# **Spinal cord stimulation**

These services may or may not be covered by your HealthPartners plan. Please see your plan documents for your specific coverage information. If there is a difference between this general information and your plan documents, your plan documents will be used to determine your coverage.

## **Administrative Process**

Prior authorization is required for the trial insertion, permanent placement, or replacement of a spinal cord stimulator.

Prior authorization is required for both the trial insertion and permanent placement when request is for the following non-covered indication:

Dorsal root ganglion stimulator

Prior authorization is not required for removal of a spinal cord stimulator

Prior authorization is not required for repair or revision (such as revision of migrated leads) of an existing spinal cord stimulator.

# Coverage

Spinal cord stimulation to treat intractable chronic neuropathic pain that is refractory to other treatment modalities (specific service) is generally covered subject to the indications listed below and per your plan documents

The member is to be offered patient decision support. The following are recommendations for a robust informed consent discussion between physician and patient:

- 1. Provide information about treatment options and their probabilities for success in sufficient detail for decision making.
- 2. Present probabilities of outcomes in an unbiased and understandable way.
- 3. Include methods for clarifying and expressing patients' values

## Indications that are covered

# Criteria for a trial insertion

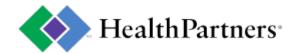
A temporary spinal cord stimulator is covered to treat intractable chronic neuropathic pain when all the following criteria are met

- 1. The pain is a result of one of the following:
  - A. Failed lumbar back surgery syndrome with intractable radicular pain refractory to medical management; or
  - B. Complex regional pain syndrome, including upper or lower extremity pain; or
    - Diabetic peripheral neuropathy (DPN).
- 2. Documentation submitted by the operating physician demonstrates compliance with all of the following criteria:
  - A. The treatment is recommended after all other patient-appropriate therapies have been tried and proven ineffective, including but not limited to pharmacological management, injection therapies, physical therapy, surgery, and psychological treatment if indicated.
  - B. Preoperative psychiatric/psychological evaluation conducted by a licensed psychiatrist, psychologist or other licensed mental health professional who has a knowledge of chronic pain syndromes. The goals of this assessment are to rule out psychiatric comorbidities or substance use disorders that would be strong predictors of poor outcomes and to select motivated patients who would be more likely to adhere to a follow-up plan.

## **Criteria for Permanent Placement**

- 1. All the criteria listed above for trial insertion, and
- 2. A trial insertion of a minimum of three days (preceding permanent implantation) leads to documented:
  - A. 50% or greater pain relief and
  - B. Improvement in function.

#### Replacement of spinal cord stimulator



The replacement of an existing spinal cord stimulator is considered medically necessary for an individual when the existing battery/implantable pulse generator (IPG) is malfunctioning, cannot be repaired, and is no longer under warranty. A copy of the expired warranty and the date the malfunctioning battery/IPG was implanted must be submitted by requesting provider.

#### Indications that are not covered

- 1. Use of spinal cord stimulation (SCS) is considered experimental and investigational for the following conditions, including but not limited to:
  - A. Chronic pain from malignancy (cancer)
  - B. Other chronic non-malignant pain, including but not limited to cephalgia, headache, inguinal pain, intercostal neuralgia, occipital neuralgia, phantom limb syndrome, post-herpetic neuralgia and trigeminal neuralgia
  - C. Spasticity disorders
  - D. Spinal cord stimulator implantation in the cervical spine for the treatment of any condition not listed under Indications that are covered, including, but not limited to, neck and arm pain caused by cervical trauma, cervical disc herniation, failed cervical spine surgery syndrome or cervicogenic headache.
  - Any conditions not listed as covered.
- 2. Dorsal root ganglion (DRG) stimulation is considered experimental and investigational because its efficacy and safety have not been established.
- 3. Replacement of a functioning spinal cord stimulator or a functioning component of a spinal cord stimulator (including, but not limited to, replacing, or "upgrading" a non-high frequency stimulator with a high frequency stimulator) is not considered medically necessary.

## **Definitions**

**Dorsal root ganglion (DRG) stimulation** is a modified SCS technique that specifically targets the dorsal root ganglion (DRG), a cluster of nerve cell bodies located in the posterior roots of the spinal nerves. Pain signals from the legs pass through the DRG to the spinal cord.

**Failed back surgery syndrome (FBSS)** is lumbar spinal pain of unknown origin persisting after surgical intervention or first appearing after surgical intervention for spinal pain originally in the same location. May also be called post-laminectomy syndrome.

