Medical Coverage Policy

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Electroencephalography

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Overview

This Coverage Policy addresses ambulatory electroencephalography (EEG) and digital EEG spike analysis.

Coverage Policy

Ambulatory Electroencephalography

Ambulatory electroencephalography (EEG) following completion of a routine EEG is considered medically necessary for the diagnosis and management of seizure activity when ANY of the following criteria is met:

- inconclusive routine EEG
- suspected epilepsy when the history, clinical examination, and routine EEG is inconclusive
- suspected seizures of sleep disturbances
- individual with confirmed epilepsy who is experiencing suspected non-epileptic events
- classification of seizure type for the selection or adjustment of anti-epileptic medication
- exclusion of non-neurological causes of seizure-like activity

- seizures which are precipitated by naturally occurring cyclic events or environmental stimuli which are not reproducible in the hospital or clinic setting

Ambulatory EEG is considered not medically necessary for the diagnosis and management of ANY other indication.

Digital EEG Spike Analysis

Digital EEG spike analysis (CPT 95957) performed in conjunction with an EEG is considered medically necessary for topographic voltage and dipole analysis in presurgical candidates with intractable (e.g., medically refractory, drug-resistant) epilepsy.

Digital EEG spike analysis (CPT 95957) performed in conjunction with an EEG is considered not medically necessary for ANY other indication.

Digital EEG spike analysis performed in conjunction with a routine EEG is considered not medically necessary for ANY indication.

General Background

A seizure is a transient episode of symptoms and/or signs due to abnormal excessive or synchronous neuronal activity in the brain. A seizure does not necessarily mean that a person has epilepsy, unless criteria for a diagnosis of epilepsy are met. There are numerous conditions that can be associated with convulsive events that can resemble seizures/epilepsy, these should be carefully excluded (Epilepsy Foundation, 2020). Epilepsy is diagnosed when: at least two unprovoked (or reflex) seizures occur more than 24 hours apart, or one unprovoked (or reflex) seizure with a probability of further seizures occurring over the next ten years or a diagnosis of an epilepsy syndrome (Schachter, 2020).

Epilepsy a disorder caused by excessive and intense activity of certain neurons in the brain. The seizures caused by this activity can last for several minutes and, depending on the region of the brain affected, they can bring about fainting, involuntary and violent shaking, or brief episodes of unconsciousness. Epilepsy can have a genetic origin or result from brain damage, and for some individuals its underlying cause may not be determined. The seizures that result from this abnormal neuron activity in the brain may be caused by neurological imbalances, or medical conditions (i.e., drug or alcohol withdrawal). Therefore, seizure type and precipitating causes should be identified to determine the best course of treatment.

The diagnosis of epilepsy can be complicated, and it is not unusual to have a misdiagnosis. Diagnosing epileptic seizures is made by analyzing the patient's clinical history, laboratory results, and an electroencephalogram (EEG). An EEG is an important diagnostic test in assessing a patient with potential epilepsy. It can support the diagnosis of epilepsy and also assist in classifying the underlying epileptic syndrome. An EEG measures the electrical activity of the brain (i.e., brainwaves) using recording equipment attached to the scalp by electrodes. The EEG is used in the evaluation of brain disorders, and most commonly used to show the type and location of the activity in the brain during a seizure. It may also be used to evaluate problems associated with brain function such as confusion and long-term difficulties with thinking or memory.

An EEG is obtained to document the presence and frequency of the abnormal neuron activity. In most cases a routine EEG can identify brain activity specific to seizures. The EEG can provide support for the diagnosis of epilepsy and also assists in classifying the underlying epileptic syndrome. However, there are several reasons why in some cases a routine EEG alone cannot be used to make or refute a specific diagnosis of epilepsy (Moeller, et al., 2020):

- Most EEG patterns can be caused by a wide variety of different neurologic diseases.
- Many diseases can cause more than one type of EEG pattern.
- Intermittent EEG changes, including interictal epileptiform discharges, can be infrequent and may not appear during the relatively brief period of routine EEG recording.

- The EEG can be abnormal in some persons with no other evidence of disease.
- Not all cases of brain disease are associated with an EEG abnormality, particularly if the pathology is small, chronic, or located deep in the brain.

