

# Clinical Policy: Video Electroencephalographic (VEEG) Monitoring

Reference Number: LA.CP.MP.177

Date of Last Revision: 2/22

Coding Implications

Revision Log

See [Important Reminder](#) at the end of this policy for important regulatory and legal information.

## Description

Video electroencephalographic (VEEG) monitoring is the synchronous recording and display of EEG patterns and video-recorded clinical behavior. Short recordings of several hours can be performed in an ambulatory and monitored setting in an EEG laboratory, while longer recordings of 24 hours or more are generally done in a hospital inpatient setting under observation or admitted status.<sup>1</sup>

## Policy/Criteria

- I. It is the policy of Louisiana Healthcare Connections that *video encephalographic (VEEG) monitoring* performed in a monitored hospital or ambulatory setting is **medically necessary** for any of the following:
  - A. Known seizure disorder, any of the following:
    1. Continued seizures despite antiepileptic medication and no concurrent seizure-provoking medications;
    2. Modification of anticonvulsant medication when outpatient observation is deemed unsafe;
    3. Suspected nocturnal seizures or nocturnal repetitive motor activity;
    4. Necessary determination of the nature and frequency of seizures when the patient has limited awareness of events or the behavioral manifestations are minimal;
  - B. Suspected epileptic seizures, when single event EEG or ambulatory EEG monitoring is inconclusive;
  - C. Suspected non-epileptic seizure (pseudoseizures, psychogenic nonepileptic seizures, or other recurring seizure-like behavior), all of the following:
    1. Recurrent symptoms are not obviously due to seizures;
    2. History or laboratory results are nondiagnostic for etiology of seizure;
    3. Routine EEG is nonspecific;
  - D. Preoperative evaluation of patient undergoing epilepsy surgery or implantation of intracranial electrodes.
- II. It is the policy of Louisiana Healthcare Connections that outpatient video encephalography (EEG) monitoring in the home is **not medically necessary**, as there is unclear support for its use in the diagnosis and management of epilepsy or seizures.

## Background

Video electroencephalographic (VEEG) is considered for differentiating epileptic seizures from nonepileptic seizures (physiologic or psychogenic). A psychogenic non-epileptic seizure is an event with short, non-stereotyped, frequent changes in behavior, movements, sensations or consciousness that resemble a seizure but are not associated with epileptiform activity. VEEG is considered the gold standard for confirming the diagnosis of psychogenic non-epileptic seizure. It is also used to classify seizure type when the diagnosis is unclear or when seizures are refractory. In drug-resistant focal epilepsy it can localize, by means of surface and/or intracranial

electrodes, a region of epileptogenic brain tissue that is the site of origin of recurrent seizures and that is amenable to surgical removal. VEEG is useful in children in whom clinical differentiation of seizures may be more difficult due to the inability to describe subjective symptoms.

The duration of recording depends on the indication for monitoring and the frequency of seizure occurrence. Classifying a rare event or recording multiple events, as required for a presurgical evaluation, usually requires longer recordings as compared to classifying a frequently occurring event such as a seizure or nonepileptic seizure. The likelihood of recording an event (and therefore making a diagnosis) increases with the duration of recording. Diagnostic efficacy requires the ability to record continuously until sufficient data are obtained.<sup>2</sup> Non-epileptic events, poorly characterized, or localized seizures will require provocation of seizures. A number of techniques can be used to provoke typical events including, but not limited to, sleep deprivation, hyperventilation, photic stimulation, and reducing or withdrawing anti-epileptic medication. Inpatient VEEG monitoring is necessary to maintain safety when reducing or withdrawing anti-epileptic medication.

During VEEG monitoring, the patient wears an EEG transmitter connected to a wall outlet by coaxial cable. Wall-mounted video cameras provide continuous behavioral observation. Both EEG and video signals are transmitted to a control room, where the EEG is reformatted and conducted to a video monitor. The EEG signal and video are displayed simultaneously for on-line observation, and both are recorded on videotape. The EEG may be recorded on paper or stored on optical disc.

### **Coding Implications**

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<b>CPT® Codes</b>	<b>Description</b>
95700	Electroencephalogram (EEG) continuous recording, with video when performed, setup, patient education, and takedown when performed, administered in person by EEG technologist, minimum of 8 channels
95713	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, 2-12 hours; with continuous, real-time monitoring and maintenance
95716	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, each increment of 12-26 hours; with continuous, real-time monitoring and maintenance

<b>CPT® Codes</b>	<b>Description</b>
95718	Electroencephalogram (EEG), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation and report, 2-12 hours of EEG recording; with video (VEEG)
95720	Electroencephalogram (EEG), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, each increment of greater than 12 hours, up to 26 hours of EEG recording, interpretation and report after each 24-hour period; with video (VEEG)
95722	Electroencephalogram (EEG), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 36 hours, up to 60 hours of EEG recording, with video (VEEG)
95724	Electroencephalogram (EEG), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 60 hours, up to 84 hours of EEG recording, with video (VEEG)
95726	Electroencephalogram (EEG), continuous recording, physician or other qualified health care professional review of recorded events, analysis of spike and seizure detection, interpretation, and summary report, complete study; greater than 84 hours of EEG recording, with video (VEEG)

<b>HCPCS Codes</b>	<b>Description</b>
N/A	

**ICD-10-CM Diagnosis Codes that Support Coverage Criteria**

+ Indicates a code requiring an additional character

<b>ICD-10-CM Code</b>	<b>Description</b>
F44.5	Conversion disorder with seizures or convulsions
G40.001- G40.919	Epilepsy and recurrent seizures
P90	Convulsions of newborn
R25.0-R25.8	Abnormal involuntary movements
R56.1	Post traumatic seizures
R56.9	Unspecified convulsions

<b>Reviews, Revisions, and Approvals</b>	<b>Revision Date</b>	<b>Approval Date</b>
Converted corporate to local policy.	08/15/2020	
Annual review. Updated verbiage for outpatient video encephalography (EEG) monitoring in the home to indicate no or unclear support for its use. Changed “Last Review Date” in header to		

Reviews, Revisions, and Approvals	Revision Date	Approval Date
“Date of Last Revision” and changed “Date” in Revision log to “Revision Date”. Added “and may not support medical necessity” to coding implications. Reviewed by specialist. References reviewed and updated. Minor wording changes in background with no clinical significance.		

## References

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### **Important Reminder**

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

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