Title	Description
Policy Name:	**Transcutaneous Electrical Nerve Stimulators (TENS) & Neuro-Muscular Electrical Nerve Stimulators (NMES)**
Policy Number:	BRM-2019-07
Code/Rule Reference:	ORC 4752.02; OAC 4123-6-08; OAC 4123-6-16.2; OAC 4123-6-43; OAC 4123-6-45.1
Effective Date:	7/1/19
Origin:	Medical Policy
Supersedes:	All medical policies, directives, and memos regarding TENS and NMES services that predate the effective date of this policy.
History:	New 2/12/97; 3/1/04; 2/1/10; 12/6/10; 11/13/15; Rev. 9/1/16
Review date:	07/01/2024

I. POLICY PURPOSE

The purpose of this policy is to ensure that the Bureau of Workers' Compensation (BWC) provides direction for the requirements for authorization, education, and documentation to accurately provide, bill and be reimbursed for TENS and NMES services provided to Ohio's injured workers. The policy clarifies requirements in the rule and emphasizes provider billing and reimbursement requirements.

Historically there has been some confusion on the billing of supplies. This policy clarifies what types of supplies can be billed and how they are to be billed.

This policy is an integration of past policy alerts and communications to provide easy access to policy information for providers.

II. APPLICABILITY

This policy is in direct support of OAC 4123-6-43 and applies to all actions relevant to the request, approval, and reimbursement of TENS and NMES services within the Ohio Workers' Compensation System.

III. DEFINITIONS

Transcutaneous Electrical Nerve Stimulator (TENS): A device that utilizes electrical current delivered through electrodes placed on the surface of the skin to decrease the injured worker's perception of pain by inhibiting the afferent pain nerve impulses and/or stimulating the release of endorphins. TENS units specifically target nerves.

Neuro-Muscular Electrical Stimulator (NMES): A device that transmits an electrical stimulus to muscle groups and causes the muscle to contract. NMES units target muscles, not nerves.

TENS Supply Kit: An all-inclusive package of supplies that must include a certain combination of supplies and supply quantities as defined by BWC, which are not separately billable. The supply kit requirements may differ based on the number of units authorized.

DME Provider: the provider that furnishes the injured worker with the unit and holds a current, valid license or certificate of registration from the State of Ohio Board of Pharmacy to sell or rent home medical equipment.

IV. POLICY

A. Provider Criteria: BWC adheres to the requirements outlined in ORC 4752.02, including exemptions.

B. Authorization Requirements:

1. Authorization criteria outlined in OAC 4123-6-43 must be met;
2. The device must produce constant current;
3. For authorization of either the rental period, the purchase of a TENS device, or the continued use of a TENS device, the following documentation must be submitted by the physician:
   a. Frequency and duration of use of TENS;
   b. Describe any limitations of use;
   c. Substantiate continued effectiveness, including but not limited to:
      i. Impact to the injured worker's quality of life and daily activities; and
      ii. Short and long-term goals;
      iii. Impact on pain modulation, levels, and function with use of TENS unit must be reported using at least one of the following tools:
         a) Visual analog scale;
         b) Pain diagram; or
         c) Oswestry low back questionnaire; and
   d. Detail supply requirements:
      i. Must be consistent with prescribed frequency and duration.
      ii. Must explain any variation from TENS supply kit.

C. Education Requirements

1. TENS and NMES units supplied by a POR or treating provider shall be personally fitted and face-to-face instruction provided when the unit is supplied; or
2. TENS and NMES units must be personally fitted, and face-to-face instruction given

by a direct employee of the DME provider within five (5) business days of the request of the unit, at no additional charge unless:

a. The DME provider verifies and documents that the ordering POR or treating provider is supplying the instruction/education; and
b. Documentation must support who is performing the training.

3. Verification of the educational training must be maintained by the DME provider in accordance with OAC 4123-6-45.1.
4. This verification documentation must be provided to BWC or the MCO upon request.

D. Supply Requirements

1. MCOs will authorize the delivery of supplies:
   a. Periodically as determined by the MCO;
   b. Quantity is based on the standard expected use of the authorized TENS unit unless the POR or treating provider provides documentation for increased utilization or exceptional needs.
   c. After the MCO approval is received for that delivery, the supplies can be delivered.
   d. Supplies shall not be reimbursed if written authorization is not received for the supplies delivered to the injured worker.
2. TENS supply kit items include:
   a. Reusable Electrodes, unless medical necessity is documented by the POR or treating physician for required use of disposable electrodes;
   b. Tape or another adhesive, as applicable;
   c. Skin preparation material, as applicable;
      i. Adhesive remover;
      ii. Alcohol prep pads;
      iii. Conductive paste or gel.
   d. Battery charger (if rechargeable batteries are used)
3. The following minimum quantities apply to TENS supply kit units of service:
   a. One unit must include at a minimum: Two (2) packages of electrodes, four (4) electrodes per package;
   b. Two (2) units must include at a minimum:
      i. Four (4) packages of electrodes, four (4) electrodes per packages, and
      ii. 30 alcohol prep pads, or
      iii. Other skin preparation materials.
4. Unit maximums differ for a two-lead or a four-lead TENS unit as differentiated in the BWC fee schedule.
5. The following supplies can be billed separately:
   a. Additional/new lead wires (one unit of lead wires once every six (6) months may be billed only when there is a substantiated need for new lead wires.)
   b. One unit of batteries equals either:

i. One 9-volt battery; or
ii. Two (2) AA batteries.
iii. Requests for additional units exceeding the maximum limit must have supporting documentation.

c. Conductive garments are rarely medically necessary but can be reimbursed when:
i. The injured worker cannot manage without the conductive garment because there is a such a large area or so many sites to be stimulated and the stimulation would have to be delivered so frequently that it is not feasible to use conventional electrodes and lead wires; or
ii. The injured worker cannot manage without the conductive garment for the treatment of chronic intractable pain because the areas or sites to be stimulated are inaccessible with the use of conventional electrodes, adhesive tapes and lead wires; or
iii. The injured worker has a documented medical condition such as skin problems that preclude the application of conventional electrodes and lead wires; or
iv. The injured worker requires electrical stimulation beneath a cast to treat chronic intractable pain.