For some individuals diagnosed with epilepsy, the EEG may remain normal. Spike discharges may not be captured on an EEG because their occurrence is rare or their site of origin is very small or within an occult area of the cortex. Spike activity can also be affected by antiepileptic medication (Blume, 2005; Aminoff, 2003). A normal patient may also show unusual brain activity on an EEG and be incorrectly diagnosed. When a definitive diagnosis cannot be made from a clinical examination and a resting EEG, additional testing may be necessary (e.g., ambulatory EEG, video EEG). A prolonged 24-hour ambulatory EEG in the outpatient/home setting may be used to differentiate between the presence of epileptic, non-epileptic or psychogenic seizure disorders. The focus of this Coverage Policy is ambulatory EEG.

Ambulatory Electroencephalography (EEG)
Ambulatory or 24-hour EEG monitoring is performed by a recorder that continuously records brain wave patterns during a patient's routine daily activities and sleep up to 72 hours. An ambulatory EEG can be done with or without video recording. The monitoring equipment includes an electrode set, preamplifiers, and a recorder. The electrodes attach to the scalp, and the leads are connected to a recorder, usually worn on a belt. Ambulatory EEG allows patients to be evaluated in their natural environments, with exposure to potential stressors and other seizure triggers.

Prolonged continuous ambulatory EEG recording throughout one or more complete natural sleep/wake cycles increases the likelihood of documenting an ictal episode. The most helpful finding on EEG is interictal epileptiform discharges (IEDs). Identification of interictal epileptiform discharges, which are EEG patterns believed to be associated with a relatively high risk for having seizures, have been reported as occurring in 95% of epilepsy patients within 48 hours of monitoring (Tatum, et al., 2018; Seneviratne, et al., 2013; Faulkner, et al., 2012). Routine EEG has low sensitivity in epilepsy ranging from 25%–56%, with a specificity of 78%–98% (Smith, 2005). Serial routine EEGs, studies performed a short time after an epileptic seizure as well as sleep-deprived EEG studies increase the overall diagnostic yield. However, those methods are usually considered inferior to long-term EEG monitoring, where the duration of recording is measured in hours or days (Keezer, et al., 2016).

Ambulatory EEG recordings can be utilized in the evaluation and differential diagnosis of non-epileptic seizures if these episodes are unable to be diagnosed by conventional studies. There are two categories of non-epileptic seizures: pathophysiological events and non-epileptic psychopathological/psychiatric events. Pathophysiological events include: autonomic disorders, cardiac arrhythmias, drug toxicity, metabolic disorders, migraines, orthostatic hypotension, sleep disorders, valvular heart disease, vasovagal syncope and vestibular disorders. Non-epileptic psychopathological/psychiatric events include: anxiety, depression, panic attacks, psychogenic seizures and psychosis (Mesraoua, 2012).

Syncope, for example, shares some clinical characteristics with seizures which may lead to diagnostic confusion. Seizures and syncope may also coexist in a given individual. In general, a syncopal episode or temporary loss of consciousness may be considered unrelated to epilepsy if any of the following features are present:

- prodromal symptoms that on other occasions have been abolished by sitting or lying down
- sweating before the episode
- prolonged standing that appeared to precipitate the temporary loss of consciousness
- pallor during the episode

Sleep and sleep stage have a significant impact on the incidence and frequency of both seizures and epileptiform discharges that occur in between seizures. Generally, non-rapid eye movement (NREM) sleep facilitates interictal epileptiform discharges (IED) and seizures, while rapid eye movement (REM) sleep tends to inhibit seizures. Prolonged outpatient ambulatory, inpatient video-EEG recordings, or overnight video-EEG polysomnography, are of higher yield in detecting IEDs and capturing seizures in the sleep-related focal epilepsies (St Louis, et al., 2020).

Literature Review: The diagnostic accuracy of ambulatory EEG has not been well studied. Authors have reported through several retrospective studies with patient populations ranging from 46–344, the value of adding ambulatory EEG to standard EEG recording data in confirming the presence or absence of epileptic conditions.

Carlson et al. (2018) published the results of a prospective study that evaluated the diagnostic efficacy and technical quality of home video telemetry (HVT) by comparison with inpatient video telemetry (IVT) in a pediatric group. Included patients (n=62) were age 18 years and younger with video telemetry of 24–72 hours with parental consent. Thirty–three patients were in the HVT group with 29 in the IVT group. The aim of the study was to determine if the performance of HVT was comparable to that of IVT in a pediatric group in terms of diagnostic efficacy, recording quality and acceptability to parents or caregivers. The diagnostic accuracy between the two groups was comparable with 64% of HVT patients and 62% of IVT patients having typical attacks during the recording. Equipment difficulties occurred in 52% of HVT studies which included camera positioning and failure to turn on the infrared button at night and resulted in a loss of diagnostic information in 15% of patients. Author reported limitations of the study included the lack of randomization and the subjective nature of recording quality assessment by a variety of clinical physiologists. The authors concluded that in a pediatric setting HVT is able to provide similar technical and diagnostic quality results when compared to IVT.

