CLINICAL GUIDELINES

CMM-211 ~ Spinal Cord and Implantable Peripheral Nerve Stimulators

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eviCore healthcare Clinical Decision Support Tool Diagnostic Strategies:This tool addresses common symptoms and symptom complexes. Imaging requests for individuals with atypical symptoms or clinical presentations that are not specifically addressed will require physician review. Consultation with the referring physician, specialist and/or individual's Primary Care Physician (PCP) may provide additional insight.

CMM-211~Spinal Cord Stimulators	

CMM-211.1 Definitions

Spinal cord stimulation, also known as dorsal column stimulation, is 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. The technical goal of this therapy is to achieve stimulation of paresthesia of the dorsal horn of the spinal cord at a subjectively comfortable level, overlapping an individual's topography of pain. The procedure initially involves a short-term, trial (e. g., three to seven [3-7] days) of percutaneous (temporary) spinal cord stimulation, prior to the subcutaneous (permanent) implantation of the spinal cord stimulation device, to determine whether the spinal cord stimulator device will induce sufficient pain relief to render it medically necessary.

In contrast to spinal cord stimulation, **peripheral nerve stimulation** involves implantation of electrodes near or on a peripheral nerve to reduce pain. **Peripheral nerve field stimulation** is a technology that involves placement of electrodes subcutaneously within an area of maximal pain, with the objective of stimulating a region of affected nerves to reduce pain. Depending on the targeted nerve, leads may be placed percutaneously just under the skin or via an open approach for larger deeper peripheral nerves. Similar to spinal cord stimulation, a short term trial is required prior to permanent implantation of a generator. The use of these technologies, used alone or in combination with spinal cord stimulation for treatment of pain conditions is under investigation.

CMM-211.2 Indications and Non-Indications

- ✓ The determination of medical necessity for implantation of a dorsal spinal cord stimulator is always made on a case-by-case basis.

Dorsal Column Spinal Cord Stimulator

A dorsal column spinal cord stimulator (SCS) is considered medically necessary for any of the indications listed below when the associated criteria are met:

- ✓ A short-term trial (e.g., three to seven [3–7] days) of a dorsal column spinal cord stimulator (SCS) **is considered medically necessary** for the treatment of chronic, intractable pain secondary to EITHER of the following indications:

    - Failed back syndrome (FBS) with intractable neuropathic leg pain
    - Complex regional pain syndrome (CRPS)/reflex sympathetic dystrophy (RSD)

And when ALL of the following criteria are met:

- Failure of at least six consecutive months of physician-supervised conservative medical management (e.g., pharmacotherapy, physical therapy, cognitive therapy, and activity lifestyle modification)
- Surgical intervention is not indicated
- An evaluation by a mental health provider (e.g., a face-to-face assessment with or without psychological questionnaires and/or psychological testing) reveals no evidence of an inadequately controlled mental health problem (e.g., alcohol or drug dependence, depression, psychosis) that would negatively impact the success of a SCS or contraindicate its placement.

✓ Permanent implantation of a dorsal column spinal cord stimulator (SCS) is considered medically necessary for the treatment of chronic, intractable pain secondary to EITHER of the following indications:

- Failed back syndrome (FBS) with intractable neuropathic leg pain
- Complex regional pain syndrome (CRPS)/reflex sympathetic dystrophy (RSD)

And when ALL of the following criteria are met:

- Failure of at least six consecutive months of physician-supervised conservative medical management (e.g., pharmacotherapy, physical therapy, cognitive therapy, activity lifestyle modification)
- Surgical intervention is not indicated
- An evaluation by a mental health provider (e.g., a face-to-face assessment with or without psychological questionnaires and/or psychological testing) reveals no evidence of an inadequately controlled mental health problem (e.g., alcohol or drug dependence, depression, psychosis) that would negatively impact the success of a SCS or contraindicate its placement
- At least a 50% reduction in pain has been demonstrated during a short-term trial of SCS.

Chronic Critical Limb Ischemia (CLI)

✓ A short-term trial (e.g., three to seven [3–7] days) of a dorsal column spinal cord stimulator (SCS) is considered medically necessary for the treatment of chronic, intractable pain secondary to chronic critical limb ischemia (CLI) when BOTH of the following criteria are met:

- Failure of available conventional multidisciplinary medical (e.g., pharmacological, physical therapy) and surgical management (e.g., revascularization)

- An evaluation by a mental health provider (e.g., a face-to-face assessment with or without psychological questionnaires and/or psychological testing) reveals no evidence of an inadequately controlled mental health problem (e.g., alcohol or drug dependence, depression, psychosis) that would negatively impact the success of a SCS or contraindicate its placement.

✓ Permanent implantation of a dorsal column spinal cord stimulator (SCS) is considered medically necessary for the treatment of chronic, intractable pain secondary to chronic critical limb ischemia (CLI) when all of the following criteria are met:

- Failure of available conventional multidisciplinary medical (e.g., pharmacological, physical therapy) and surgical management (e.g., revascularization)
- An evaluation by a mental health provider (e.g., a face-to-face assessment with or without psychological questionnaires and/or psychological testing) reveals no evidence of an inadequately controlled mental health problem (e.g., alcohol or drug dependence, depression, psychosis) that would negatively impact the success of a SCS or contraindicate its placement
- Beneficial clinical response from a temporarily implanted electrode has been demonstrated prior to consideration of permanent implantation.

