



MEDICAL POLICY STATEMENT

Ohio Medicaid

Policy Name & Number	Date Effective
Functional Electrical Stimulation (FES)-OH MCD-MM-1867	09/01/2026
Policy Type	
MEDICAL	

Medical Policy Statements are developed from a review of the available evidence-based, clinical information based on and supported by clinical guidelines from medical specialties, peer-reviewed medical and scientific studies, nationally recognized utilization and technology assessment guidelines, and other medical management industry standards to aid in determining the medical necessity of a service. Medically necessary services are defined in the plan-specific Evidence of Coverage, Member Handbooks, Provider Manuals, Medical Policy Statements, and/or other plan policies and procedures.

Medical Policy Statements do not guarantee an authorization or payment of services. Please refer to the plan contract (e.g., Evidence of Coverage, Member Handbook) for the service(s) referenced in the Medical Policy Statement. Except as otherwise required by law, if there is a conflict between the Medical Policy Statement and the plan contract and/or provider agreement, then the plan contract and/or provider agreement will be the controlling document. Reasonable discretion may be used in interpreting and applying this Policy Statement to services provided in a particular case, and the policy may be modified at any time. Medical Policy Statements may be superseded by federal and state laws and regulations, as applicable. In the case of a discrepancy between the Policy Statement's effective date and any applicable legal or regulatory requirement, the law or regulation will govern.

Coverage for mental health and substance use disorder (MH/SUD) benefits are provided at the same level as coverage for medical and surgical (M/S) benefits, as required by the Mental Health Parity and Addiction Equity Act (MHPAEA). MH/SUD benefits are not subject to limits or requirements that are more restrictive than those that apply to M/S benefits.

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A. Subject**Functional Electrical Stimulation (FES)****B. Background**

Paralysis affects millions of Americans, and its effects are a significant public health concern. Approximately 1.7 percent of the U.S. population, or 5,357,970 people reported they were living with some form of paralysis, defined by the study as a central nervous system disorder resulting in difficulty or inability to move the upper or lower extremities. The leading cause of paralysis was stroke (33.7 percent), followed by spinal cord injury (SCI) (27.3 percent), multiple sclerosis (18.6 percent) and cerebral palsy (8.3%). Functional electrical stimulation is a technique to produce functional movements after paralysis. Electrical discharges are applied to a person's muscles making them contract in a sequence that allows performing tasks such as grasping a key, holding a toothbrush, standing, and walking. This technology was developed in the sixties, during which initial clinical use started, emphasizing its potential as an assistive device. Since then, functional electrical stimulation has evolved into an important therapeutic intervention that clinicians have used to help individuals who have had a stroke or a spinal cord injury regain their ability to stand, walk, reach, and grasp. It is a therapeutic or exercise modality for individuals with a nervous system injury to reactivate the peripheral nervous system without significant lower motor neuron damage. Similarly, Neuromuscular electrical stimulation (NMES) technology utilizes electrical stimulation to alleviate the inability of muscles to produce joint movements in stroke patients due to weak or absent innervation. It enables survivors with lower extremity motor dysfunction to reactivate their muscles and regain motor coordination.

C. Definitions

- **Functional Electrical Stimulation** – The application of low levels of electrical current to artificially induce or modify nerve activation and muscle contraction to restore function, improve health and/or improve physiological dysfunction following disease or neurological injury.
- **Neuromuscular Electrical Stimulation (NMES)** – A therapeutic technique that uses a device to deliver low-voltage electrical impulses to nerves through skin-placed electrodes, inducing involuntary muscle contractions.
- **Paralysis** – complete or partial loss of function especially when involving the motion or sensation in a part of the body.
- **Spinal Cord Injury (SCI)** – Damage to the bundle of nerves and fibers within the spinal column that disrupts communication between the brain and body.
- **Stroke** – Sudden impairment or loss of consciousness, sensation, and voluntary motion that is caused by rupture or obstruction (as by a clot) of a blood vessel supplying the brain and is accompanied by permanent damage of brain tissue.