In a prospective study (n=72) by Keezer et al. (2016), the sensitivity of ambulatory EEG was reported to be 2.23 times greater than that of routine EEG ($p<0.0001$). Ambulatory EEG results have been reported to change clinical management in up to 51% of patients. The median duration of recording was 1.4 days (Faulkner, et al., 2012). Prolonged ambulatory EEG has been found to have a higher probability of recording an epileptic event relative to sleep-deprived EEG (15.2% versus 0%, respectively; $p=0.01$) (Liporace, et al., 1998).The published peer-reviewed medical literature contains some evidence primarily in the form of case series to support the use of ambulatory EEG. While the supporting evidence is not robust, the use of ambulatory EEG monitoring has become a standard of care within the armamentarium of diagnostic evaluations of epilepsy versus a non-epileptic syndrome for a subset of individuals.

Digital EEG Spike Analysis

Patients who have epilepsy and do not successfully respond to antiseizure drug therapy are considered to have drug-resistant epilepsy (DRE). This condition is also known as intractable, medically refractory, or pharmacoresistant epilepsy (Sirven, 2018). Refractory epilepsy is defined by failure of two antiepileptic drugs and the patient may be referred to an epilepsy center for diagnosis and consideration of the many therapeutic options currently available. In addition to a careful history and physical examination directed at determining seizure type, site of origin, and etiology, the most important diagnostic test for evaluating intractable seizures is prolonged simultaneous video and EEG monitoring. Video EEG may need to continue for days or weeks to obtain enough spells to make a correct diagnosis. Surgery for resection of the epilepsy focus is currently the only available method of curing epilepsy (Dobrin, 2018).

Currently, EEGs are primarily performed on digital machines instead of older analog machines. Automated spike and seizure detectors are usually built into digital routine EEG, ambulatory EEG, or video-EEG monitoring. Because of this enhancement, substantial additional analysis is typically not necessary. The most intense use of EEG source localization is in epilepsy, with the intention to localize the epileptic zone in pharmaco-resistant focal epilepsies. The added value of this method in the pre-surgical assessment of these patients has been demonstrated repeatedly, not only for focus localization, but also for localization of eloquent cortex (Michel and Brunet, 2019).

Prolonged monitoring for epilepsy surgery is often divided into two phases. Testing in the first phase is noninvasive and sets out to determine the type of epilepsy and whether or not the epilepsy is pharmacotherapy-resistant. Phase two consists of semi-invasive and invasive techniques to locate the areas of the brain from which the seizures originate (Mesraoua, 2012). As such, ambulatory and video EEG may be appropriate during phase one, while more advanced EEG testing is needed in phase two. Most practitioners would not have the opportunity to do this advanced analysis, which would be more commonly used at specialty centers (e.g., epilepsy surgery programs) (American Clinical Neurophysiology Society [ACNS], 2008).

Professional Societies/Organizations

American Board of Internal Medicine's (ABIM) Foundation Choosing Wisely® Initiative (2019): The American Academy of Neurology (AAN) (2013) recommended that EEG not be performed for headaches. According to the AAN, an EEG offers no advantage over clinical evaluation in diagnosing headache, nor does it improve outcomes.

American Clinical Neurophysiology Society (ACNS): According to the ACNS, indications for long term EEG monitoring (e.g., ambulatory EEG) included the following:

1. Identification of epileptic paroxysmal electrographic and/or behavioral abnormalities. These included epileptic seizures, overt and subclinical, and documentation of interictal epileptiform discharges.
2. Verification of the epileptic nature of the new "spells" in a patient with previously documented and controlled seizures.
3. Classification of clinical seizure type(s) in a patient with documented but poorly characterized epilepsy.

The ACNS further stated that EEG and/or behavioral abnormalities may assist in the differential diagnosis between epileptic disorders and conditions associated with intermittent symptoms due to non-epileptic mechanisms (e.g., syncope, narcolepsy, other sleep disturbances, psychogenic seizures) (ACNS, 2008).

Use Outside of the US
A National Institute for Health and Care Excellence (NICE) guideline on the diagnosis and management of epilepsy stated "long-term video or ambulatory EEG may be used in the assessment of children, young people and adults who present diagnostic difficulties after clinical assessment and standard EEG" (NICE, 2012; 2020).

