

# Spinal Cord Electrical Stimulator (Spinal cord stimulator (SPS) and Dorsal Motor Ganglion Stimulator (DMG), Surgical 69

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**Member-specific benefits take precedence over medical policy and benefits may vary across plans. Refer to the individual's benefit plan for details [\\*](#).**

## Description & Definitions:

A **Dorsal column stimulator** is a device which stimulates nerves by tiny electrical impulses via small electrical wires implanted on the dorsal area of the spinal cord to interrupt pain signals to the brain.

A **Spinal cord stimulator** is a device which uses implanted electrodes to deliver electrical stimulation in the epidural space of the spinal column to disguise signals of pain to the brain.

**Spinal Cord Stimulation** (also known as dorsal column stimulation or neuromodulation): a reversible therapy applied for neuropathic pain with techniques that include multi-output implanted pulse generators and a choice of electrodes, some of which can be placed percutaneously. A traditional dorsal column stimulator (i.e., non-high-frequency) generally produces a pulse width between 20-1000  $\mu$ s and frequencies between 2 and 1200 Hz. Some devices allow adjustment of the settings, including burst- and/or continuous-mode stimulation.

**High-frequency spinal cord stimulation**, (also referred to as kilohertz frequency spinal cord stimulation or HF10): a type of spinal cord stimulation (SCS) providing a higher frequency than traditional spinal cord stimulator systems. It uses low-amplitude, high-frequency, and short-duration pulses.

**Dorsal root ganglion (DRG) stimulation**: an emerging method of treatment for neuropathic pain. With DRG stimulation leads are placed percutaneously into the epidural space under fluoroscopic guidance directly over the targeted dorsal root ganglion within the lumbar or sacral region of the spine.

- non-high-frequency or high-frequency

## Criteria:

Spinal cord electrical stimulators are considered medically necessary for **1 or more** of the following:

- Trial spinal cord electrical stimulators devices for individuals with indications of **ALL** of the following:
  - Indications of **1 or more** of the following:
    - Failed back surgery syndrome (FBSS) with low back pain and significant radicular pain
    - Intractable pain caused by complex regional pain syndrome (CRPS)
    - Intractable pain caused by phantom limb syndrome that has not responded to medical management
    - Intractable pain caused by plexopathy
    - Intractable pain caused by cauda equina injury
    - Intractable pain caused by incomplete spinal cord injury
    - Inoperable chronic ischemic limb pain from peripheral vascular disease
    - Neuropathic pain due to Diabetes or inoperable critical limb ischemia
    - Chronic back pain or neck pain with **ALL** of the following:
      - Individual with chronic back or neck pain who are considered inoperable
      - Documentation of at least 12 months of trial and failure of standard therapy (including non-steroidal anti-inflammatory drugs, tricyclic antidepressants, and anticonvulsants)
    - Individual with intractable angina has angiographically documented significant coronary artery disease with **ALL** of the following:
      - Individual not suitable for revascularization procedures such as coronary artery bypass grafting or percutaneous transluminal coronary angioplasty
      - Individual has had optimal pharmacotherapy for at least one month including maximal tolerated dosages of **2 or more** of the following:
        - Anti-anginal medications
        - Long-acting nitrates
        - Beta-adrenergic blockers
        - Calcium channel antagonists
      - Individual's angina pectoris is New York Heart Association Functional Class III or Class IV
      - Reversible ischemia is documented by symptom-limited treadmill exercise test
  - Documentation of unresponsive trial of conservative therapies such as medications, physical therapy, surgery, psychological therapy or other modalities for at least 6 months
  - Documentation of no active substance abuse issues
  - Documentation of proper patient education, discussion, and disclosure including an extensive discussion of the risks and benefits of this therapy
  - Individual has the ability to understand and operate the device
  - Favorable psychological evaluation, absence of untreated psychiatric comorbidity, or current treatment in multidisciplinary pain management program
  - No cardiac pacemaker or implantable defibrillator
  - No coagulopathy, anticoagulant or antiplatelet therapy, or thrombocytopenia (ie, platelet count of less than 75,000/mm<sup>3</sup> (75 x10<sup>9</sup>/L))
  - No current or chronic infection
- Implanted spinal cord or dorsal motor ganglion electrical stimulators with indications of **ALL** of the following:
  - Indications of **1 or more** of the following:
    - Failed back surgery syndrome (FBSS) with low back pain and significant radicular pain
    - Intractable pain caused by complex regional pain syndrome (CRPS)
    - Intractable pain caused by phantom limb syndrome that has not responded to medical management
    - Intractable pain caused by plexopathy
    - Intractable pain caused by cauda equina injury
    - Intractable pain caused by incomplete spinal cord injury
    - Inoperable chronic ischemic limb pain from peripheral vascular disease
    - Neuropathic pain due to Diabetes or inoperable critical limb ischemia

