Clinical Coverage Guidelines: Long Term Video Electroencephalography (EEG) Monitoring

**Current Effective Date:** 09/01/12  
**Original Effective Date:** 06/09/06*  
**Policy Number:** OCA 3.38  
**Product Applicability:**  
- MassHealth  
- Commonwealth Care  
- Commercial

**Summary:** Long-term video EEG monitoring requires prior authorization and is considered medically necessary when the diagnosis cannot be made by neurological examination, standard EEG studies, and ambulatory cassette EEG monitoring, and the non-neurological causes of symptoms (e.g., syncope, cardiac arrhythmias) have been ruled out.

**Description of Item or Service:**  
**Long Term Video EEG:** A diagnostic procedure that uses simultaneous video and EEG recordings to monitor brain activity and clinical symptoms used to establish the diagnosis of epilepsy and differentiate between the type and frequency of seizure activity. Long-term video EEG recordings can differentiate between neurological and cardiovascular related problems and evaluate episodic events where psuedoseizures or non-epileptic attacks are suspected. Typically, long-term video EEG is performed on an inpatient monitoring unit for 1-3 days where events are registered for 24 hours a day.

**Clinical Guideline Statement:**  
Long-term video EEG monitoring requires prior authorization and is considered medically necessary when the diagnosis cannot be made by neurological examination, standard EEG studies, and ambulatory cassette EEG monitoring, and the non-neurological causes of symptoms (e.g., syncope, cardiac arrhythmias) have been ruled out for the following indications:

- To differentiate epileptic events from pseudo-seizures; or
- To quantify seizure frequency; or
- To correctly classify seizure type in patients where such characterization is medically necessary to select the most appropriate therapeutic regimen; or

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This guideline provides information on BMC HealthNet Plan claims adjudication processing guidelines. The use of this guideline is not a guarantee of payment and will not determine how a specific claim(s) will be paid. Reimbursement is based on member benefits and eligibility, medical necessity review, where applicable, coordination of benefits, adherence to Plan policies, clinical coding criteria, and the BMC HealthNet Plan agreement with the rendering or dispensing provider. Reimbursement policies may be amended at BMC HealthNet Plan’s discretion. BMC HealthNet Plan will always use the most recent CPT and HCPCS coding guidelines. All Plan policies are developed in accordance with state, federal and accrediting organization guidelines and requirements, including NCQA.
- To localize the seizure focus in patients with refractory seizures prior to epilepsy surgery; or
- To establish a diagnosis in neonates or very young children; or
- In a patient with medically refractory seizure activity despite therapeutic antiepileptic drug levels.

Additional Definitions:

**Ambulatory 24-Hour EEG Monitoring:** A diagnostic test that is used to record the electrical activity of the brain on a continuous outpatient basis for 24 hours. Scalp electrodes are secured to the patient’s head along with a digital or cassette recorder that is secured to the patient’s waist or via a shoulder harness. The EEG information is stored in the recorder for analysis. Ambulatory EEG has the ability to continuously record any seizure activity over a period of 24 hours.

**Electroencephalography (EEG):** A diagnostic test that measures the electrical activity of the brain using scalp electrodes attached to sensitive recording equipment. A typical EEG takes about 90 minutes.

**Applicable Coding:**
Codes may not be all inclusive as the American Medical Association (AMA) code updates may occur more frequently or at different intervals than policy updates. These codes are not intended to be used for coverage determinations.

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<tr>
<th>CPT Code</th>
<th>Description</th>
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<tr>
<td>95951</td>
<td>Monitoring for localization of cerebral seizure focus by cable or radio, 16 or more channel telemetry, combined electroencephalographic (EEG) and video recording and interpretation (e.g., for presurgical localization), each 24 hours</td>
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**Limitations:**
The Plan will preauthorize a total of three (3) inpatient days for eligible members if the above clinical criteria are met. Up to two (2) additional days for medication management and/or titration of medication dosages for video EEG monitoring may be considered medically necessary when there is documentation of infrequent or insufficient EEG changes, or the presence of EEG changes is indicative of seizure activity without clinical manifestations of this activity. Other factors that may influence the length of monitoring include the overall impact and sequential timing of antiepileptic drug discontinuation and patient comorbidities and the need to capture at least three (3) events in the evaluation of patients for epilepsy surgery.