Medicare Coverage Determinations

	Contractor	Policy Name/Number	Revision Effective Date
NCD	National	Ambulatory EEG Monitoring (160.22)	6/12/1984
LCD	National Government Services, Inc.	EEG – Ambulatory Monitoring (L33399)	1/01/2020
LCD	First Coast Service Options, Inc.	Special EEG Tests (L34521)	1/08/2019
LCD	Palmetto GBA	Special Electroencephalography (L33447)	10/24/2019

Note: Please review the current Medicare Policy for the most up-to-date information.

Coding/Billing Information

Note: 1) This list of codes may not be all-inclusive.
2) Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

Ambulatory Electroencephalography (EEG)

Considered Medically Necessary when criteria in the applicable policy statements listed above are met:

CPT®* Codes	Description
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
95705	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, 2-12 hours; unmonitored
95706	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, 2-12 hours; with intermittent monitoring and maintenance

CPT®* Codes	Description
95707	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, 2-12 hours; with continuous, real-time monitoring and maintenance
95708	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, each increment of 12-26 hours; unmonitored
95709	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, each increment of 12-26 hours; with intermittent monitoring and maintenance
95710	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, each increment of 12-26 hours; with continuous, real-time monitoring and maintenance
95711	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, 2-12 hours; unmonitored
95712	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, 2-12 hours; with intermittent monitoring and maintenance
95713	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, 2-12 hours; with continuous, real-time monitoring and maintenance
95714	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, each increment of 12-26 hours; unmonitored
95715	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, each increment of 12-26 hours; with intermittent 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
95717	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; without video
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)
95719	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; without video
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)
95721	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, without video
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)
95723	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, without video
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)

CPT®* Codes	Description
95725	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, without video
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)

ICD-10-CM Diagnosis Codes	Description
F51.8	Other sleep disorders not due to a substance or known physiological condition
G40.001	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, not intractable, with status epilepticus
G40.009	Localization-related (focal) (partial) idiopathic epilepsy and epileptic syndromes with seizures of localized onset, not intractable, without status epilepticus
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
G40.101	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not intractable, with status epilepticus
G40.109	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not 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
G40.201	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, not intractable, with status epilepticus
G40.209	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, not 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
G40.301	Generalized idiopathic epilepsy and epileptic syndromes, not intractable, with status epilepticus
G40.309	Generalized idiopathic epilepsy and epileptic syndromes, not intractable, without status epilepticus
G40.311	Generalized idiopathic epilepsy and epileptic syndromes, intractable, with status epilepticus
G40.319	Generalized idiopathic epilepsy and epileptic syndromes, intractable, without status epilepticus
G40.A01	Absence epileptic syndrome, not intractable, with status epilepticus
G40.A09	Absence epileptic syndrome, not intractable, without status epilepticus
G40.A11	Absence epileptic syndrome, intractable, with status epilepticus
G40.A19	Absence epileptic syndrome, intractable, without status epilepticus
G40.B01	Juvenile myoclonic epilepsy, not intractable, with status epilepticus
G40.B09	Juvenile myoclonic epilepsy, not intractable, without status epilepticus
G40.B11	Juvenile myoclonic epilepsy, intractable, with status epilepticus
G40.B19	Juvenile myoclonic epilepsy, intractable, without status epilepticus
G40.401	Other generalized epilepsy and epileptic syndromes, not intractable, with status epilepticus
G40.409	Other generalized epilepsy and epileptic syndromes, not intractable, without status epilepticus
G40.411	Other generalized epilepsy and epileptic syndromes, intractable, with status epilepticus