- Chronic back pain or neck pain with **ALL** of the following:
  - Individual with chronic back or neck pain who are considered inoperable
  - Documentation of at least 12 months of trial and failure of standard therapy (including non-steroidal anti-inflammatory drugs, tricyclic antidepressants, and anticonvulsants)
- Individual with intractable angina has angiographically documented significant coronary artery disease with **ALL** of the following:
  - Individual not suitable for revascularization procedures such as coronary artery bypass grafting or percutaneous transluminal coronary angioplasty
  - Individual has had optimal pharmacotherapy for at least one month including maximal tolerated dosages of **2 or more** of the following:
    - Anti-anginal medications
    - Long-acting nitrates
    - Beta-adrenergic blockers
    - Calcium channel antagonists
  - Individual's angina pectoris is New York Heart Association Functional Class III or Class IV
  - Reversible ischemia is documented by symptom-limited treadmill exercise test
- Documentation of successful completion of a trial with percutaneous spinal stimulator, after meeting criteria for trial
- Individual has the ability to understand and operate the device
- No cardiac pacemaker or implantable defibrillator
- No coagulopathy, anticoagulant or antiplatelet therapy, or thrombocytopenia (ie, platelet count of less than 75,000/mm<sup>3</sup> (75 x10<sup>9</sup>/L))
- No current or chronic infection
- Documentation of no active substance abuse issues
- The implantation of the stimulator is used only as a late resort (if not a last resort) for patients with chronic intractable pain
- With respect to item a, other treatment modalities (pharmacological, surgical, physical, or psychological therapies) have been tried and did not prove satisfactory, or are judged to be unsuitable or contraindicated for the given patient
- Individuals have undergone careful screening, evaluation and diagnosis by a multidisciplinary team prior to implantation. (Such screening must include psychological, as well as physical evaluation
- Short trial with percutaneous implantation of neurostimulator electrode(s) in epidural space for assessing patient's suitability for ongoing treatment. (A successful trial should be associated with at least a 50% reduction of target pain, or 50% reduction of analgesic medications, and show some element of functional improvement. (Patients with reflex sympathetic dystrophy may show lower levels of improvement since it takes longer periods for improvement than the typical one to two week trial)).

Spinal Cord Stimulation is considered not medically necessary for any use other than those indicated in clinical criteria, to include but not limited to:

- Repeat trials are not considered medically necessary unless appropriate medical documentation proves there was an extenuating circumstance that led to trial failure
- Cephalgia
- Headache of any etiology
- Inguinal pain
- Occipital neuralgia
- Trigeminal neuralgia
- Spasticity
- Cervical spinal cord stimulation for the treatment of cervical trauma, disc herniation, failed cervical spine surgery syndrome presenting with arm pain, neck pain, and/or cervicogenic headache, radiation-induced brain injury, or stroke

- Implantable epidural spinal cord stimulation (both temporary and permanent) as a treatment of critical limb ischemia as a technique to forestall amputation
- Implantable subcutaneous target stimulator devices (both temporary and permanent) for all indications

Dorsal Column Stimulation is considered not medically necessary for any use other than those indicated in clinical criteria, to include but not limited to:

- Chronic malignant pain
- Other chronic non-malignant neuropathic pain (e.g., cephalgia, diabetic neuropathy, headache, inguinal pain occipital neuralgia, phantom limb syndrome, and trigeminal neuralgia) that does not meet the clinical indications below
- Spasticity
- Critical limb ischemia as a technique to forestall amputation
- Chronic vegetative state or minimally conscious state
- Irritable bowel syndrome

The combined use of dorsal column stimulation and dorsal root ganglion stimulation for the treatment of complex regional pain syndrome or any other indications are not medically necessary.

