Medical Coverage Policy
Policy Number – MP21-006E
Original review date – 08/25/2021
Revised Effective date – 04/30/2025

Spinal cord stimulation

Definition

Spinal cord stimulation is a pain relief technique that uses electrical current to the spinal cord to block the sensation of pain. Spinal cord stimulator consists of electrodes that are implanted in the epidural space either percutaneously or by surgical laminectomy, and a pulse generator that is implanted in the subcutaneous space. The pulse generator and the electrodes are connected by a cable placed under the skin.

Prior to stimulator implantation, a test stimulation is performed using percutaneous stimulation. Electrodes are temporarily implanted in the epidural space and an external generator is used to deliver electric impulses.

Policy statement

Disclaimer: This policy is applicable to TRICARE Prime and Select beneficiaries and may not apply to Active Duty Service Members (ADSM) under Supplemental Health Care Program (SHCP) or TRICARE Prime Remote (TPR) in accordance with TRICARE Operations Manual (TOM) Ch. 17, Sec. 3. Please review TOM Ch. 17, Sec. 3, Para. 2.0 onwards, regarding SHCP coverage and any TRICARE-specific exclusions included in this coverage policy to accurately determine the benefit for ADSMs.

A trial for spinal cord stimulation (63650) is considered reasonable and necessary if ALL the following conditions are met:

I. Chronic, intractable pain caused by one of the following conditions:
    a. Chronic neuropathic or ischemic pain
    b. Failed back surgery syndrome
    c. Radiculopathy
    d. Painful, inoperable peripheral vascular disease
    e. Intractable angina
    f. Complex regional pain syndrome
II. Failed conservative management such as physical therapy, pharmacotherapy, and psychotherapy or cognitive behavioral therapy as appropriate
III. Psychological evaluation stating patient is suitable for implantation of spinal cord stimulator and does not have any untreated psychiatric comorbidity
IV. Patient capable of operating stimulating device
V. No active, untreated substance abuse disorder
VI. No coagulopathy, current anticoagulant or antiplatelet therapy
VII. No thrombocytopenia (platelet count < 75,000/mm^3)
VIII. No current or chronic infection at the site of implantation

Permanent implantation of spinal cord stimulator is covered if the following criteria are met:

I. Beneficiary meets all the criteria listed above; AND
II. Reduction of pain by at least 50% on test spinal stimulation

Limitations of coverage

I. Spinal cord stimulation is not covered for chronic, intractable headache or migraine per TRICARE policy

TRICARE Policy Statements

TPM Ch. 4, Sec. 20.1

2.4 Spinal cord and deep brain stimulation are covered in the treatment of chronic intractable pain. Coverage includes:

2.4.1 The accessories necessary for the effective functioning of the covered device.

2.4.2 Repair, adjustment, replacement and removal of the covered device and associated surgical costs.

3.0 Exclusions
3.12 The following treatments for chronic intractable headache or migraine pain are unproven:
- Trigger point injection
- Sphenopalatine ganglion block (CPT procedure code 64505)
- Cryoablation of Occipital Nerve (CPT procedure code 64640)
- Deep brain neurostimulation
- Spinal cord neurostimulation
- Implantation of Occipital Nerve Stimulator

Coding information

63650	Percutaneous implantation of neurostimulator electrode array, epidural
63655	Laminectomy for implantation of neurostimulator electrodes, plate/paddle, epidural
63661	Removal of spinal neurostimulator electrode percutaneous array(s), including fluoroscopy, when performed
63662	Removal of spinal neurostimulator electrode plate/paddle(s) placed via laminotomy or laminectomy, including fluoroscopy, when performed
63663	Revision including replacement, when performed, of spinal neurostimulator electrode percutaneous array(s), including fluoroscopy, when performed

63664	Revision including replacement, when performed, of spinal neurostimulator electrode plate/paddle(s) placed via laminotomy or laminectomy, including fluoroscopy, when performed
63685	Insertion or replacement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling
63688	Revision or removal of implanted spinal neurostimulator pulse generator or receiver
C1767	Generator, neurostimulator (implantable), nonrechargeable
C1778	Lead, neurostimulator (implantable)
C1787	Patient programmer, neurostimulator
C1816	Receiver and/or transmitter, neurostimulator (implantable)
C1820	Generator, neurostimulator (implantable), with rechargeable battery and charging system
C1822	Generator, neurostimulator (implantable), high frequency, with rechargeable battery and charging system
C1883	Adaptor/extension, pacing lead or neurostimulator lead (implantable)
C1897	Lead, neurostimulator test kit (implantable)
L8679	Implantable neurostimulator, pulse generator, any type
L8680	Implantable neurostimulator electrode, each
L8681	Patient programmer (external) for use with implantable programmable neurostimulator pulse generator, replacement only
L8682	Implantable neurostimulator radiofrequency receiver
L8683	Radiofrequency transmitter (external) for use with implantable neurostimulator radiofrequency receiver
L8685	Implantable neurostimulator pulse generator, single array, rechargeable, includes extension
L8686	Implantable neurostimulator pulse generator, single array, nonrechargeable, includes extension
L8687	Implantable neurostimulator pulse generator, dual array, rechargeable, includes extension
L8688	Implantable neurostimulator pulse generator, dual array, nonrechargeable, includes extension
L8689	External recharging system for battery (internal) for use with implantable neurostimulator, replacement only
L8695	External recharging system for battery (external) for use with implantable neurostimulator, replacement only

References

1. TRICARE Policy Manual Chapter 4 TRICARE Manuals - Display Chap 4 Sect 20.1 (Change 28, Jan 8, 2025)
2. MCG Health. Implantable Electrical Stimulator, Spinal Cord. Ambulatory Care. 28th edition. ACG: A-0243 (AC). Last reviewed: 03/14/2024
3. Uptodate Inc. Spinal Cord Stimulation: Placement and Management Last updated 09/14/2023

Revision history

April 2025: Updated references

April 2024: Updated criteria and references

September 2023: Updated references

Approved by:

Joseph F. McKeon, MD, MPH

Chief Medical Officer

Date of approval: 04/30/2025