

Transcutaneous Electrical Nerve Stimulation (TENS) and Neuromuscular Electrical Stimulation (NMES) Devices

TENS Devices

Transcutaneous Electrical Nerve Stimulation (TENS) is a noninvasive therapy indicated for the symptomatic relief from, and management of, chronic intractable pain and post-surgical and post-trauma acute pain.

Mechanism of TENS

Pain messages transmitted by the peripheral nervous system to the brain are electro-chemical in nature. Controlling or overriding these nociceptive impulses can bring about significant pain relief to patients. With a TENS system, a portable stimulator generates a current which flows through leads to electrodes placed in specific locations on the patient's skin. The low voltage current causes an electrical reaction in sensory and motor nerve fibers, overriding pain message transmission. The frequency and intensity of the stimulus are carefully controlled. TENS can also stimulate endorphin production.

Clinical Application

- Pain treatment and management for general and specialty medical practices
- Patients whose pain therapy is limited by medication side effects
- Patients requiring frequent and costly PT and OT services

NMES Devices

Neuromuscular Electrical Stimulation (NMES) is a non-invasive, non-addictive means of muscle rehabilitation after injury, surgery or disease. Patients with a wide range of orthopedic and neurologic diagnoses can benefit from NMES, which applies customized electrical stimulus to cause a muscle to contract.

Mechanism of NMES

A portable stimulator generates customized electrical pulses. These flow through leads to electrodes placed on motor points over a targeted muscle or muscle group. Between the electrodes, the current passes into the body and causes an electrical reaction in motor nerves that result in muscle contraction. Stimulus parameters including rate, amplitude and waveform, are adjusted to facilitate a quality contraction without causing fatigue. Dual waveforms allow clinicians to choose the one best suited for the muscle being stimulated.

Clinical Application

- Prevention of disuse atrophy
- Muscle re-education
- Relaxation of muscle spasm
- Maintaining or increasing range of motion
- Prevention of venous thrombosis in selective muscles immediately post-surgery
- Increasing local blood circulation
- Strengthening weak or injured muscles

Coding of Rental vs. Purchase

TENS Unit	NMES Unit
TENS Unit E0730- Rental up to three months with conversion to purchase if noted benefit, see below for applicable accessory information. (2015- \$411.30 purchase, \$50.00 recurring rental)	Neurostimulator E0745- Rental up to three months with conversion to purchase if noted benefit, see below for applicable accessory information. (2015- \$897.75 purchase, \$86.78 recurring rental)

Customary Amounts of Accessories Specific to TENS Units

Electrodes: Information provided by DJO Company relating to number of electrodes per device, company reports replacement monthly at rate of two packages (any assortment, usually 4-electrodes per package dependent on size), coding is A4556 or A4595 (monthly supply).

Leads: Information provided by DJO Company relating to number of lead replacements per device, company reports replacement rate of every 6-12 months, coding is A4557 or A4595 (monthly supply).

Rechargeable Batteries: Information provided by DJO Company relating to number of battery replacements per device, company reports replacement rate of every 6-12 months per battery. The following are general guidelines for units/devices: TENS (AA/AAA battery), NMES (9/8.4-Volt), A4630.

Skin-Preparations Coding Information

Disposable Wipes- A6250 or A5120 (Ostomy)- (1) Box per Month of 100-Count is Customary

Pump Spray- A6250 or A4369 (Ostomy)- (6) Bottles per Year is Customary

Skin Preparation Swab- A6250 (Ostomy)- (1) Box per Month of 100-Count is Customary

Conductive Gel or Paste- A4558 (per ounce)- (6) Bottles per Year is Customary

Please note that the above numbers for skin-preparations are customary amounts, please review additional requests for frequency of utilization