University of Michigan Health Plan

BENEFIT COVERAGE POLICY

Title: BCP-80 Ambulatory EEG and Video Monitoring

Effective Date: 01/01/2024

Important Information - Please Read Before Using This Policy

The following coverage policy applies to health benefit plans administered by UM Health Plan and may not be covered by all UM Health Plan plans. Please refer to the member's benefit document for specific coverage information. If there is a difference between this general information and the member's benefit document, the member's benefit document will be used to determine coverage. For example, a member's benefit document may contain a specific exclusion related to a topic addressed in a coverage policy.

Coverage determinations for individual requests require consideration of:

- 1. The terms of the applicable benefit document in effect on the date of service.
- 2. Any applicable laws and regulations.
- 3. Any relevant collateral source materials including coverage policies.
- 4. The specific facts of the particular situation.

Contact UM Health Plan Customer Service to discuss plan benefits more specifically.

1.0 Policy:

Please refer to the member's benefit plan coverage document for specific benefit descriptions, guidelines, coverage, and exclusions.

Prior approval is required for all non-network covered services to be paid at the network benefit level, except for emergency/urgent services, prior approval is required.

Unlisted codes are subject to review.

This policy does not guarantee or approve Benefits. Coverage depends on the specific Benefit plan. Benefit Coverage Policies are not treatment recommendations and should not be used as treatment guidelines.

2.0 Background:

A 24-hour ambulatory electroencephalogram (AEEG) is used to record EEG tracings on a cassette or digital recorder on an outpatient basis. Electrodes for at least four recording channels are secured to the patient's head while a digital or cassette recorder is secured to the patient's waist or to a shoulder harness. The EEG information is stored for later playback and analysis. A CMS National Coverage Determination (NCD) states that ambulatory EEG should always be preceded by a resting EEG.

EEG video monitoring is the simultaneous recording of the EEG and video monitoring of the patient's face or entire body on a video screen. This allows for the correlation of ictal and interictal electrical events with demonstrated seizure symptomology.

Ambulatory EEG monitoring may facilitate the differential diagnosis between seizures and syncopal attacks, sleep apnea (in conjunction with a home sleep study), cardiac arrhythmias or hysterical episodes. The test may also allow the investigator to identify the epileptic nature of some episodic periods of disturbed consciousness, mild confusion, or peculiar behavior, where resting EEG is not conclusive. It may be useful in documenting seizures that are precipitated by naturally occurring cyclic events or environmental stimuli, which are not reproducible in the hospital or clinic setting. It may also allow an estimate of seizure frequency, which may at times help to evaluate the effectiveness of a drug and determine its appropriate dosage.

Ambulatory monitoring, however, is not necessary to evaluate most seizures, which are usually readily diagnosed by routine EEG studies and history. The goal of ambulatory EEG monitoring is usually achieved within 48 hours.

Seizures vary to such an extent that epilepsy specialists frequently re-classify seizure types. Current classifications include two basic categories: primary generalized seizures and partial seizures (also referred to as focal seizures). Classifying the type of seizure assists the physician in diagnosing whether or not an individual has epilepsy or another condition and is important in the selection of appropriate anti-epileptic drug treatment.

Generalized seizures are produced by electrical impulses throughout the entire brain, while partial seizures are produced (at least initially) by electrical impulses in a relatively small area of the brain (focus). The most common types of generalized seizures include absence seizures (petit mal), atonic seizures, clonic seizures, generalized tonic-clonic (grand mal), myoclonic seizures, and tonic seizures.

Focal seizures can be "simple" (not affecting awareness or memory) or "complex" (affecting awareness, memory, or behavior before, during, and immediately after the seizure). Seizure syndromes are specific to adults and children of all ages. Epilepsy syndromes in adults include, but are not limited to: temporal lobe epilepsy, primary generalized epilepsy, idiopathic focal epilepsy, and progressive myoclonic epilepsy. Epilepsy syndromes in children include, but are not limited to: febrile seizures, Landau-Kleffner Syndrome, Lennox-Gastaut Syndrome, and benign occipital epilepsy.