**Complex regional pain syndrome (CRPS)** describes painful conditions characterized by ongoing, spontaneous and/or evoked, regional pain that seems out of proportion to known trauma or causative lesion. Previous names for CRPS include reflex sympathetic dystrophy and causalgia.

Two subtypes of CRPS have been recognized:

- Type I describes cases without evidence of peripheral nerve injury
- Type II describes cases in which peripheral nerve injury is present.

**Spinal Cord Stimulation (SCS)** also known as a dorsal column stimulation, involves electrical stimulation of spinal nerves using electrodes implanted in the epidural space of the spinal column. The goal of SCS is to suppress pain in specific areas for patients with a chronic pain disorder, including refractory neuropathic pain. A spinal cord stimulation system consists of a surgically implanted neurostimulator device, lead wires, a computer programming device used by clinicians to set stimulation levels and a patient-controlled handheld programming device.

#### Codes

If available, codes are listed below for informational purposes only, and do not guarantee member coverage or provider reimbursement. The list may not be all-inclusive

Codes	Description
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

## **Related HCPCS Codes:**

Codes	Description
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
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)

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#### **Products**

This information is for most, but not all, HealthPartners plans. Please read your plan documents to see if your plan has limits or will not cover some items. If there is a difference between this general information and your plan documents, your plan documents will be used to determine your coverage. These coverage criteria may not apply to Medicare Products if Medicare requires different coverage. For more information regarding Medicare coverage criteria or for a copy of a Medicare coverage policy, contact Member Services at 952-883-7979 or 1-800-233-9645.

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#### References

- Abdi, S, Complex regional pain syndrome in adults: Prevention and management In: UpToDate, Rosenquist, E (Ed), UpToDate, Waltham, MA. (Accessed on November 30, 2021)
- 2. Chou, R. Subacute and chronic low back pain: Surgical treatmentIn; UpToDate, Atlas, S. (Ed) UpToDate, Waltham, MA (accessed February 1, 2024)
- 3. Duarte,R., Nevitt, S., McNicol, E., Taylor,R., Buchser, E., North, R., Eldabe, S. (2020) Systematic review and metaanalysis of placebo/sham controlled randomized trials or spinal cord stimulation, *Pain*, 161 (2020) 24-35
- ECRÍ, Institute (2014). Rechargeable Implantable Neurostimulators (Spinal Cord Stimulators) for Managing Chronic Pain. ECRI Institute. Plymouth Meeting, PA.
- 5. ECRI Institute. (2017). Dorsal Root Ganglion Neurostimulation for Treating Complex Regional Pain Syndrome Types I and II. Plymouth Meeting, PA: ECRI Institute.
- Eldabe, S., Buchser, E., Duarte, R. (2016) Complications of Spinal Cord Stimulation and Peripheral Nerve Stimulation Techniques: A review of the Literature, Pain Medicine 2016; 17: 325-336
- 7. Hayes, Inc. Hayes Medical Technology Assessment . Spinal Cord Stimulation for relief of neuropathic pain. Lansdale, PA: Hayes, Inc.;December 2018, Reviewed March 2023
- 8. Hayes, Inc. Hayes Medical Technology Directory Report Dorsal Root Ganglion Stimulation for the Treatment of Complex Regional Pain Syndrome. Lansdale, PA: Hayes, Inc.; December 2021, Reviewed Dec 2023



- Mckenzie-Brown, A., Pritzlaff, S. Spinal cord stimulation: Placement and management. In: UpToDate, Fishman, S, (Ed), UpToDate, Waltham, MA. (Accessed on January 31, 2024)
- National Institute for Health and Clinical Excellence (NICE). Pain (chronic neuropathic orischaemic) spinal cord stimulation. NICE Technology Appraisal Guidance 159. London, UK: NICE; October 2008.
- 11. Peng, Lihua, et al. "Spinal cord stimulation for cancerrelated pain in adults." Cochrane Database of Systematic Reviews, 2015, Issue 6 Art. No.: CD009389
- 12. Sayed, D., Grider, J, Strand, N., Hagedorn, J., Falowski, S., Lam, C., ..... Deer, T. (2022) The American Society of Pain and Neuroscience (ASPN) Evidence-Based Clinical Guideline of Interventional Treatments for Low Back Pain, *Journal of Pain Research*, 2022: 15 3729-3932
- 13. Shanthanna, H., Eldabe, S., Provenzano, D., Bouche, B., Buchser, E., Chadwick, R....Narouze, S. Evidence-based consensus guidelines on patient selection and trial stimulation for spinal cord stimulation therapy for chronic non-cancer pain *Regional Anesthesia and Pain Medicine*, 2023; 48: 273-287