



MEDICAL COVERAGE POLICY

SERVICE: Seizure Disorders: Invasive Treatments (Epilepsy Surgery)

Policy Number: 013

Effective Date: 11/01/2019

Last Review: 08/22/2019

Next Review Date: 08/22/2020

Important note:

Unless otherwise indicated, this policy will apply to all lines of business.

Even though this policy may indicate that a particular service or supply may be considered medically necessary and thus covered, this conclusion is not based upon the terms of your particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all benefits that are determined to be medically necessary will be covered benefits under the terms of your benefit plan. You need to consult the Evidence of Coverage (EOC) or Summary Plan Description (SPD) to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and your plan of benefits, the provisions of your benefits plan will govern. However, applicable state mandates will take precedence with respect to fully insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, Federal mandates will apply to all plans. With respect to Medicare-linked plan members, this policy will apply unless there are Medicare policies that provide differing coverage rules, in which case Medicare coverage rules supersede guidelines in this policy. Medicare-linked plan policies will only apply to benefits paid for under Medicare rules, and not to any other health benefit plan benefits. CMS's Coverage Issues Manual can be found on the CMS website. Similarly, for Medicaid-linked plans, the Texas Medicaid Provider Procedures Manual (TMPPM) supersedes coverage guidelines in this policy where applicable.

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PRIOR AUTHORIZATION: Required.

POLICY: SWHP considers cerebral hemispherectomy, corpus callosotomy, and temporal lobectomy medically necessary when **ALL** of the following selection criteria are met:

1. Non-epileptic events or conditions such as cardiogenic syncope and psychogenic seizures have been ruled out; **AND**
2. The diagnosis of epilepsy has been documented, and the epileptic seizure type and the epileptic syndrome has been clearly defined. In general, appropriate candidates for epilepsy surgery are members who are incapacitated by their frequent seizures as well as the toxicity of antiepileptic drugs. The general characteristics of individuals for each type of surgical procedure for epilepsy are as follows:
 - a. cerebral hemispherectomy: members with unilateral multifocal epilepsy associated with infantile hemiplegia (especially in hemimegalencephaly and Sturge-Weber disease);
 - b. corpus callosotomy: members with secondarily generalized seizures;
 - c. temporal lobectomy: members with complex partial seizures of temporal or extratemporal origin.
3. Members' quality of life may significantly improve with surgery; **AND**
4. Seizures occur at a frequency that interferes with members' daily living and threatens their well-being; **AND**
5. There has been an adequate trial of drug therapy, namely, the correct drugs used in the correct dosage, carefully monitored for treatment effects and members' compliance.

Responsive cortical stimulation (e.g., the NeuroPace RNS System) may be determined medically necessary for adults (18 years or older) with partial onset seizures when the following criteria are met:

1. The member has undergone diagnostic testing that identified no more than two epileptogenic foci; **AND**



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2. The seizures are refractory to two or more antiepileptic medications; AND
3. The member has frequent and disabling seizures (motor partial seizures, complex partial seizures and/or secondarily generalized seizures); AND
Member is averaging three or more disabling seizures per month over the three most recent months (with NO month with fewer than two seizures); AND
4. The member has no other implanted medical devices that deliver electrical energy to the brain; AND
5. The member has ability, or has the necessary assistance, to properly operate the device; AND
6. The member is not currently a candidate for epilepsy surgery; AND
7. The member is not at high risk for surgical complications because of active systemic infection, or coagulation disorders associated with the use of antithrombotic therapies or the presence of thrombocytopenia.

Responsive cortical stimulation is considered unproven for all other indications.

Cerebral hemispherectomy, corpus callosotomy, and temporal lobectomy are considered experimental and investigational when selection criteria are not met.

Cerebellar stimulation or deep brain stimulation for members with intractable seizures is experimental and investigational because their effectiveness for this indication has not been established.

Localized neocortical resections are considered experimental and investigational for uncontrolled complex partial seizures because its effectiveness has not been established.

Hippocampal electrical stimulation for the treatment of mesial-temporal lobe epilepsy is experimental and investigational because its effectiveness has not been established.

The use of stereotactic radiosurgery including radiofrequency amygdalohippocampectomy for medial temporal lobe epilepsy and epilepsy arising in other functional cortical regions is experimental and investigational because its effectiveness has not been established.

High-Frequency Oscillations in epilepsy surgery planning is experimental and investigational because its effectiveness has not been established.