**Clinical Background Information:**

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Epilepsy is a recurrent paroxysmal disorder of cerebral function that is associated with a sudden and brief attack of altered consciousness, motor activity, or sensory phenomena. Convulsive seizures are the most common form of epilepsy. Epilepsy can be the result of injury, infections, structural abnormalities in the brain, abnormal fetal brain development, or exposure to toxins but in many cases the cause is unknown. Seizures have been defined as paroxysmal disorder of the central nervous system that is associated with abnormal cerebral neuronal discharge, with or without loss of consciousness. Seizures have been further subclassified into those with a generalized onset, beginning throughout the brain, and those with a partial onset, having a discrete focal onset. EEG, computed tomography (CT), positron emission tomography (PET) and magnetic resonance imaging (MRI) scans are common diagnostic test for epilepsy.

Long-term video EEG monitoring is used in clinical practice to verify the diagnosis and type of seizure and to localize the area of seizure foci if epilepsy surgery is being considered. Video EEG monitoring consists of the simultaneous recording of EEG brain wave activity combined with a time synchronized video recording of the patient. This procedure is performed on an inpatient monitoring unit and requires specialized equipment. Patients are monitored for 24 hours a day in order to capture any seizure events on video and at the same time to capture EEG activity during the event. The duration of long-term video EEG monitoring depends upon the frequency of the patient’s symptoms but generally can be completed in 1-3 days. Factors that may influence the length of monitoring include: infrequent or insufficient EEG changes; the overall impact and sequential timing of antiepileptic drug discontinuation; the presence of EEG changes indicative of seizure activity without clinical manifestations of this activity; or patient comorbidities. Synchronized recordings of the patient’s behavior can contribute significantly to the diagnosis, as video recordings of the patient during and after a seizure are useful. For most patients who have epilepsy, the routine EEG or 24 ambulatory EEG test is sufficient for physicians to evaluate the type of seizure and initiate medical therapy.

References:


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Policy History:
Original Effective Date: 06/09/06
*Effective date for Commercial is 01/01/12

Date of Review/Revision:
05/08/07: Annual review: updated clinical criteria, references, template, added coding.
05/13/08: Annual review, no changes.
05/26/09: Annual review, no changes, updated references.
05/01/10: Annual review, no changes, updated references.
05/01/11: Annual review, updated references and the clinical criteria section by changing the criteria from the evaluation and treatment of complex partial and secondary seizures to: Differentiate epileptic events from pseudo-seizures; or to quantify seizure frequency; or to correctly classify seizure type in patients where such characterization is medically necessary to select the most appropriate therapeutic regimen; or to localize the seizure focus in patients...
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with refractory seizures prior to epilepsy surgery; or to establish a diagnosis in neonates or very young children; or in a patient with medically refractory seizure activity despite therapeutic antiepileptic drug levels.

05/01/12: Annual review, references updated, and applicable code list revised to include only video EEG monitoring..

Last Review Date:
05/01/12

Next Review Date:
03/01/13

Approval Dates:
Regulatory Approval: N/A
Internal Approval:
05/09/06: Initial approval by Q&CMC
05/08/07: MPCTAC
05/24/07: UMC
07/12/07: QIC
05/13/08: MPCTAC
05/20/08: UMC
05/28/08: QIC
05/26/09: MPCTAC & UMC
06/24/09: QIC
05/25/10: MPCTAC
06/23/10: QIC
05/18/11: MPCTAC
06/22/11: QIC
05/16/12: MPCTAC
06/27/12: QIC

Authorizing Entity:
QIC

IMPORTANT NOTE: Not all services are covered for all products or employer groups. This medical policy expresses the Plan's determination of whether certain services or supplies are medically necessary, experimental or investigational or cosmetic. The Plan has reached these conclusions based upon the regulatory status of the technology and a review of clinical studies published in peer-reviewed medical literature. Even though this policy may indicate that a particular service or supply is considered covered or not covered, this conclusion is not based upon the terms of a member’s particular benefit plan. Each benefit plan contains its own specific provisions for coverage and exclusions. Not all services that are determined to be medically necessary will necessarily be covered services under the terms of a member’s benefit plan. Members and their providers need to consult the applicable benefit plan document (e.g.,

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Evidence of Coverage) to determine if there are any exclusions or other benefit limitations applicable to this service or supply. If there is a discrepancy between this medical policy and the benefit plan document, the provisions of the benefit plan document will govern. In addition, this policy and the benefit plan document are subject to applicable state and federal laws that may mandate coverage for certain services and supplies.