3.0 Clinical Determination Guidelines:

- A. The Health Plan considers ambulatory electroencephalography (EEG) with or without home video monitoring medically necessary for any of the following conditions, where the member has had a recent (within the previous 12 months) neurologic examination and standard EEG studies:
 - 1. To diagnose a seizure disorder when either the clinical history or examination is suggestive of epilepsy, but routine EEG is non-diagnostic; or
 - 2. To classify seizure type in individuals with epilepsy after a routine EEG is non-diagnostic and classification will be used to select drug therapy; or
 - 3. To differentiate between paroxysmal non-epileptic events and seizures; or
 - 4. To document seizures precipitated by naturally occurring cyclic events or extraneous stimuli (e.g., flashing lights, loud sounds, sudden movements) that are not reproducible in the hospital or laboratory setting; or
 - 5. To evaluate seizures or syncope suspected to be cardiogenic in etiology when cardiac evaluation has not been diagnostic; or
 - 6. To quantify the number of electrical seizures in individuals who experience frequent seizures.
- B. The Health Plan considers an ambulatory EEG for the following not medically necessary:
 - 1. When a resting EEG has not been performed.
 - 2. Use in unattended, uncooperative individuals.
 - Localization of seizure focuses on individuals with medically refractory epilepsy who are candidates for epilepsy surgery. Inpatient video EEG monitoring is the preferred mode in presurgical EEG testing.
 - 4. Antiepileptic drug treatment withdrawal or modification in individuals because the risk of seizure precipitation would require immediate medical intervention.

4.0 Coding:

Prior Approval Legend: Y = All lines of business; N = None required; 1 = HMO/POS; 2 = PPO; 3 = ASO group L0000264; 4 = ASO group L0001269 Non-Union & Union; 5 = ASO group L0001631; 6 = ASO group L0002011; 7 = ASO group L0001269 Union Only; 8 = ASO group L0002184; 9 = ASO group L0002237; 10 = ASO group L0002193.

	COVERED CODES			
Code	Description	Prior Approval	Benefit Plan Cost Share Reference	
95700	Electroencephalogram (EEG) continuous recording, with video when performed, setup, patient education, and takedown when performed, administered in person by EEG technologist, a minimum of 8 channels	N	Outpatient diagnostic services and tests	
95705	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, 2-12 hours; unmonitored	N	Outpatient diagnostic services and tests	
95706	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, 2-12 hours; with intermittent monitoring and maintenance	N	Outpatient diagnostic services and tests	
95707	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, 2-12 hours; with continuous, real-time monitoring and maintenance	N	Outpatient diagnostic services and tests	
95708	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, each increment of 12-26 hours; unmonitored	N	Outpatient diagnostic services and tests	
95709	Electroencephalogram (EEG), without video, review of data, technical description by EEG technologist, each increment of 12-26 hours; with intermittent monitoring and maintenance	N	Outpatient diagnostic services and tests	
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	N	Outpatient diagnostic services and tests	
95711	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, 2-12 hours; unmonitored	N	Outpatient diagnostic services and tests	
95712	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, 2-12 hours; with intermittent monitoring and maintenance	N	Outpatient diagnostic services and tests	
95713	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, 2-12 hours; with continuous, real-time monitoring and maintenance	N	Outpatient diagnostic services and tests	
95714	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, each increment of 12-26 hours; unmonitored	N	Outpatient diagnostic services and tests	

COVERED CODES			
Code	Description	Prior Approval	Benefit Plan Cost Share Reference
95715	Electroencephalogram with video (VEEG), review of data, technical description by EEG technologist, each increment of 12-26 hours; with intermittent monitoring and maintenance	N	Outpatient diagnostic services and tests
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	N	Outpatient diagnostic services and tests
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	N	Outpatient diagnostic services and tests
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)	N	Outpatient diagnostic services and tests
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	N	Outpatient diagnostic services and tests
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)	N	Outpatient diagnostic services and tests
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	N	Outpatient diagnostic services and tests
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	N	Outpatient diagnostic services and tests

	COVERED CODES				
Code	Description	Prior Approval	Benefit Plan Cost Share Reference		
	(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	N	Outpatient diagnostic services and tests		
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)	N	Outpatient diagnostic services and tests		
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	N	Outpatient diagnostic services and tests		
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)	N	Outpatient diagnostic services and tests		

ICD-10 DIAGNOSIS CODES (ALL-INCLUSIVE)			
Code	Description		
F44.5	Conversion disorder with seizures or convulsions [psychogenic seizure]		
G40.001 – G40.919	Epilepsy and recurrent seizures		
G40.A01 – G40A19	Absence epileptic syndrome		
G40.B01 – G40.B19	Juvenile myoclonic epilepsy (impulsive petit mal)		
G45.0 - G45.9	Transient ischemic attacks and related syndromes		
P90	Convulsions of newborn		
R25.0 – R25.9	Abnormal involuntary movements		
R55	Syncope and collapse		
R56.01	Complex febrile convulsions		
R56.1	Post-traumatic seizures		
R56.00 – R56.9	Unspecified convulsions		
R94.01	Abnormal EEG		

5.0 Unique Configuration/Prior Approval/Coverage Details:

None.

6.0 Terms & Definitions:

<u>Absence seizure</u> – a staring spell, usually brief (less than 15 seconds) in duration due to abnormal electrical activity of the brain; commonly called a petit mal seizure.

