



## Medicare Part C Medical Coverage Policy

### Electrical Stimulators-Neuromuscular

**Origination:** June 30, 1988

**Review Date:** March 20, 2019

**Next Review:** March, 2021

***\*\*\*This policy applies to all Blue Medicare HMO, Blue Medicare PPO, Blue Medicare Rx members, and members of any third-party Medicare plans supported by Blue Cross NC through administrative or operational services. \*\*\****

#### **DESCRIPTION OF PROCEDURE OR SERVICE**

Neuromuscular Electrical Stimulation (NMES) involves the use of a device that transmits an electrical impulse to the skin over selected muscle groups by way of electrodes. Neuromuscular stimulator devices transmit an electrical impulse to stimulate motor nerves thus contracting the muscle. There are two broad categories of NMES:

1. One type of stimulator stimulates the actual muscle when the patient is in a resting state and is used to treat muscle atrophy.
2. The second type of stimulator is used to enhance the functional activity of neurologically impaired patients. These devices are commonly referred to as functional electrical stimulation (FES).

#### **Definitions**

**Muscle atrophy-** loss of muscle bulk, secondary to imposed inactivity, neurological dysfunction, reduced vascular perfusion, fibrosis or specific disease

**Disuse Atrophy-** loss of muscle mass due to inactivity. May follow a period of immobilization, e.g. bed rest or with casting

**Functional Electrical Stimulation (FES) -** These devices are surface units that use electrical impulses to activate paralyzed or weak muscles in a precise sequence.

**Neurologically Impaired-** Any damage to or deficiency of the nervous system

**Neuromuscular Electrical Stimulation (NMES) -** Neuromuscular stimulator devices transmit an electrical impulse to stimulate motor nerves thus contracting the muscle.

#### **POLICY STATEMENT**

Coverage will be provided for neuromuscular stimulators when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.

### **BENEFIT APPLICATION**

Please refer to the member's individual Evidence of Coverage (E.O.C.) for benefit determination. Coverage will be approved according to the E.O.C. limitations, if the criteria are met.

Coverage decisions will be made in accordance with:

- The Centers for Medicare & Medicaid Services (CMS) National Coverage determinations (NCDs);
- General coverage guidelines included in Original Medicare manuals unless superseded by operational policy letters or regulations; and
- Written coverage decisions of local Medicare carriers and intermediaries with jurisdiction for claims in the geographic area in which services are covered.

Benefit payments are subject to contractual obligations of the Plan. If there is a conflict between the general policy guidelines contained in the Medical Coverage Policy Manual and the terms of the member's particular Evidence of Coverage (E.O.C.), the E.O.C. always governs the determination of benefits.

### **INDICATIONS FOR COVERAGE**

#### **1. Preauthorization by the Plan is required;**

**AND**

#### **2. Muscle Atrophy:** Coverage of neuromuscular stimulators may be considered for the treatment of disuse atrophy providing the following criteria are met:

- a. The nerve supply to the muscle must be intact, including brain, spinal cord and peripheral nerves;

**OR**

- b. Other non-neurological reasons for disuse atrophy, e.g., casting/splinting of a limb, contractures caused by scarring of burn lesions and hip replacement surgery (only until orthotic training can be instituted).

#### **3. Functional Electrical Stimulation (FES) For Walking in Patients with Spinal Cord Injury (SCI):**

Coverage is limited to those patients who have completed a training program that consists of at least 32 physical therapy sessions with the device over a period of three months.

Coverage for NMES/FES may be considered, and is limited for the use of walking in SCI patients with **ALL** of the following characteristics:

1. An intact lower motor unit (L1 and below) (both muscle and peripheral nerve);
2. 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.
3. Demonstrate brisk muscle contraction to NMES and have sensory perception electrical stimulation sufficient for muscle contraction;
4. Possess high motivation, commitment and cognitive ability to use such devices for walking;
5. Can transfer independently and can demonstrate independent standing tolerance for at least three (3) minutes;
6. Persons that can demonstrate hand and finger function to manipulate controls;
7. At **least** six (6) months **post recovery spinal cord injury and restorative surgery;**
8. Without **hip and knee degenerative disease and no history of a long bone fracture secondary to osteoporosis;**
9. Demonstrated a willingness to use the device long-term.

#### **WHEN COVERAGE WILL NOT BE APPROVED**

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

1. Persons with cardiac pacemakers;
2. Severe scoliosis or severe osteoporosis;
3. Skin disease or cancer at area of stimulation;
4. Irreversible contracture; or
5. Autonomic dysflexia.

#### **Special Note:**

The initial provision of E0770 includes all the necessary supplies. Supplies can then be billed per month with code A4595 and is all inclusive of all supplies.

#### **BILLING/ CODING/PHYSICIAN DOCUMENTATION INFORMATION**

This policy may apply to the following codes. Inclusion of a code in the section does not guarantee that it will be reimbursed.

Applicable codes: E0744, E0745, E0764, E0770 (WalkAide device and NESS H200; L300) E0731

The Plan may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful,

but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

References:

1. Medicare National Coverage Determination for Neuromuscular Electrical Stimulation (ID #160.12), Effective 10/2/06, accessed via Internet, [http://www.cms.gov/mcd/viewed\\_ncd](http://www.cms.gov/mcd/viewed_ncd) on, 3/20/19.
2. BCBSNC Corporate Medical Policy "Electrical Stimulators- Neuromuscular" Effective 10/2012, accessed via the internet <http://www.bcbsnc.com> on 3/20/19.
3. DME Jurisdiction C; CGS; viewed on line at <http://www.cgsmedicare.com/jc/pubs/news/2011/0601/cope15145.html>; viewed on, 3/20/19.
4. DME MAC Jurisdiction C; CGS: Functional Electrical Stimulation (FES)-Coverage and HCPCS Coding Revised, effective August 1, 2014 viewed online at <http://www.cgsmedicare.com/jc/pubs/news/2014/0714/cope26209.html> 3/20/19.

Policy Implementation/Update Information:

Revision Dates: May 3, 1998; February 9, 1999; June 28, 1999; November 22, 1999; January 24, 2000; April 24, 2000; February 23, 2005.

Revision Date: November 30, 2006: Updated Codes to include finalized codes E0762 & E0764; No criteria changes made.

Revision Date: September 2009: No changes proposed to the review criteria. Formatting and minor wording changes only.

Revision Date: October 28, 2010: Changed wording under "Indications For Coverage" item #2 to reflect current NCD language

Revision Date: January 28, 2013: Minor edit to criteria to mirror LCD. Added HCPCS code E0731.

Revision Date: February 3/27/15: No CMS criteria changes, minor revisions to policy for device clarification.

Revision Date: March 15, 2017: Annual Review. Minor revision made to Indications for Coverage:#3, Sub point #8- "with" changed to "without" to mirror LCD.

Revision Date: March 20, 2019: Annual Review. No CMS Updates. Description Section: 1. Added "of stimulator" "actual" and "is used to" to help with literary fluency. Indications for Coverage: #3. Removed "The devices are surface units that use electrical impulses to activate paralyzed or weak muscles in a precise sequence." and added to the added Definitions section along with 4 other definitions. Added "the use of" for literary fluency and added the word "ALL" to make consistent with NCD.

Approval Dates:

Medical Coverage Policy Committee: March 20, 2019

Policy Owner: Carolyn Wisecarver, RN, BSN  
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