E. Coding and Reimbursement of TENS/NMES

1. Fees for TENS and NMES units include fitting and instruction. Please refer to the most current medical and Professional Provider Fee Schedule for reimbursement rates.
2. BWC shall not separately reimburse for a TENS/NMES fitting and instruction.
3. All rental payments for the TENS unit shall be applied to the purchase price.
4. The TENS provider's bill must indicate the actual date of service, reflecting the date that the services or supplies were provided to the injured worker.

F. Special Coverage Criteria

1. TENS for Chronic Pain
a. Payment for a transcutaneous electrical nerve stimulator (i.e., TENS) is covered for the treatment of an injured worker with chronic, intractable pain who meets the following criteria:
i. Documentation of chronic pain that has been present for three (3) months;
ii. Documentation of the location of pain, duration of time the injured worker has had pain, and the presumed cause of the pain; and
iii. Documentation of other modalities that have been tried and failed.
b. Documentation shall support continued need and patient usage;
c. An MCO may not authorize continued use if:
i. Evidence does not support benefits to injured worker; or

ii. Evidence that the injured worker is not using the authorized TENS unit.

2. TENS for Acute Post-Operative Pain
   a. TENS rental is limited to thirty (30) days beyond surgery.
   b. For reimbursement beyond thirty (30) days, the physician must provide medical documentation for justification.
3. In cases where the TENS use may be contraindicated, the POR or treating provider may be required to submit medical justification and supporting documentation. These contraindications include but are not limited to:
   a. Use in patients with a pacemaker (especially of the demand type).
   b. Use during pregnancy because it may induce premature labor.
   c. Application over the carotid sinuses due to the risk of acute hypotension through a vasovagal reflex.
   d. Application over the anterior neck because laryngospasm due to laryngeal muscle contraction may occur.
   e. The electrodes should not be placed in an area of sensory impairment (e.g., in cases of nerve lesions, neuropathies), where the possibility of burns exists.
   f. A TENS unit should be used cautiously in patients with a spinal cord stimulator or intrathecal pump.
4. NMES
   a. A NEMS device provides an electrical stimulus directly to the muscle or motor nerve of the muscle, causing the muscle to contract. The goal is to stimulate denervated muscle to prevent atrophy or degeneration and to strengthen/train healthy muscle s that are at risk for atrophy from immobilization or disuse due to injury.
   b. Prior authorization by BWC, the MCO or self-insured employer or their agents is required prior to NMES rental or purchase.
   c. The MCO Medical Director or an MCO physician consultant is required to review each request for home rental or purchase of NMES based on medical necessity and BWC NMES criteria.
   d. Reimbursement of NMES devices for home use for the treatment/prevention of muscle atrophy requires the following conditions be met:
      i. The injured worker has suffered partial or completed loss of function in one (1) or more muscles because of an injury to a peripheral nerve or nerve root; and
      ii. Denervation is substantiated by electromyography confirming the nerve injury. The electromyography must demonstrate positive waves and/or fibrillation in the affected muscles.
   e. The authorization of reimbursement of NMES and functional electrical stimulation to enhance walking of injured workers with spinal cord injuries who

meet all the following criteria:

i. Diagnosis of paraplegia of both lower limbs;
ii. Willingness to use the device on a long-term basis;
iii. High motivation, commitment, and cognitive ability to use the device for walking;
iv. Completion of a physical therapy training program of a minimum of thirty (30) sessions with the NMES unit over a three (3) month period;
v. Intact lower motor units (i.e., L1 and below) both muscle and peripheral nerve;
vi. Demonstration of brisk muscle contraction to NMES and sensory perception of electrical stimulations sufficient for muscle contraction;
vii. Muscle and joint stability for weight bearing at upper and lower extremities with demonstration of balance and control to maintain an upright support posture independently;
viii. Ability to transfer independently and demonstration of standing independently for at least three (3) minutes;
ix. Demonstration of hand and finger functions to manipulate controls;
x. Minimum of six (6) month post recovery spinal cord injury and restorative surgery; and
xi. Absence of hip and knee degenerative disease and no history of long bone fracture secondary to osteoporosis.

f. NMES/functional electrical stimulation for walking is contraindicated for injured workers with spinal cord injuries with any of the following:
   i. Cardiac pacemakers or cardiac defibrillators;
   ii. Severe scoliosis or severe osteoporosis;
   iii. Irreversible contracture;
   iv. Autonomic dysreflexia; or
   v. Skin disease or cancer at the area of stimulation.
   vi. In cases where the IW has the conditions that would be contraindicated for NMES use, the POR or treating provider may be required to submit medical justification and supporting documentation.