medical Insurance](#)

CMS Claims Processing Manual

[Chapter 5: § 10 Part B Outpatient Rehabilitation and Comprehensive Outpatient Rehabilitation Facility \(CORF\) Services – General, § 20 HCPCS Coding Requirement](#)

UnitedHealthcare Commercial Policy

[Electrical Stimulation for the Treatment of Pain and Muscle Rehabilitation](#)

Others

[Joint DME MAC Publication: Functional Electrical Stimulation \(FES\) - Coverage and HCPCS Coding – Revised](#)

Also reference the Medicare Benefit Policy Manual, Chapter 15, "Covered Medical and Other Health Services," §220 and §230, and Medicare Claims Processing Manual, Chapter 5, "Part B Outpatient Rehabilitation and CORF Services," §10.1).

Guideline History/Revision Information

Revisions to this summary document do not in any way modify the requirement that services be provided and documented in accordance with the Medicare guidelines in effect on the date of service in question.

Date	Summary of Changes
07/13/2022	<p>Applicable Codes</p> <ul style="list-style-type: none">Added HCPCS code E0770 <p>Supporting Information</p> <ul style="list-style-type: none">Updated <i>References</i> section to reflect the most current informationArchived previous policy version MPG215.07

Purpose

The Medicare Advantage Policy Guideline documents are generally used to support UnitedHealthcare Medicare Advantage claims processing activities and facilitate providers' submission of accurate claims for the specified services. The document can be used as a guide to help determine applicable:

- Medicare coding or billing requirements, and/or
- Medical necessity coverage guidelines; including documentation requirements.

UnitedHealthcare follows Medicare guidelines such as NCDs, LCDs, LCAs, and other Medicare manuals for the purposes of determining coverage. It is expected providers retain or have access to appropriate documentation when requested to support coverage. Please utilize the links in the [References](#) section below to view the Medicare source materials used to develop this resource document. This document is not a replacement for the Medicare source materials that outline Medicare coverage requirements. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

Terms and Conditions

The Medicare Advantage Policy Guidelines are applicable to UnitedHealthcare Medicare Advantage Plans offered by UnitedHealthcare and its affiliates.

These Policy Guidelines are provided for informational purposes, and do not constitute medical advice. Treating physicians and healthcare providers are solely responsible for determining what care to provide to their patients. Members should always consult their physician before making any decisions about medical care.

Benefit coverage for health services is determined by the member specific benefit plan document* and applicable laws that may require coverage for a specific service. The member specific benefit plan document identifies which services are covered,

which are excluded, and which are subject to limitations. In the event of a conflict, the member specific benefit plan document supersedes the Medicare Advantage Policy Guidelines.

Medicare Advantage Policy Guidelines are developed as needed, are regularly reviewed and updated, and are subject to change. They represent a portion of the resources used to support UnitedHealthcare coverage decision making. UnitedHealthcare may modify these Policy Guidelines at any time by publishing a new version of the policy on this website. Medicare source materials used to develop these guidelines include, but are not limited to, CMS National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Medicare Benefit Policy Manual, Medicare Claims Processing Manual, Medicare Program Integrity Manual, Medicare Managed Care Manual, etc. The information presented in the Medicare Advantage Policy Guidelines is believed to be accurate and current as of the date of publication and is provided on an "AS IS" basis. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

You are responsible for submission of accurate claims. Medicare Advantage Policy Guidelines are intended to ensure that coverage decisions are made accurately based on the code or codes that correctly describe the health care services provided. UnitedHealthcare Medicare Advantage Policy Guidelines use Current Procedural Terminology (CPT®), Centers for Medicare and Medicaid Services (CMS), or other coding guidelines. References to CPT® or other sources are for definitional purposes only and do not imply any right to reimbursement or guarantee claims payment.

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*For more information on a specific member's benefit coverage, please call the customer service number on the back of the member ID card or refer to the [Administrative Guide](#).