## Document History:

### Revised Dates:

- 2024: March
- 2020: March, April
- 2015: September
- 2013: September
- 2012: August
- 2011: March, May, September
- 2008: October
- 2006: October
- 2005: January
- 2002: September

### Reviewed Dates:

- 2025: March – Implementation date of 6/1/2025. Annual review completed, no changes, references updated.
- 2023: March
- 2022: April
- 2021: March
- 2018: November
- 2017: January
- 2015: June
- 2014: September
- 2010: September
- 2009: September
- 2008: January
- 2007: December
- 2006: February
- 2004: October
- 2003: October

Effective Date: December 2000

## Coding:

### Medically necessary with criteria:

Coding	Description
63650	Percutaneous implantation of neurostimulator electrode array, epidural
63655	Laminectomy for implantation of neurostimulator electrodes, plate/paddle, epidural
63685	Insertion or replacement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling
L8680	Implantable neurostimulator electrode, each
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, non-rechargeable, includes extension
L8687	Implantable neurostimulator pulse generator, dual array, rechargeable, includes extension
L8688	Implantable neurostimulator pulse generator, dual array, non-rechargeable, includes extension

### Considered Not Medically Necessary:

Coding	Description
	None

U.S. Food and Drug Administration (FDA) - approved only products only.

*The preceding codes are included above for informational purposes only and may not be all inclusive. Additionally, inclusion or exclusion of a treatment, procedure, or device code(s) does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.*

## Special Notes: \*

- Coverage:
  - See the appropriate benefit document for specific coverage determination. Member specific benefits take precedence over medical policy.
- Application to products:
  - Policy is applicable to Sentara Health Plan Commercial products.
- Authorization requirements:
  - Pre-certification by the Plan is required.
- Special Notes:
  - Commercial

- Medical policies can be highly technical and complex and are provided here for informational purposes. These medical policies are intended for use by health care professionals. The medical policies do not constitute medical advice or medical care. Treating health care professionals are solely responsible for diagnosis, treatment, and medical advice. Sentara Health Plan members should discuss the information in the medical policies with their treating health care professionals. Medical technology is constantly evolving, and these medical policies are subject to change without notice, although Sentara Health Plan will notify providers as required in advance of changes that could have a negative impact on benefits.
- Services mean both medical and behavioral health (mental health) services and supplies unless We specifically tell You otherwise. We do not cover any services that are not listed in the Covered Services section unless required to be covered under state or federal laws and regulations. We do not cover any services that are not Medically Necessary. We sometimes give examples of specific services that are not covered but that does not mean that other similar services are covered. Some services are covered only if We authorize them. When We say You or Your We mean You and any of Your family members covered under the Plan. Call Member Services if You have questions.

## References:

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Spinal Cord Stimulation for Relief of Neuropathic Pain. (2023, Mar 27). Retrieved Mar 11, 2025, from Hayes - a symplr company: <https://evidence.hayesinc.com/report/dir.584scspain>

## Keywords:

Spinal Cord Stimulation and Dorsal Column Stimulation, SHP Surgical 69, chronic intractable pain, peripheral vascular disease, reflex sympathetic dystrophy, complex regional pain syndrome, radicular pain, low back pain, phantom limb syndrome, plexopathy, cauda equina injury, spinal cord injury, coronary artery disease, angina pectoris, New York Heart Association Functional Class III, New York Heart Association Functional Class IV, Complex regional pain syndrome, CRPS, Failed back surgery syndrome, FBSS, Neuropathic pain, Diabetes, inoperable critical limb ischemia, dorsal motor ganglion electrical stimulators, Spinal cord stimulator (SCS), Dorsal column stimulators (DCS), Dorsal Motor Ganglion Stimulator (DMG), dorsal root ganglion stimulation (DRGS)