D. Policy

- I. CareSource considers functional electrical stimulation (FES) medically necessary as a component of a comprehensive ambulation rehabilitation program in members with

- lower limb paralysis due to spinal cord injury (SCI) when **ALL** of the following criteria are met:
- A. Member has successfully completed a training program, which consists of at least 32 physical therapy sessions with the device over a 3-month period.
 - B. Training must be directly performed by the physical therapists as part of a one-on-one training program.
 - C. Member has intact lower motor units (L1 and below) (both muscle and peripheral nerve).
 - D. Muscle and joint stability for weight bearing at upper and lower extremities and has balance and control to maintain an upright support posture independently.
 - E. Brisk muscle contraction to neuromuscular electrical stimulation and sensory perception of electrical stimulation sufficient for muscle contraction
 - F. Member has the cognitive ability to use such devices for walking and motivation to use the device long term.
 - G. The ability to transfer independently and stand for at least 3 minutes
 - H. Member demonstrates hand and finger function to manipulate the controls.
 - I. Post-recovery from SCI and restorative surgery of at least 6 months
 - J. Absence of hip and knee degenerative disease and no history of long bone fracture secondary to osteoporosis.
- II. Contraindications
- A. FES is unproven and not medically necessary due to insufficient evidence of efficacy for treating any other indication not listed above
 - B. presence of cardiac pacemakers
 - C. members with severe scoliosis or severe osteoporosis
 - D. skin disease or cancer at area of stimulation
 - E. irreversible contracture
 - F. autonomic dysreflexia
 - G. poorly controlled epilepsy
 - H. pregnancy
 - I. fracture or dislocation near or on the application site
- III. Experimental and Investigational
- A. when used to prevent or reverse muscular atrophy (wasting) and bone demineralization (loss), by stimulating paralyzed limbs for the performance of stationary exercise
 - B. to correct gait disorders
 - C. functional electrical stimulation ergometer devices (for example, ERGYS® and ERGYS®)
 - D. when used to activate muscles of the upper limb or lower limb to produce functional movement patterns. This includes, but is not limited to, the NESS H200® Handmaster Rehabilitation System, NESS L300™ Foot Drop System, ODFS Dropped Foot Stimulator, and the WalkAide® System.

IV. CareSource considers neuromuscular electrical stimulators (NMES) medically necessary for the following indications:

- A. disuse muscle atrophy if:
 - 1. the nerve supply to the muscle is intact
 - 2. disuse muscle atrophy is not of neurological origin but results from other conditions for example casting, splinting, or contractures
- B. when used as part of a comprehensive lower limb rehabilitation program following total knee arthroplasty
- C. hemiplegia or hemiparesis with foot drop after chronic stroke, as indicated by **ALL** of the following:
 - 1. ankle range of motion within limits required for normal gait
 - 2. cognitively able to understand and comply with rehabilitation protocol
 - 3. stroke onset greater than 3 months prior

V. Contraindications/not medically necessary

- A. use in members with cardiac pacemakers
- B. as a technique to increase circulation
- C. treatment of pain for various musculoskeletal conditions, including, but not limited to patellofemoral syndrome, spinal stenosis, lumbago, muscle strains/sprain
- D. more than 2 hours of NMES per day, as excessive duration can lead to muscle fatigue, skin irritation, or breakdown, and is not supported by literature for improved outcomes.

E. Conditions of Coverage

NA

F. Related Policies/Rules

Experimental or Investigational Item or Service

G. Review/Revision History

DATE		ACTION
Date Issued	05/06/2026	New policy. Approved at Committee.
Date Revised		
Date Effective	09/01/2026	
Date Archived		

H. References

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The MEDICAL Policy Statement detailed above has received due consideration as defined in the MEDICAL Policy Statement Policy and is approved.

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