Neuromuscular Electrical Stimulation (NMES)

Policy Number: HS-048

Original Effective Date: 9/18/2008


APPLICATION STATEMENT

The application of the Clinical Coverage Guideline is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any.

DISCLAIMER

The Clinical Coverage Guideline (CCG) is intended to supplement certain standard WellCare benefit plans and aid in administering benefits. Federal and state law, contract language, etc. take precedence over the CCG (e.g., Centers for Medicare and Medicaid Services [CMS] National Coverage Determinations [NCDs], Local Coverage Determinations [LCDs] or other published documents). The terms of a member’s particular Benefit Plan, Evidence of Coverage, Certificate of Coverage, etc., may differ significantly from this Coverage Position. For example, a member’s benefit plan may contain specific exclusions related to the topic addressed in this CCG. Additionally, CCGs relate exclusively to the administration of health benefit plans and are NOT recommendations for treatment, nor should they be used as treatment guidelines. Providers are responsible for the treatment and recommendations provided to the member. The application of the CCG is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any. All links are current at time of approval by the Medical Policy Committee (MPC) and are subject to change prior to the annual review date. Lines of business (LOB) are subject to change without notice; current LOBs can be found at www.wellcare.com. All guidelines can be found at this site as well but selecting the Provider tab, then “Tools” and “Clinical Guidelines”.

BACKGROUND

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. NMES can be performed at low, medium, or high intensity to elicit mild, moderate, or strong muscle contractions. When used at very low intensity to stimulate barely perceptible contractions, this technique is referred to as threshold NMES or threshold electrical stimulation (TES). To avoid muscle strain, patients undergo high-intensity NMES for only 30 to 60 minutes per day; low-intensity and threshold NMES can be applied for much longer periods, such as all night while the patient is sleeping.1,2 Regardless of the intensity of NMES,
patients are encouraged to exercise the affected muscles voluntarily to maintain and improve their strength and function. For chronic disorders, this exercise may be in the form of regular participation in sports activities. For acute conditions, such as rehabilitation shortly after surgery or a stroke, patients must often undergo intensive physical and occupational therapy. Electrical stimulation can also be used to activate muscles of the upper or lower limbs to produce functional movement patterns, such as standing and walking, in patients with paraplegia. This application of electrical stimulation is called functional electrical stimulation (FES). 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 detailing skilled physical therapy.¹,²

POSITION STATEMENT

Exclusions

Neuromuscular Electrical Stimulation (NMES or Functional Electrical Stimulation [FES] when used for walking in SCI patients) is contraindicated and not considered medically necessary for members with SCI with the following:

- Cardiac pacemakers; OR,
- Severe scoliosis; OR,
- Severe osteoporosis; OR,
- Skin disease or cancer at area of stimulation; OR,
- Irreversible contracture; OR,
- Autonomic dysreflexia.

Coverage

Neuromuscular Electrical Stimulation (NMES; also known as Functional Electrical Stimulation [FES] when used for walking in SCI patients) is considered medically necessary for the following two indications IF the following criteria are met:

1. Treatment of muscle atrophy due to disuse when:
   a. The nerve supply to the muscle is intact, including the brain, spinal cord and peripheral nerves; AND,
   b. Other non-neurological reasons for disuse atrophy have been ruled out. (Examples of non-neurological reasons would be casting or splinting of a limb, contracture due to scarring of soft tissue as in burn lesions, and hip replacement surgery).

2. Use for Walking in Member’s with Spinal Cord Injury (SCI) when:
   a. Member has completed a training program and exhibits understanding of proper use of the device; AND,
   b. Member has intact lower motor units (L1 and below), including both muscle and peripheral nerve); AND,
   c. Member exhibits muscle and joint stability for weight bearing at upper and lower extremities and can demonstrate balance and control to maintain an upright support posture independently; AND,
   d. Member can demonstrate brisk muscle contraction to NMES and have sensory perception of electrical stimulation sufficient for muscle contraction; AND,
   e. Member possesses high motivation, commitment and cognitive ability to use such devices for walking; AND,
   f. Member can transfer independently and stand for at least 3 minutes; AND,
   g. Member can demonstrate hand and finger function sufficient enough to manipulate controls; AND,
   h. Member is at least 6 months post recovery of spinal cord injury and restorative surgery; AND,
   i. Member does not have hip and knee degenerative disease and has no history of long bone fracture secondary to osteoporosis; AND,
   j. Member demonstrates willingness to use device long-term.
CODING

CPT Codes – No applicable codes.

Covered HCPCS Level II (DME) codes
A4558 Conductive gel or paste, for use with electrical device; (e.g. TENS, NMES) per oz.
A4595 Electrical stimulator supplies, 2 lead, per month, (e.g. TENS, NMES)
E0731 Form-fitting conductive garment for delivery of TENS or NMES (with conductive fibers separated from the patients skin by layers of fabric)
E0745 Neuromuscular stimulator, electronic shock unit

Covered ICD-10-CM Diagnosis Codes
M62.50 - M62.59 Muscle wasting and atrophy, not elsewhere classified
S14.0xxA – S14.0xxS Concussion and edema of cervical spinal, cord
S24.101A - S24.109S Unspecified injury at unspecified level of thoracic spinal cord
S34.101A - S34.109S Unspecified injury to unspecified level to lumbar spinal cord
S34.131A - S34.139S Unspecified injury to sacral spinal cord

Coding information is provided for informational purposes only. The inclusion or omission of a CPT, HCPCS, or ICD-10 code does not imply member coverage or provider reimbursement. Consult the member's benefits that are in place at time of service to determine coverage (or non-coverage) as well as applicable federal / state laws.

REFERENCES


MEDICAL POLICY COMMITTEE HISTORY AND REVISIONS

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<tr>
<td>7/6/2017, 9/27/2016</td>
<td>• Approved by MPC. No changes.</td>
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<tr>
<td>9/17/2015</td>
<td>• Approved by MPC. Coding update only.</td>
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<td>• New template design approved by MPC.</td>
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