



## Medicare Part C Medical Coverage Policy

### Deep Brain Stimulation for Essential Tremor and Parkinson's disease

**Origination:** June 30, 1988  
**Review Date:** December 15, 2021  
**Next Review:** December, 2023

***\*\*\*This policy applies to all Blue Medicare HMO, Blue Medicare PPO, Blue Medicare Rx members, and members of any third-party Medicare plans supported by Blue Cross NC through administrative or operational services.\*\*\****

#### **DESCRIPTION OF PROCEDURE OR SERVICE**

Deep Brain Stimulation (DBS) refers to high-frequency electrical stimulation of anatomic regions deep within the brain utilizing neurosurgically implanted electrodes. These DBS electrodes are stereotactically placed within targeted nuclei on one (unilateral) or both (bilateral) sides of the brain. There are currently three targets for DBS- the thalamic ventralis intermedius nucleus (VIM), subthalamic nucleus (STN) and globus pallidus interna (GPi). Electrical stimulation can inactivate the output of the nuclei, the part of the brain that is responsible for the motor difficulties associated with dystonia, Parkinson's disease (PD) and Essential Tremor (ET).

#### **POLICY STATEMENT**

Coverage will be provided for DBS when it is determined to be medically necessary, as outlined in the below guidelines and medical criteria.

#### **BENEFIT APPLICATION**

Please refer to the member's individual Evidence of Coverage (E.O.C.) for benefit determination. Coverage will be approved according to the E.O.C. limitations if the criteria are met.

Coverage decisions will be made in accordance with:

- The Centers for Medicare & Medicaid Services (CMS) National Coverage Determination (NCD);
- General coverage guidelines included in Original Medicare manuals unless superseded by operational policy letters or regulations; and
- Written coverage decisions of local Medicare carriers and intermediaries with jurisdiction for claims in the geographic area in which services are covered.

Benefit payments are subject to contractual obligations of the Plan. If there is a conflict between the general policy guidelines contained in the Medical Coverage Policy Manual and the terms of the member's particular Evidence of Coverage (E.O.C.), the E.O.C. always governs the determination of benefits.

## **INDICATIONS FOR COVERAGE**

### **A. Thalamic Stimulation**

For thalamic ventralis intermedius nucleus (VIM) deep brain stimulation to be considered reasonable and necessary, patient must meet all the following criteria:

1. Diagnosis of ET based on postural or kinetic tremors of hand(s) without other neurologic signs, or diagnosis of idiopathic PD (presence of at least 2 cardinal PD features such as tremor, rigidity or bradykinesia) which is of tremor dominant form; **AND**
2. Marked disabling tremor of at least level 3 or 4 on the Fahn-Tolosa-Marin Clinical Tremor Rating Scale (or equivalent scale) in the extremity intended for treatment, causing significant limitation in daily activities despite optimal medical therapy; **AND**
3. Willingness and ability to cooperate during conscious operative surgery procedure, as well as during post-surgical evaluations, adjustments of medications and stimulator settings.

### **B. Subthalamic Stimulation**

For unilateral or bilateral subthalamic nucleus (STN) or globus pallidus interna (GPi) deep brain stimulation to be considered reasonable and necessary patients must meet all the following criteria:

1. Diagnosis of PD based on the presence of at least 2 cardinal PD features (tremor, rigidity or bradykinesia); **AND**
2. Advanced idiopathic PD as determined by the use of the Hoehn and Yahr stage or Unified Parkinson's Disease rating scale (UPDRS) part III motor subscale; **AND**
3. L-dopa responsive with clearly defined "on" periods; **AND**
4. Persistent disabling Parkinson's symptoms or drug side effects (e.g., dyskinesias, motor fluctuations, or disabling "off" periods) despite optimal medical therapy; **AND**
5. Willingness and ability to cooperate during conscious operative procedure, as well as during post-surgical evaluations, adjustments of medications and stimulator settings.

