I. POLICY/Criteria

A. QEEG should be used only as an adjunct to and in combination with a traditional EEG for specific patients, as determined by their clinical presentation. The use of QEEG is limited to specialists trained in its use and only for the following indications:

1. Epilepsy - one of the following:
   a. When the surface or long-term EEG is inconclusive and additional screening for possible epileptic spikes or seizures is needed.
   b. When ambulatory recording is needed to facilitate subsequent visual EEG interpretation.
   c. For topographic voltage and dipole analysis in pre-surgical candidates with intractable epilepsy.

2. Cerebral vascular disease, dementia or encephalopathy: when neurological imaging and routine EEG outcomes are inconclusive to confirm diagnostic symptoms.

3. Operating room (OR): to provide continuous monitoring for the early detection of an acute intracranial complication during surgery.


B. QEEG is not covered for any other condition including, but not limited to, the following indications:

   a. Alcoholism
   b. Attention-deficit/hyperactivity disorders (ADD/ADHD)
   c. Depression
   d. Drug/substance abuse
   e. Mild or moderate head injury
   f. Learning disability
   g. Schizophrenia

II. MEDICAL NECESSITY REVIEW

☐ Required ☒ Not Required ☐ Not Applicable
III. APPLICATION TO PRODUCTS

Coverage is subject to member’s specific benefits. Group specific policy will supersede this policy when applicable.

- **HMO/EPO**: This policy applies to insured HMO/EPO plans.
- **POS**: This policy applies to insured POS plans.
- **PPO**: This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.
- **ASO**: For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.
- **INDIVIDUAL**: For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.
- **MEDICARE**: Coverage is determined by the Centers for Medicare and Medicaid Services (CMS); if a coverage determination has not been adopted by CMS, this policy applies.
- **MEDICAID/HEALTHY MICHIGAN PLAN**: For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: [http://www.michigan.gov/mdch/0,1607,7-132-2945,42542,42543,42546,42551-159815--,00.html](http://www.michigan.gov/mdch/0,1607,7-132-2945,42542,42543,42546,42551-159815--,00.html). If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: [http://www.michigan.gov/mdch/0,1607,7-132-2945,5100-87572--,00.html](http://www.michigan.gov/mdch/0,1607,7-132-2945,5100-87572--,00.html), the Michigan Medicaid Provider Manual will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.

IV. DESCRIPTION

Quantitative electroencephalogram (QEEG) or brain electrical activity mapping (BEAM) is a visual enhancement of a traditional surface EEG. The process transforms the surface EEG data into a topographic display of brain / seizure activity. The images are placed on a schematic map of the brain and the activity data is analyzed by size of the activity spike, frequency and location. This data is then compared to a database of normal patient brainwaves to determine specific seizure type, location and possible underlying medical condition. QEEG is non-invasive and can be used on all age groups but requires the interpretation of a specialist trained in quantitative encephalographic analysis.

