

## MP.078.MPC- Magnetoencephalography

Maryland Physicians Care considers **Magnetoencephalography (MEG)** of value in a selected group of cases when the member meets any of the following indications:

1. Intractable Epilepsy
2. Failure of seizure control by brain surgery where the seizure type or the number of seizures interferes with activities of daily living
3. Pre-surgical functional brain mapping (PSFBM) of the following selected members:
  - Members with intractable epilepsy
  - Members with brain lesions (tumors, cysts, arteriovenous malformations) near eloquent cortex
  - Surgical approaches near eloquent areas (auditory, visual, language, somatosensory and motor cortex)
  - Brain surgery involving essential functional areas

The procedure must be ordered and performed by a Privileged Epileptologist with MEG expertise, or documentation must indicate referral from an Adult or Pediatric Epileptologist or Neurosurgeon at a Tertiary care center to a Privileged Epileptologist with MEG expertise.

### Limitations

1. MEG (when performed with an MRI is also known as Magnetic Source Imaging(MSI)) is a non-invasive imaging technique which is in addition to the radiological procedures currently available and not necessarily a replacement or substitute for older procedures.
2. Application of MSI or MEG outside the indications described in this policy is currently considered experimental and investigational and is therefore not covered.
4. Considerations for limitations should be given to the following individuals in anticipation of MEG study:
  - Members who have had placement of metal devices within the body
  - The member's condition requires external devices for care (e.g., portable oxygen tank)
  - In some circumstances an open MRI may be appropriate for members who have small amounts of implanted metal not located in the imaging area,
  - Members who are claustrophobic, in which case an open MRI may be appropriate for these individuals
5. MEG is not appropriate as a screening tool (i.e., asymptomatic members without a previous diagnosis or specific clinical indication).

### Background

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The Epilepsy Foundation defines epilepsy as a condition of the brain causing seizures, caused by disturbances in the electrical activity of the brain. Nearly 65 million people worldwide have epilepsy and over 2 million people in the United States have epilepsy.

The Institute for Learning & Brain Sciences of the University of Washington defines Magnetoencephalography (MEG) as a non-invasive technique for investigating human brain activity. It allows the measurement of ongoing brain activity on a millisecond-by-millisecond basis, and it shows where in the brain activity is produced. MEG provides timing as well as spatial information about the brain's activity.

## Codes:

<b>CPT Codes / HCPCS Codes / ICD-10 Codes</b>	
Code	Description
<b>CPT Codes</b>	
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) (List separately in addition to code for primary procedure)
<b>HCPCS codes covered if selection criteria are met (If Appropriate):</b>	
S8035	Magnetic source imaging.
<b>ICD-10 codes covered if selection criteria are met:</b>	
C71.0	Malignant neoplasm of cerebrum, except lobes and ventricles
C71.1	Malignant neoplasm of frontal lobe
C71.2	Malignant neoplasm of temporal lobe
C71.3	Malignant neoplasm of parietal lobe
C71.4	Malignant neoplasm of occipital lobe
C71.5	Malignant neoplasm of cerebral ventricle
C71.6	Malignant neoplasm of cerebellum
C71.7	Malignant neoplasm of brain stem
C71.8	Malignant neoplasm of overlapping sites of brain
C71.9	Malignant neoplasm of brain, unspecified
C70.0	Malignant neoplasm of cerebral meninges

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C70.9	Malignant neoplasm of meninges, unspecified
C72.5	Malignant neoplasm of unspecified cranial nerve
C75.1- C75.3	Malignant neoplasm of pituitary gland, craniopharyngeal duct, and pineal
C76.0	Malignant neoplasm of head, face and neck
C79.31	Secondary malignant neoplasm of brain
C79.32	Secondary malignant neoplasm of cerebral meninges
D32.0	Benign neoplasm of cerebral meninges
D32.9	Benign neoplasm of meninges, unspecified
D33.0	Benign neoplasm of brain, supratentorial
D33.1	Benign neoplasm of brain, infratentorial
D33.2	Benign neoplasm of brain, unspecified
D33.3	Benign neoplasm of cranial nerves
D35.2- D35.4	Benign neoplasm of pituitary gland, craniopharyngeal duct, and pineal gland
D49.6	Neoplasm of unspecified behavior of brain
G40.101	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not intractable, with status epilepticus
G40.109	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, not intractable, without status epilepticus
G40.111	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, with status epilepticus
G40.119	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with simple partial seizures, intractable, without status epilepticus
G40.211	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, with status epilepticus
G40.219	Localization-related (focal) (partial) symptomatic epilepsy and epileptic syndromes with complex partial seizures, intractable, without status epilepticus
G40.804	Other epilepsy, intractable, without status epilepticus
Q28.2	Arteriovenous malformation of cerebral vessels
Q28.3	Other malformations of cerebral vessels
Q85.1	Tuberous sclerosis

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