### **C. Coverage for DBS not related to Parkinson's disease, tremors, or dystonia.**

1. The implantation of the stimulator is used only as a late or last resort for patients with chronic intractable pain; **and**
2. Other treatment modalities (pharmacologic, surgical, physical, or psychological therapies) have been tried and did not prove satisfactory; were judged unsuitable, or were contraindicated for the patient; **and**

3. Patient has undergone careful screening and diagnosis by a multidisciplinary team before implantation (must include psychological, as well as physical evaluation); **and**
4. All the facilities, equipment, and professional support personnel required for the proper diagnosis, treatment, training, and follow-up of the patient are available; **and**
5. Demonstration of pain relief with a temporarily (percutaneous) implanted electrode precedes permanent implantation; **and**
6. No documentation of drug addiction.

### **WHEN COVERAGE WILL NOT BE APPROVED**

DBS is not reasonable and necessary and is not covered for ET or PD patients with any of the following:

- Non-idiopathic PD or "Parkinson's Plus" syndromes.
- Cognitive impairment, dementia or depressions, which would be worsened by or would interfere with the patient's ability to benefit from DBS.
- Current psychosis, alcohol abuse or other drug abuse.
- Structural lesions such as basal ganglionic stroke, tumor or vascular malformations as etiology of the movement disorder.
- Previous movement disorder surgery within the affected basal ganglion.
- Significant medical, surgical, neurologic or orthopedic co-morbidities contraindicating DBS surgery or stimulation.

### **BILLING/ CODING/PHYSICIAN DOCUMENTATION INFORMATION**

This policy may apply to the following codes. Inclusion of a code in the section does not guarantee reimbursement.

*Applicable codes: L8682, L8683, L8679, 61850, 61860, 61863, 61864, 61867, 61868, 61885, 61886, 95961, 95962, 95970, 95971.*

The Plan may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

### **SPECIAL NOTES**

DBS should be performed with extreme caution in patients with cardiac pacemakers or other electronically controlled implants that may adversely affect or be affected by the DBS system.

#### References:

1. Medicare National Coverage Determination for Deep Brain Stimulation for Essential Tremor and Parkinson's Disease(160.24), Effective 04/1/2003, Accessed via [www.cms.gov](http://www.cms.gov), 11/30/21.
2. Medicare National Coverage Determination for Electrical Nerve Stimulators (160.7, B), Central Nervous System Stimulators for Dorsal Column and Deep Brain, Effective 8/07/1995, accessed via [www.cms.gov](http://www.cms.gov), accessed on 11/30/21.

## Medical Coverage Policy: Deep Brain Stimulation for Essential Tremor & Parkinson's Disease

### Policy Implementation/Update Information:

Revision Date: January 22, 2002; November 3, 2003; Policy renamed: Deep Brain Stimulation for Essential Tremor and Parkinson's disease, 11/3/2003. Previous policy name: Electrical Stimulators Thalamic. August 24, 2005

Revision Date: September 2009: No changes proposed to the review criteria. Formatting and minor wording changes only.

Revision Date: October 28, 2010: Added items 1-5 under coverage item: for DBS not related to Parkinson's disease, tremors, or dystonia as referenced in NCD 160.7. Codes: 95972 and 95973 were removed, and codes L8682 and L8683 were added per Senior Coding Analyst.

Revision Date: February 20, 2013; Annual Review. No edits in criteria. Removed codes L8689,61880,61888.

Revision Date: February 19, 2014; updated codes; Deleted L8685; L8686; L8687; L9688 and added L8679.

Revision Date: November 24, 2015: Code update, deleted L8680 as code is invalid for Medicare. No new CMS guidance, no further revisions to policy; updated reference section.

Revision Date: December 20, 2017: Annual Review, No CMS Updates. Minor Revisions only.

Revision Date: December 18, 2019; Annual Review, No CMS Updates. Removed Deleted Codes 61875, 95974, 95975, 95978, and 95979 from coding section.

Revision Date: December 15, 2021; Annual Review; No CMS Updates. Minor Revisions Only.

### Approval Dates:

Medical Coverage Policy Committee: December 15, 2021

Policy Owner: Carolyn Wisecarver, RN, BSN  
Medical Policy Coordinator