V. CODING INFORMATION

**ICD-10 Codes** that may support medical necessity:

- **E03.5** Myxedema coma
- **F01.50** Vascular dementia without behavioral disturbance
- **F01.51** Vascular dementia with behavioral disturbance
- **F02.80 – F02.81** Dementia in other diseases
F03.90  Unspecified dementia without behavioral disturbance
F05   Delirium due to known physiological condition
G13.2   Systemic atrophy primarily affecting the central nervous system in myxedema
G13.8   Systemic atrophy primarily affecting central nervous system in other diseases classified elsewhere
G30.0 – G30.9  Alzheimer's disease
G31.01 – G31.9  Other degenerative diseases of nervous system, not elsewhere classified
G40.301 - G40.411  Generalized idiopathic epilepsy and epileptic syndromes
G46.4  Cerebellar stroke syndrome
G46.5  Pure motor lacunar syndrome
G46.6  Pure sensory lacunar syndrome
G46.7  Other lacunar syndromes
G46.8  Other vascular syndromes of brain in cerebrovascular diseases
G91.4  Hydrocephalus in diseases classified elsewhere
G93.40 – G93.49  Other encephalopathy
G93.7  Reye's syndrome
G94  Other disorders of brain in diseases classified elsewhere
I63.30 - I63.9  Cerebral infarction
I66.01 – I66.9  Occlusion and stenosis of cerebral arteries,
I68.0  Cerebral amyloid angiopathy
I68.8  Other cerebrovascular disorders in diseases classified elsewhere
I69.01  Cognitive deficits following nontraumatic subarachnoid hemorrhage
I69.11  Cognitive deficits following nontraumatic intracerebral hemorrhage
I69.21  Cognitive deficits following other nontraumatic intracranial hemorrhage
I69.31  Cognitive deficits following cerebral infarction
I69.81  Cognitive deficits following other cerebrovascular disease
I69.91  Cognitive deficits following unspecified cerebrovascular disease
R40.0  Somnolence
R40.1  Stupor
R40.20 - R40.3  Coma

**ICD-10 Codes** that **Do Not Support Medical Necessity**:
F10.10 - F10.99  Alcohol abuse
F11.10 - F11.90  Opioid abuse
F12.10 - F12.90  Cannabis abuse
F13.10 - F13.90  Sedative, hypnotic or anxiolytic abuse
F14.10 - F14.90  Cocaine abuse
F15.10 - F15.90  Other stimulant abuse
F16.10 - F16.90  Hallucinogen abuse
F17.200 - F17.291  Nicotine dependence
F18.10 - F18.90  Inhalant abuse
F19.10 - F19.90  Other psychoactive substance abuse
F20.0 - F20.9  Schizophrenia
F21  Schizotypal disorder
F25.0 - F25.9  Schizoaffective disorder
F31.9 Bipolar disorder, unspecified
F32.0 - F33.9 Major depressive disorder
F34.1 Dysthymic disorder
F40.00 - F40.9 Phobic anxiety disorders
F41.0 - F41.9 Other anxiety disorders
F42 Obsessive-compulsive disorder
F44.0 - F44.9 Dissociative and conversion disorders
F45.0 - F45.9 Somatoform disorders
F48.1 - F48.9 Other nonpsychotic mental disorders
F55.0 - F55.8 Abuse of non-psychoactive substances
F68.10 - F80.9 Factitious disorder
F80.0 - F80.9 Specific developmental disorders of speech and language
F81.0 - F81.9 Specific developmental disorders of scholastic skills
F82 Specific developmental disorder of motor function
F84.5 Asperger's syndrome
F84.8 Other pervasive developmental disorders
F84.9 Pervasive developmental disorder, unspecified
F88 Other disorders of psychological development
F89 Unspecified disorder of psychological development
F90.0 - F90.9 Attention-deficit hyperactivity disorder
F93.8 Other childhood emotional disorders
F99 Mental disorder, not otherwise specified
H93.25 Central auditory processing disorder
R45.2 Unhappiness
R45.5 Hostility
R45.6 Violent behavior
R48.0 Dyslexia and alexia
S06.0x0A - S06.0x09S Concussion without loss of consciousness
S06.1x0A Traumatic cerebral edema without loss of consciousness, initial encounter
S06.2x0A - S06.2x9S Diffuse traumatic brain injury without loss of consciousness
S06.300A - S06.309S Unspecified focal traumatic brain injury without loss of consciousness
S06.890A - S06.899S Other specified intracranial injury without loss of consciousness
S06.9x0A - S06.9x9S Unspecified intracranial injury without loss of consciousness

**CPT /HCPCS Codes:**
95957 Digital analysis of electroencephalogram (EEG) (e.g., for epileptic spike analysis)
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 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; each additional hour of physician attendance (List separately in addition to code for primary procedure)

Not Covered:
S8040 Topographic brain mapping
VI. REFERENCES