Chronic Stable Angina Pectoris

✓ A short-term trial (e.g., three to seven [3–7] days) of a dorsal column spinal cord stimulator (SCS) is considered medically necessary for the treatment of chronic, intractable pain secondary to chronic stable angina pectoris as medically necessary for myocardial ischemia when all of the following criteria are met:

- Angina pectoris is Canadian Cardiovascular Society (CCS) functional class III or class IV (see Appendix A)
- Individual has documented significant coronary artery disease (CAD) and is not a suitable candidate for a revascularization procedure
- Optimal pharmacological treatment using anti-anginal medications (e.g., long-acting nitrates, beta-adrenergic blockers, or calcium-channel antagonists) has failed to adequately improve anginal symptoms
- an evaluation by a mental health provider (e.g., a face-to-face assessment with or without psychological questionnaires and/or psychological testing) reveals no evidence of an inadequately controlled mental health problem (e.g., alcohol or drug dependence, depression, psychosis) that would negatively impact the success of a SCS or contraindicate its placement.

- ✓ Permanent implantation of a dorsal column spinal cord stimulator (SCS) is considered medically necessary for the treatment of chronic, intractable pain secondary to chronic stable angina pectoris as medically necessary for myocardial ischemia when all of the following criteria are met:

    - Angina pectoris is Canadian Cardiovascular Society (CCS) functional class III or class IV (see Appendix A)
    - The individual has documented significant coronary artery disease (CAD) and is not a suitable candidate for a revascularization procedure
    - Optimal pharmacological treatment using anti-angina medications (e.g., long-acting nitrates, beta-adrenergic blockers, or calcium-channel antagonists) has failed to adequately improve anginal symptoms
    - An evaluation by a mental health provider (e.g., a face-to-face assessment with or without psychological questionnaires and/or psychological testing) reveals no evidence of an inadequately controlled mental health problem (e.g., alcohol or drug dependence, depression, psychosis) that would negatively impact the success of a SCS or contraindicate its placement
    - Beneficial clinical response from a temporarily implanted electrode has been demonstrated prior to consideration of permanent implantation.

Dorsal Column Spinal Cord Stimulator Replacement

- ✓ The replacement of a malfunctioning dorsal column spinal cord stimulator (SCS) and/or battery/generator is considered medically necessary for an individual who meets ALL of the above criteria and the existing stimulator and/or battery/generator replacement are/is no longer under warranty.

Dorsal Column Spinal Cord Stimulator Not Covered Services

- ✓ A dorsal column spinal cord stimulator (SCS) is considered experimental, investigational or unproven for any other indication including but not limited to:
    - Post-amputation pain (phantom limb pain)
    - Post-herpetic neuralgia
    - Peripheral neuropathy
    - Dysesthesias involving the lower extremities secondary to spinal cord injury.

Peripheral Nerve Stimulation

- ✓ Peripheral nerve stimulation, including peripheral nerve field stimulation, is considered experimental, investigational, or unproven for treatment of acute or chronic pain conditions, including ANY of the following:

    - Failed back syndrome (FBS) with intractable neuropathic leg pain

- Complex regional pain syndrome (CRPS)/reflex sympathetic dystrophy (RSD)
- Chronic Critical Limb Ischemia (CLI)
- Chronic Stable Angina Pectoris
- Post-amputation pain (phantom limb pain)
- Post-herpetic neuralgia
- Peripheral neuropathy
- Dysesthesias involving the lower extremities secondary to spinal cord injury.

High Frequency Spinal Cord Stimulation for Chronic Pain

✓ Implantation of a high frequency spinal cord stimulator for treatment of chronic pain is considered experimental, investigational or unproven.

Appendix A

New York Heart Association and Canadian Cardiovascular Society Functional Classifications

Class	New York Heart Association Functional Classification	Canadian Cardiovascular Society Functional Classification
I	Patients with cardiac disease but without resulting limitations of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea, or anginal pain.	Ordinary physical activity does not cause angina, such as walking and climbing stairs. Angina occurs with strenuous or rapid or prolonged exertion at work or recreation.
II	Patients with cardiac disease resulting in slight limitation of physical activity. They are comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea, or anginal pain.	Slight limitation of ordinary activity. Walking or climbing stairs rapidly, walking uphill, walking or stair climbing after meals, in cold, in wind, or under emotional stress, or only during the few hours after awakening. Walking more than two blocks on the level and climbing more than one flight of ordinary stairs at a normal pace and in normal conditions.
III	Patients with cardiac disease resulting in marked limitation of physical activity. They are comfortable at rest. Less than ordinary physical activity causes fatigue, palpitation, dyspnea, or anginal pain.	Marked limitation of ordinary physical activity. Walking one to two blocks on the level and climbing one flight in normal conditions and at a normal pace.
IV	Patient with cardiac disease resulting in inability to carry on any physical activity without discomfort. Symptoms of cardiac insufficiency or of the anginal syndrome may be present even at rest. If any physical activity is undertaken, discomfort is increased.	Inability to carry on any physical activity without discomfort—anginal syndrome may be present at rest.

Class	New York Heart Association Functional Classification	Canadian Cardiovascular Society Functional Classification
(Heart Failure Society of America [HFSA], 2006; Gibbons, et al., 2002; American Heart Association [AHA], 1994; Canadian Cardiovascular Society [CCS], 1976).		

CMM-211.3 Procedure (CPT®) Codes

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only. Any given code's inclusion on this list does not necessarily indicate prior authorization is required.

CPT® Code	Description/Definition
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) place via 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
95970	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse, amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple or complex brain, spinal cord, or peripheral (i.e., cranial nerve, peripheral nerve, autonomic nerve, neuromuscular) neurostimulator pulse generator/transmitter, without reprogramming
95971	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurement(s); simple spinal cord, or peripheral (i.e., peripheral nerve, automatic nerve, neuromuscular) neurostimulator pulse generation/transmitter, with intraoperative or subsequent programming
95972	Electrode analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurement(s); complex spinal cord, or peripheral (except cranial nerve) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.

CMM 211.4 References

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