



MEDICAL COVERAGE POLICY

SERVICE: Neuromuscular Stimulation

Policy Number: 251

Effective Date: 02/01/2020

Last Review: 11/21/2019

Next Review Date: 11/21/2020

Important note:

Unless otherwise indicated, this policy will apply to all lines of business.

Even though this policy may indicate that a particular service or supply may be considered medically necessary and thus covered, this conclusion is not based upon the terms of your particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all benefits that are determined to be medically necessary will be covered benefits under the terms of your benefit plan. You need to consult the Evidence of Coverage (EOC) or Summary Plan Description (SPD) to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and your plan of benefits, the provisions of your benefits plan will govern. However, applicable state mandates will take precedence with respect to fully insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, Federal mandates will apply to all plans. With respect to Medicare-linked plan members, this policy will apply unless there are Medicare policies that provide differing coverage rules, in which case Medicare coverage rules supersede guidelines in this policy. Medicare-linked plan policies will only apply to benefits paid for under Medicare rules, and not to any other health benefit plan benefits. CMS's Coverage Issues Manual can be found on the CMS website. Similarly, for Medicaid-linked plans, the Texas Medicaid Provider Procedures Manual (TMPPM) supersedes coverage guidelines in this policy where applicable.

SERVICE: Neuromuscular Stimulation

PRIOR AUTHORIZATION: Not required, **except for E0764 for Medicare lines of business.**

POLICY:

SWHP considers neuromuscular electrical stimulators (NMES) medically necessary as part of a comprehensive rehabilitation program for treatment disuse atrophy where the nerve supply to the muscle is intact and the member has one of the following non-neurological reasons for disuse atrophy:

1. Contractures due to burn scarring, OR
2. Major knee surgery (e.g., total knee replacement) when there is failure to respond to physical therapy, OR
3. Previous casting or splinting of a limb (arm or leg), OR
4. Recent hip replacement surgery before physical therapy begins (NMES is considered medically necessary until physical therapy begins).

Functional neuromuscular electrical stimulation (FNMES) is considered experimental, investigational and/or unproven as a technique to restore function following central nervous system, or peripheral nerve, damage or injury. This includes, but is not limited to, its use in the following situations:

- To provide upper extremity function in patients with nerve damage (e.g., spinal cord injury or post-stroke);
- To improve ambulation in patients with footdrop caused by congenital disorders (e.g., cerebral palsy) or nerve damage (e.g., post-stroke, or in those with multiple sclerosis);
- As a technique to provide ambulation in patients with spinal cord injury.

FNMES (E0764) may be medically necessary for members with Medicare lines of business. See coverage rules per NCD 160.2. Prior authorization required.

SWHP considers FES and NMES experimental and investigational for all other indications because its effectiveness for indications other than the ones listed above as medically necessary has not been established

SWHP considers the FES exercise devices such as the FES Power Trainer, ERGYS, REGYS, NeuroEDUCATOR, STimMaster Galaxy, RT200 Elliptical, RT300 FES Cycle Ergometer (also



MEDICAL COVERAGE POLICY

SERVICE: Neuromuscular Stimulation

Policy Number: 251

Effective Date: 02/01/2020

Last Review: 11/21/2019

Next Review Date: 11/21/2020

referred to as a FES bicycle), RT600 Step and Stand Rehabilitation Therapy System, and SpectraSTIM to be exercise equipment. Most plans exclude coverage of exercise equipment. In addition, these stationary exercise devices are considered experimental and investigational to prevent or reduce muscle atrophy in upper and lower extremities in individuals with hemiplegia or quadriplegia and for all other indications.

OVERVIEW:

Without sufficient exercise, muscles atrophy, losing strength and mass. This process can lead to significant loss of function in limbs that are immobilized after injuries or surgery. Muscles can also lose strength in limbs that have impaired motor control due to stroke or other neurological injury. To prevent atrophy in these situations, muscles can be exercised by applying electrical pulses through electrodes attached to the skin surface, a technique known as neuromuscular electrical stimulation (NMES). Specific applications of this treatment include: (1) treating or preventing shoulder subluxation after stroke-related paralysis; (2) regaining wrist or swallowing function after partial paralysis due to stroke or spinal cord injury; (3) strengthening leg muscles after hip fracture, hip replacement, or surgical repair of the anterior cruciate ligament (ACL); (4) providing exercise for patients with severe physical limitations due to osteoarthritis (OA), chronic heart failure (CHF), or chronic obstructive pulmonary disease (COPD); and (5) improving motor function in patients with cerebral palsy (CP).

MANDATES:

CODES:

Important note:

CODES: Due to the wide range of applicable diagnosis codes and potential changes to codes, an inclusive list may not be presented, but the following codes may apply. Inclusion of a code in this section does not guarantee that it will be reimbursed, and patient must meet the criteria set forth in the policy language.

CPT Codes:	64550 Application of surface (transcutaneous) neurostimulator 64565 Percutaneous implantation of neurostimulator electrode array;
CPT Not Covered:	
HCPCS Codes	A4595 Electrical stimulator supplies E0745 Neuromuscular stimulator, electronic shock unit Medicare lines only: E0764 Functional neuromuscular stimulation, transcutaneous stimulation of sequential muscle groups of ambulation with computer control, used for walking by spinal cord injured
HCPCS Codes Not covered	E0744 Neuromuscular stimulator for scoliosis E0762 Transcutaneous electrical joint stimulation device system, E0770 Functional electrical stimulator, transcutaneous stimulation of nerve and/or muscle groups
ICD10 codes:	M62.50-M62.59 Muscular wasting and disuse atrophy, not elsewhere classified
ICD10 Not covered:	

CMS: NCD 160.12

POLICY HISTORY:



MEDICAL COVERAGE POLICY

SERVICE: Neuromuscular Stimulation

Policy Number: 251

Effective Date: 02/01/2020

Last Review: 11/21/2019

Next Review Date: 11/21/2020

Status	Date	Action
New	08/07/2018	New policy
Reviewed	11/21/2019	No changes

REFERENCES:

The following scientific references were utilized in the formulation of this medical policy. SWHP will continue to review clinical evidence related to this policy and may modify it at a later date based upon the evolution of the published clinical evidence. Should additional scientific studies become available and they are not included in the list, please forward the reference(s) to SWHP so the information can be reviewed by the Medical Coverage Policy Committee (MCPC) and the Quality Improvement Committee (QIC) to determine if a modification of the policy is in order.

1. Platz T, Gillner A, Borgwaldt N, Kroll S and Roschka S. Device-training for individuals with thoracic and lumbar spinal cord injury using a powered exoskeleton for technically assisted mobility: achievements and user satisfaction. Biomed Res Int. 2016;2016:8459018
2. Yang A, Asselin P, Knezevic S, Kornfeld S and Spungen AM. Assessment of in-hospital walking velocity and level of assistance in a powered exoskeleton in persons with spinal cord. Top Spinal Cord Inj Rehabil. 2015;Spring;21(2):100-109.