TOPOGRAPHIC BRAIN MAPPING
MED 205.009
BlueReview POSTED DATE: 3/23/2004
EFFECTIVE DATE: 7/1/2004

LEGISLATIVE MANDATES:

Texas: A Legislative mandate applies for all insured (individual and group) businesses and self funded plans opting to participate in coverage for Acquired Brain Injury.

The mandate states, “A health benefit plan may not exclude coverage for cognitive rehabilitation therapy, cognitive communication therapy, neurocognitive therapy and rehabilitation, neurobehavioral, neurophysiological, neuropsychological and psychophysiological testing or treatment, neuro feedback therapy, remediation, post-acute transition services or community reintegration services necessary as a result of and related to an acquired brain injury.”

COVERAGE:

Topographic brain mapping (TBM) is considered experimental or investigational.

*Exception for Texas:

Pertaining to Texas legislative mandates and when related to Acquired Brain Injury, TBM may be used in the rehabilitation setting to assess and predict functional outcomes related to cognitive function.

DESCRIPTION:

TBM is an extension of the conventional electroencephalogram (EEG) and is sometimes called brain electrical activity mapping (BEAM). Using computerized analysis and topographic display of EEG rhythms and evoked potential data, a wide assortment of maps can be created to represent different measurement patterns. The premise for TBM is to identify EEG patterns that distinguish pathological groups from normal ones.

RATIONALE:

TBM has been widely researched as an adjunct to the standard EEG. In 1997, Nuwer reported on indications for the use of TBM but cited technical limitations in the clinical setting associated with it use as being:

• Epileptiform spikes may be overlooked and considered artifact or misinterpreted; AND

• General EEG and TBM techniques are predisposed to false positives among patients with and without medical conditions.
However, clinical studies evaluating TBM are limited with evaluation of small populations and outcomes remain inconclusive as to the effectiveness of TBM.

PRICING:

None

REFERENCES:

- Procaccio F., Polo, et al. “Electrophysiologic monitoring in


DISCLAIMER:

State and federal law, as well as contract language, including definitions and specific inclusions/exclusions, takes precedence over Medical Policy and must be considered first in determining coverage. The member’s contract benefits in effect on the date that services are rendered must be used. Any benefits are subject to the payment of premiums for the date on which services are rendered. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically. HMO Blue Texas physicians who are contracted/affiliated with a capitated IPA/medical group must contact the IPA/medical group for information regarding HMO claims/reimbursement information and other general polices and procedures.