

# **Cortical Stimulation for Epilepsy (NeuroPace®)**

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## **Definitions**

#### **Cortical stimulation**

Involves the implantation of electrodes onto the surface the brain near areas associated with seizure activity.

One responsive neurostimulation device, the NeuroPace® RNS® System, is currently approved by FDA The system consists of the implant and external components:

- The implant is the RNS neurostimulator (generator) and leads (tiny wires containing electrodes connected to the target areas of the brain). The neurostimulator is a battery powered microprocessor-controlled generator that is placed within the skull and beneath the scalp. It connects to one or two leads that are either inserted into the brain (depth lead) or placed on the brain surface in the area of the seizure focus (cortical strip lead).
- The external components include the programmer, remote monitor and magnet. The
  programmer is a laptop computer installed with a proprietary software program, which
  clinicians use to retrieve information from the neurostimulator and noninvasively program
  the neurostimulator through telemetry wand.

The remote monitor component consists of a laptop computer, proprietary software and a telemetry wand. Using the telemetry wand (by swiping it over the implant site), a patient can transfer

	information from the neurostimulator to the laptop at home. The magnet allows patients to instruct the neurostimulator to record brain activity when seizure occurs or stop stimulation.	
Focal onset seizures (previously termed	The term focal is used instead of partial to be more accurate when talking about where seizures begin. Focal seizures can start in one area or group of cells in one side of the brain.	
partial)	<ul> <li>Focal onset aware seizures (previously termed simple partial seizure): When a person is awake and aware during a seizure, it's called a focal aware seizure.</li> </ul>	
	<ul> <li>Focal onset impaired awareness (previously termed complex partial seizure): When a person is confused or their awareness is affected in some way during a focal seizure, it's called a focal impaired awareness seizure.</li> </ul>	
Medically refractory seizures		

#### Guideline

Cortical stimulation is considered medically for members with epilepsy who are  $\geq 18$  years of when **all** of the following criteria are met:

- 1. Partial (focal onset) seizures
- 2. Documentation that seizures must originate from two specific localized areas of the brain Continued seizures despite treatment with ≥ 2 appropriately chosen and tolerated antiepileptic medications
- 3. Disabling seizure significantly impacts a person's ability to function or carry out daily activities
- 4. Member is not a VNS candidate secondary to any:
  - Presence of a condition related to the recurrent laryngeal nerve on the contralateral side
  - Swallowing problems that may be exacerbated by VNS implantation
  - Obstructive sleep apnea (OSA) (Note: Members with signs or symptoms of OSA should be evaluated and cleared by an appropriate specialist before implantation)
  - Previous left-sided neck surgery
  - Asthma or chronic obstructive pulmonary disease (COPD) that may be exacerbated by VNS implantation

#### **Limitations and Exclusions**

- Responsive cortical stimulation is considered experimental and investigational for primary generalized seizures and for all other indications.
- 2. The RNS® System is contraindicated for:
  - Patients at high risk for surgical complications such as active systemic infection, coagulation disorders (such as the use of anti-thrombotic therapies) or platelet count below 50,000
  - Patients who have medical devices implanted that deliver electrical energy to the brain
  - Patients who are unable, or do not have the necessary assistance, to properly operate the NeuroPace® Remote Monitor or magnet

# **Procedure Codes**

61850	Twist drill or burr hole(s) for implantation of neurostimulator electrodes, cortical
61860	Craniectomy or craniotomy for implantation of neurostimulator electrodes, cerebral, cortical
61863	Twist drill, burr hole, craniotomy, or craniectomy with stereotactic implantation of neurostimulator electrode array in subcortical site (eg, thalamus, globus pallidus, subthalamic nucleus, periventricular, periaqueductal gray), without use of intraoperative microelectrode recording; first array
61864	Twist drill, burr hole, craniotomy, or craniectomy with stereotactic implantation of neurostimulator electrode array in subcortical site (eg, thalamus, globus pallidus, subthalamic nucleus, periventricular, periaqueductal gray), without use of intraoperative microelectrode recording; each additional array (List separately in addition to primary procedure)
61880	Revision or removal of intracranial neurostimulator electrodes
61885	Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to a single electrode array
61886	Insertion or replacement of cranial neurostimulator pulse generator or receiver, direct or inductive coupling; with connection to 2 or more electrode arrays
61888	Revision or removal of cranial neurostimulator pulse generator or receiver
95970	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude, pulse 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 (ie, cranial nerve, peripheral nerve, sacral nerve, neuromuscular) neurostimulator pulse generator/transmitter, without reprogramming
95971	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple spinal cord, or peripheral (ie, peripheral nerve, sacral nerve, neuromuscular) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming
95978	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, battery status, electrode selectability and polarity, impedance and patient compliance measurements), complex deep brain neurostimulator pulse generator/transmitter, with initial or subsequent programming; first hour
95979	Electronic analysis of implanted neurostimulator pulse generator system (eg, rate, pulse amplitude and duration, battery status, electrode selectability and polarity, impedance and patient compliance measurements), complex deep brain neurostimulator pulse generator/transmitter, with initial or subsequent programming; each additional 30 minutes after first hour (List separately in addition to code for primary procedure)
L8686	Implantable neurostimulator pulse generator, single array, nonrechargeable, includes extension
L8688	Implantable neurostimulator pulse generator, dual array, nonrechargeable, includes extension

# **ICD-10 Diagnoses**

G40.011	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, intractable, with status epilepticus
G40.019	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, intractable, without status epilepticus

G40.111	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, with status epilepticus
G40.119	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, without status epilepticus
G40.211	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, with status epilepticus
G40.219	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, without status epilepticus

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- 25. Specialty matched clinical peer review.

## **Revision History**

Oct. 12, 2025	Clarification edits to clinical criteria:
	<ul> <li>"Intractable focal aware seizures" replaced with "Partial focal onset seizures"</li> </ul>
	<ul> <li>Replaced "Diagnostic confirmation of ≤ 2 well localized seizure foci identified" with "Documentation that seizures must originate from two specific localized areas of the brain"</li> </ul>
	<ul> <li>Replaced "Refractory to ≥ 2 antiepileptic medications" with "Continued seizures despite treatment with at least two or more appropriately chosen and tolerated anti-epileptic medications"</li> </ul>
	<ul> <li>Replaced "≥ 3 disabling seizures per month over the most recent 3 months (e.g., types such as motor partial, complex partial and/or secondary generalized" with "Disabling seizure significantly impacts a person's ability to function or carry out daily activities"</li> </ul>
	Added note pertaining to OSA contraindication stating that members with signs/symptoms should be evaluated and cleared by an appropriate specialist before implantation
Nov. 10, 2023	Removed prerequisite stating that the ember must not be a candidate for focal resective epilepsy surgery
Oct. 8, 2021	ConnectiCare, Inc. adopts the clinical criteria of its parent corporation EmblemHealth
	Removed prerequisite for failed trial of vagus nerve stimulation
Aug. 14, 2020	Added contraindications to Limitations/Exclusions
Sept. 14, 2018	Added clarification that cortical stimulation is considered medically necessary for members with disabling seizures despite surgical intervention