<u>Ambulatory electroencephalogram (AEEG)</u> – provides a continuous recording of the brain's electrical activity that can range from several hours to several days (typically 48 – 72 hours).

<u>Electroencephalogram (EEG)</u> – a test that records the electrical activity of the brain to assist in the evaluation and diagnosis of seizure disorders, epilepsy syndromes, and other conditions.

Epilepsy – a condition of the brain where an individual is prone to repeated seizures.

<u>Epileptic seizure</u> – a brief occurrence of signs and/or symptoms such as a sudden and involuntary jerk of a hand, arm, or whole body, a strange smell (such as burnt rubber), a sensation in the stomach, a ringing sound that keeps increasing in volume, staring into space, or convulsive movements as a result of a primary change to the electrical activity (abnormally excessive) in the brain.

<u>Epileptiform activity</u> – changes in the brain's electrical activity that are commonly seen in people with epilepsy.

<u>Focal seizure</u> - A seizure that begins with an electrical discharge in a relatively small area (called the focus) of the brain; previously referred to as a partial or localization-related seizure. In most cases, the cause is unknown but may be related to a brain infection, head injury, stroke, or brain tumor.

<u>Generalized seizure</u> - A seizure that begins with a widespread electrical discharge involving both sides of the brain at once.

<u>Lennox-Gastaut Syndrome</u> - An epilepsy syndrome with an age onset of 3-10 years characterized by multiple seizure types (including atonic, tonic, tonic-clonic, and atypical absence seizures), cognitive impairment and specific EEG features of diffuse slow spike and wave as well as paroxysmal fast activity during sleep.

<u>Medically refractory (intractable) epilepsy</u> - Failure of an adequate trial of two tolerated antiepileptic drug schedules to achieve sustained seizure freedom. These should be appropriately chosen and can be monotherapy or in combination.

<u>Myoclonic seizure</u> - Sudden, brief (less than 100 milliseconds) and almost shock-like involuntary single or multiple jerks due to abnormal or excessive or synchronous neuronal activity; associated with polyspikes on EEG.

Nonconvulsive status epilepticus - Refers to a prolonged seizure that manifests as an altered mental state as opposed to convulsions seen in tonic-clonic seizures.

<u>Primary generalized seizure</u> - A seizure that results from abnormal electrical activity of both sides of the brain at the same time.

<u>Psychogenic Non-epileptic Spells</u> - A non-epileptic event that imitates a seizure and may include rhythmic movements, unresponsiveness, or other symptoms similar to those caused by epilepsy, but without an electrographic association.

<u>Seizure</u> - An excessive surge of electrical activity in the brain, usually lasting from a few seconds up to a few minutes, causing a wide range of symptoms or effects depending on which parts of the brain are involved in the abnormal electrical activity.

<u>Status epilepticus</u> - A condition in which a seizure lasts too long or when seizures occur close together and the individual doesn't recover between seizures.

<u>Tonic seizures</u> - An epileptic seizure characterized by abrupt generalized muscle stiffening than can result in a fall, usually lasting less than a minute with rapid recovery.

<u>Tonic-clonic seizure</u> - A seizure of sudden onset involving generalized stiffening and subsequent rhythmic jerking of the limbs.

7.0 References, Citations & Resources:

Centers for Medicare & Medicaid Services (CMS). National Coverage Determination (NCD) for Ambulatory EEG Monitoring (160.22). DMS; effective 1/1/2023.

https://www.cms.gov/medicare-coverage-

database/view/ncd.aspx?ncdid=215&ncdver=1&doctype=all&year=2023&sortBy=title&bc=14

8.0 Associated Documents [For internal use only]:

Policy and Procedure (P&P) - MMP-09 Benefit Determinations , MMP-02 Transition and Continuity of Care

Standard Operating Procedure (SOP) – MMS-03 Algorithm for Use of Criteria for Benefit

Determinations; MMS-45 UM Nurse Review, MMS-52 Inpatient Case Process in CCA; MMS-53

Outpatient Case Process in CCA

Sample Letter – TCS Approval Letter; Clinically Reviewed Exclusion Letter; Specific Exclusion Letter; Lack of Information Letter

Form – Request Form: Out of Network/ Prior Authorization.

9.0 Revision History:

Original Effective Date: 10/01/2020 Next Review Date: 01/01/2025

Revision Date	Reason for Revision	
11/20	References to MCG replaced with InterQual®	
7/21	Annual review – updated references.	
1/23	Annual review, added ASO groups L0002237 & L0002193 to policy. Removed InterQual references. Updated section 1.0. Added ICD-10 codes G45.0 – G45.9 and R55.	
10/23	Annual review, updated references in section 7.0, updated associated documents in section 8.0.	