ICD-10-CM Diagnosis Codes	Description
G40.419	Other generalized epilepsy and epileptic syndromes, intractable, without status epilepticus
G40.501	Epileptic seizures related to external causes, not intractable, with status epilepticus
G40.509	Epileptic seizures related to external causes, not intractable, without status epilepticus
G40.801	Other epilepsy, not intractable, with status epilepticus
G40.802	Other epilepsy, not intractable, without status epilepticus
G40.803	Other epilepsy, intractable, with status epilepticus
G40.804	Other epilepsy, intractable, without status epilepticus
G40.811	Lennox-Gastaut syndrome, not intractable, with status epilepticus
G40.812	Lennox-Gastaut syndrome, not intractable, without status epilepticus
G40.813	Lennox-Gastaut syndrome, intractable, with status epilepticus
G40.814	Lennox-Gastaut syndrome, intractable, without status epilepticus
G40.821	Epileptic spasms, not intractable, with status epilepticus
G40.822	Epileptic spasms, not intractable, without status epilepticus
G40.823	Epileptic spasms, intractable, with status epilepticus
G40.824	Epileptic spasms, intractable, without status epilepticus
G40.89	Other seizures
G40.901	Epilepsy, unspecified, not intractable, with status epilepticus
G40.909	Epilepsy, unspecified, not intractable, without status epilepticus
G40.911	Epilepsy, unspecified, intractable, with status epilepticus
G40.919	Epilepsy, unspecified, intractable, without status epilepticus
G47.00	Insomnia, unspecified
G47.10	Hypersomnia, unspecified
G47.14	Hypersomnia due to medical condition
G47.20	Circadian rhythm sleep disorder, unspecified type
G47.30	Sleep apnea, unspecified
G47.8	Other sleep disorders
G47.9	Sleep disorder, unspecified
G93.5	Compression of brain
G93.6	Cerebral edema
G93.82	Brain death
I60.00-I60.9	Nontraumatic subarachnoid hemorrhage
I61.9	Nontraumatic intracerebral hemorrhage, unspecified
I63.00-I63.9	Cerebral infarction
P91.60	Hypoxic ischemic encephalopathy [HIE], unspecified
P91.61	Mild hypoxic ischemic encephalopathy [HIE]
P91.62	Moderate hypoxic ischemic encephalopathy [HIE]
P91.63	Severe hypoxic ischemic encephalopathy [HIE]
R25.1	Tremor, unspecified
R25.2	Cramp and spasm
R25.3	Fasciculation
R25.8	Other abnormal involuntary movements
R25.9	Unspecified abnormal involuntary movements
R40.4	Transient alteration of awareness
R41.0	Disorientation, unspecified
R41.82	Altered mental status, unspecified
R55	Syncope and collapse
R56.01	Complex febrile convulsions
R56.1	Post traumatic seizures
R56.9	Unspecified convulsions

ICD-10-CM Diagnosis Codes	Description
R94.01	Abnormal electroencephalogram [EEG]
S06.2X0A-S06.2X9S	Diffuse traumatic brain injury

Considered Not medically necessary:

ICD-10-CM Diagnosis Codes	Description
	All other codes

Digital EEG Spike Analysis

Considered medically necessary when performed in conjunction with an EEG for topographic voltage and dipole analysis in presurgical candidates with intractable (e.g., medically refractory, drug-resistant) epilepsy:

CPT®* Codes	Description
95957	Digital analysis of electroencephalogram (EEG) (eg, for epileptic spike analysis)

Considered medically necessary when used to report digital EEG spike analysis (CPT® code 95957) performed in conjunction with the following procedures:

CPT®* Codes	Description
95830	Insertion by physician or other qualified health care professional of sphenoidal electrodes for electroencephalographic (EEG) recording
95954	Pharmacological or physical activation requiring physician or other qualified health care professional attendance during EEG recording of activation phase (eg, thiopental activation test)
95955	Electroencephalogram (EEG) during nonintracranial surgery (eg, carotid surgery)
95958	Wada activation test for hemispheric function, including electroencephalographic (EEG) monitoring

Considered Not medically necessary when digital EEG spike analysis (CPT® code 95957) is billed with any of the following routine EEG CPT® codes:

CPT®* Codes	Description
95782	Polysomnography; younger than 6 years, sleep staging with 4 or more additional parameters of sleep, attended by a technologist
95806	Sleep study, unattended, simultaneous recording of, heart rate, oxygen saturation, respiratory airflow, and respiratory effort (eg, thoracoabdominal movement)
95807	Sleep study, simultaneous recording of ventilation, respiratory effort, ECG or heart rate, and oxygen saturation, attended by a technologist
95808	Polysomnography; any age, sleep staging with 1-3 additional parameters of sleep, attended by a technologist
95810	Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, attended by a technologist
95812	Electroencephalogram (EEG) extended monitoring; 41-60 minutes
95813	Electroencephalogram (EEG) extended monitoring; 61-119 minutes
95816	Electroencephalogram (EEG); including recording awake and drowsy

CPT®* Codes	Description
95819	Electroencephalogram (EEG); including recording awake and asleep
95822	Electroencephalogram (EEG); recording in coma or sleep only
95824	Electroencephalogram (EEG); cerebral death evaluation only

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