The Wada test (intra-carotid amobarbital procedure), part of the pre-surgical evaluation of members who may undergo temporal lobectomy, is considered a medically necessary service.

SWHP requires prior authorization for all procedures as well as for planning procedures if epilepsy surgery is under consideration. Only evidence-based services as outlined in this policy will be authorized and only those that cannot be provided in network will be authorized for out of network providers.

OVERVIEW: Patients who have intractable epileptic seizures despite adequate treatment with appropriate antiepileptic drugs, can be offered relief with surgery. The goal of epilepsy surgery or other invasive treatments for intractable seizures is to decrease the frequency of seizures and improve quality of life.



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Temporal lobectomy has been found to be safe and effective for treating patients with complex partial seizures of temporal or extratemporal origin. Patients who have a single identifiable focus in a restricted cortical area that can be safely excised without producing additional disability can be considered as candidates for temporal lobectomy.

Corpus callosotomy has been found to be safe and effective for treating patients with partial and secondarily generalized seizures.

There is only limited evidence that cerebral hemispherectomy is effective in managing unilateral multifocal epilepsy associated with infantile hemiplegia (especially in hemimegalencephaly and Sturge-Weber disease). However, it is the last hope for these patients to eliminate/alleviate their disabling epileptic seizures, and to avoid adverse irreversible psychosocial consequences that may lead to lifelong disability.

Candidates for epilepsy surgery and their family, if applicable, should receive detailed information regarding the specific surgical procedures and their possible benefits and side effects. Candidates for epilepsy surgery should not have co-existent progressive neurological disease or major psychological or medical disorder. Persons with progressive neurological diseases or major medical or psychological disorders are generally unsuitable candidates for epilepsy surgery because of the possibility that surgery could worsen the course of these other conditions.

The Wada test (intra-carotid amytal procedure) is commonly used as a predictor of memory dysfunction following temporal lobectomy for intractable epilepsy. Asymmetry in memory scores can provide focus lateralizing information.

The Agency for Healthcare Research and Quality's technology assessment on the management of treatment-resistant epilepsy stated that the data are inconsistent across studies and do not allow for clear evidence-based conclusions as to the exact proportion of patients who will become seizure-free or who will not benefit from multiple subpial transection. In addition, too few studies were available to allow for an evidence-based evaluation of parietal or occipital lobe surgery (Chapell, et al., 2003). The American Academy of Neurology's practice parameter on temporal lobe and localized neocortical resections for epilepsy stated that there remains no Class I or II evidence regarding the safety and efficacy of localized neocortical resections. Further studies are needed to determine if neocortical seizures benefit from surgery.

MANDATES: None

Important note:

CODES: Due to the wide range of applicable diagnosis codes and potential changes to codes, an inclusive list may not be presented, but the following codes may apply. Inclusion of a code in this section does not guarantee that it will be reimbursed, and patient must meet the criteria set forth in the policy language.

CPT Codes:	61534; 61536; 61537; 61538; 61541; 61543; 95958; 61885; 61888; 95961; 95962
CPT Not Covered:	
ICD10:	G40.011 - G40.019 G40.111 - G40.119 G40.211 - G40.219 G40.311 - G40.319 G40.411 - G40.419 G40.803, G40.804, G40.811, G40.813, G40.814, G40.823 - G40.824



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	G40.911 - G40.919
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CMS: No NCD or LCD.

POLICY HISTORY:

Status	Date	Action
New	12/17/2010	New policy
Reviewed	12/17/2011	Reviewed.
Reviewed	11/15/2012	Reviewed.
Reviewed	11/14/2013	ICD10 codes added.
Reviewed	09/25/2014	Reviewed
Reviewed	09/24/2015	No changes
Reviewed	09/08/2016	No changes
Reviewed	08/22/2017	Criteria for coverage of responsive cortical stimulation added.
Reviewed	06/05/2018	No changes
Reviewed	08/22/2019	Criteria language updated where necessary. Codes updated

REFERENCES:

The following scientific references were utilized in the formulation of this medical policy. SWHP will continue to review clinical evidence related to this policy and may modify it at a later date based upon the evolution of the published clinical evidence. Should additional scientific studies become available and they are not included in the list, please forward the reference(s) to SWHP so the information can be reviewed by the Medical Coverage Policy Committee (MCPC) and the Quality Improvement Committee (QIC) to determine if a modification of the policy is in order.

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