Policy: MP266
Section: Medical Benefit Policy
Subject: Magnetoencephalography (MEG) and Magnetic Source Imaging (MSI)

I. Policy: Magnetoencephalography (MEG) and Magnetic Source Imaging (MSI)

II. Purpose/Objective:
To provide a policy of coverage regarding Magnetoencephalography (MEG) and Magnetic Source Imaging (MSI)

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: Magnetoencephalography (MEG) is a noninvasive functional imaging technique that records magnetic fields generated by brain activity. When the information is superimposed on an anatomic image of the brain such as a magnetic resonance imaging scan, the image is referred to as magnetic source imaging (MSI).

INDICATIONS: Magnetoencephalography (MEG) and Magnetic Source Imaging (MSI) may be considered medically necessary for the following indications:

- Pre-surgical evaluation in patients with intractable focal epilepsy to identify and localize area(s) of epileptiform activity when other techniques designed to localize a focus are discordant or inconclusive;
- Pre-surgical evaluation in patients with tumors and AVM's located in close proximity to the eloquent cortex

EXCLUSIONS:
MEG or MSI used as a stand-alone test or as the first order of test after clinical and routine electroencephalography (EEG) diagnosis of epilepsy because it is considered experimental, investigational or unproven and is NOT COVERED.

MEG or MSI used for evaluation of any of the following indications is considered experimental, investigational or unproven and is NOT COVERED:
- Alzheimer’s disease
- Autism
- Learning disorders
- Migraines
- Multiple sclerosis
- Parkinson’s disease
- Schizophrenia
- Traumatic Brain Injury

MEG or MSI used for any indication not specifically listed is considered experimental, investigational or unproven and is NOT COVERED.

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: Magnetoencephalography (MEG) and Magnetic Source Imaging (MSI)
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.

HCPCS/CPT Codes:
95965 Magnetoencephalography (MEG), recording and analysis; for spontaneous brain magnetic activity (e.g., epileptic cerebral cortex localization)
95966 Magnetoencephalography (MEG), recording and analysis; for evoked magnetic fields, single modality (e.g., sensory, motor, language, or visual cortex localization)
95967 Magnetoencephalography (MEG), recording and analysis; for evoked magnetic fields, each additional modality (e.g., sensory, motor, language, or visual cortex localization)
S8035 magnetic source imaging

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

REFERENCES: Geisinger Technology Assessment Committee Triage Group. June 2012


Harmsen IE, Rowland NC, Wennberg RA, Lozano AM. Characterizing the effects of deep brain stimulation with magnetoencephalography: A review. Brain Stimul. 2018 Jan 4


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

Devised: 7/2/2012

Revised: 7/14 (added exclusions)

Reviewed: 7/13, 7/15, 7/16, 6/17, 6/18, 6/19, 6/20

Geisinger Health Plan may refer collectively to health care coverage sponsors Geisinger Health Plan, Geisinger Quality Options, Inc., and Geisinger Indemnity Insurance Company, unless otherwise noted. Geisinger Health Plan is part of Geisinger, an integrated health care delivery and coverage organization.