

Policy: MP216

Section: Medical Benefit Policy

Subject: Quantitative EEG (QEEG)

I. Policy: Quantitative EEG (QEEG)

II. Purpose/Objective:

To provide a policy of coverage regarding Quantitative EEG (QEEG)

III. Responsibility:

- A. Medical Directors
- B. Medical Management

IV. Required Definitions

1. Attachment – a supporting document that is developed and maintained by the policy writer or department requiring/authoring the policy.
2. Exhibit – a supporting document developed and maintained in a department other than the department requiring/authoring the policy.
3. Devised – the date the policy was implemented.
4. Revised – the date of every revision to the policy, including typographical and grammatical changes.
5. Reviewed – the date documenting the annual review if the policy has no revisions necessary.

V. Additional Definitions

Medical Necessity or Medically Necessary means Covered Services rendered by a Health Care Provider that the Plan determines are:

- a. appropriate for the symptoms and diagnosis or treatment of the Member's condition, illness, disease or injury;
- b. provided for the diagnosis, and the direct care and treatment of the Member's condition, illness disease or injury;
- c. in accordance with current standards of good medical treatment practiced by the general medical community.
- d. not primarily for the convenience of the Member, or the Member's Health Care Provider; and
- e. the most appropriate source or level of service that can safely be provided to the Member. When applied to hospitalization, this further means that the Member requires acute care as an inpatient due to the nature of the services rendered or the Member's condition, and the Member cannot receive safe or adequate care as an outpatient.

Medicaid Business Segment

Medical Necessity shall mean a service or benefit that is compensable under the Medical Assistance Program and if it meets any one of the following standards:

- (i) The service or benefit will, or is reasonably expected to, prevent the onset of an illness, condition or disability.
- (ii) The service or benefit will, or is reasonably expected to, reduce or ameliorate the physical, mental or development effects of an illness, condition, injury or disability.
- (iii) The service or benefit will assist the Member to achieve or maintain maximum functional

capacity in performing daily activities, taking into account both the functional capacity of the Member and those functional capacities that are appropriate for members of the same age.

DESCRIPTION:

A quantitative electroencephalogram (QEEG) is a technique for topographic visual enhancement of traditional surface EEG electrophysiological data. The process transforms the surface EEG data into a topographic image of the brain activity. The activity data is algorithmically analyzed by amplitude, frequency and locality and placed onto a schematic map of the brain. The data is then compared to a database of normal patient brainwave activity to determine specific seizure types, location of seizure activity or abnormal discharges, or underlying medical conditions.

INDICATIONS: Quantitative electroencephalography, when used by physicians highly skilled in clinical EEG, and only as an adjunct to and in conjunction with traditional EEG interpretation, may be considered medically necessary for the following indications:

- Topographical localization and amplitude analysis in pre-surgical evaluations of intractable epilepsy; **or**
- Continuous EEG frequency-trend monitoring for early detection of acute intracranial complications in the operating room during cerebrovascular surgery such as intracranial or carotid endarterectomy; **or**
- Detection of non-convulsive seizures in high-risk individuals in the intensive care setting; **or**
- As an adjunct to confirm diagnostic symptoms of cerebral vascular disease or encephalopathy when routine neurological imaging and routine EEG outcomes are inconclusive; **or**
- To aid in the detection of possible epileptogenic activity when routine surface EEG and long-term EEG monitoring is inconclusive and additional testing is needed to diagnose episodes of behavior suspicious for seizures.

EXCLUSIONS: In accordance with the American Academy of Neurology / American Clinical Neurophysiology Society's report, and due to insufficient evidence in the peer reviewed, published, medical literature to support a definitive role outside of a research setting, quantitative EEG is considered to be **experimental, investigational or unproven** and is **NOT COVERED** for the diagnosis or treatment of conditions included but not limited to:

- Depression
- Schizophrenia
- Prediction of psychotropic medication response
- Alcoholism
- Drug abuse
- Learning disabilities
- Attention deficit disorders
- Mild to moderate head injury
- Post-concussive syndrome
- Tinnitus
- Asperger syndrome and other autism spectrum disorders
- Fibromyalgia
- Hypoxic ischemic encephalopathy
- Insomnia
- Panic disorder
- Parkinson's disease

Note: A complete description of the process by which a given technology or service is evaluated and determined to be experimental, investigational or unproven is outlined in MP 15 - Experimental Investigational or Unproven Services or Treatment.

CODING ASSOCIATED WITH: Quantitative EEG (QEEG)

The following codes are included below for informational purposes and may not be all inclusive. Inclusion of a procedure or device code(s) does not constitute or imply coverage nor does it imply or guarantee provider reimbursement. Coverage is determined by the member specific benefit plan document and any applicable laws regarding coverage of specific services. Please note that per Medicare coverage rules, only specific CPT/HCPCS Codes may be covered for the Medicare Business Segment. Please consult the CMS website at www.cms.gov or the local Medicare Administrative Carrier (MAC) for more information on Medicare coverage and coding requirements.

- 95955 – Electroencephalogram (EEG) during non-intracranial surgery (eg, carotid surgery)
- 95957 – Digital analysis of electroencephalogram

95961 – Functional cortical and subcortical mapping by stimulation and/or recording of electrodes on brain surface, or of depth electrodes, to provoke seizures or identify vital brain structures; initial hour of physician attendance
95962 - each additional hour of physician attendance
S8040 – Topographic brain mapping

Current Procedural Terminology (CPT®) © American Medical Association: Chicago, IL

LINE OF BUSINESS:

Eligibility and contract specific benefits, limitations and/or exclusions will apply. Coverage statements found in the line of business specific benefit document will supersede this policy. For Medicare, applicable LCD's and NCD's will supercede this policy. For PA Medicaid Business segment, this policy applies as written.

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This policy will be revised as necessary and reviewed no less than annually.

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Revised: 6/12 (Added Exclusions)

Reviewed: 7/09, 7/10, 6/11, 6/13, 6/14; 5/15, 5/16, 5/17, 5/18, 5/19