

Subject: Brain MRI (70551, 70552, 70553, 70557, 70558, 70559)		Original Effective Date: 7/26/17
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This Molina Clinical Review (MCR) is intended to facilitate the Utilization Management process. It expresses Molina's determination as to whether certain services or supplies are medically necessary, experimental, investigational, or cosmetic for purposes of determining appropriateness of payment. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered (i.e., will be paid for by Molina) for a particular member. The member's benefit plan determines coverage. Each benefit plan defines which services are covered, which are excluded, and which are subject to dollar caps or other limits. Members and their providers will need to consult the member's benefit plan to determine if there are any exclusion(s) or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and a member's plan of benefits, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of a State, the Federal government or CMS for Medicare and Medicaid members. CMS's Coverage Database can be found on the CMS website. The coverage directive(s) and criteria from an existing National Coverage Determination (NCD) or Local Coverage Determination (LCD) will supersede the contents of this Molina Clinical Review (MCR) document and provide the directive for all Medicare members.

DESCRIPTION OF PROCEDURE/SERVICE/PHARMACEUTICAL

Magnetic resonance imaging (MRI) is the modality of choice used in the evaluation, diagnosis and management of most brain related conditions.

RECOMMENDATIONS

MRI Imaging can be contraindicated in any of the following circumstances; there is a metallic body in the eye, for magnetically activated implanted devices such as pacemakers and defibrillators, insulin pumps, neurostimulators, and for some types of metal, and aneurysm clipping. The imaging facility should always be consulted with any compatibility questions as the types of metal used and development of MRI compatible devices is continually changing.

Neurological issues:

Weakness, numbness or tingling, sensory loss, lack of coordination, problems with speech, vision problems, cranial nerve deficits, or changes in mental status when these complaints are suspected to arise from the brain.

- Suspected Stroke or TIA

Multiple Sclerosis

Known Multiple Sclerosis

- Worsening or new symptoms without imaging in the past three months
- Follow up of or surveillance of known disease and no imaging within the last year

- Follow up of disease progression after a change in medications and no imaging in the last three months
- Suspected Multiple Sclerosis
- For evaluation of patients with symptoms consistent with a possible diagnosis of multiple sclerosis

Movement Disorders

- New onset of movement disorders
- Suspected Parkinson's disease
- Known Parkinson's disease but with new symptoms

Headache (with any of the following)

- Papilledema
- Awakens you from sleep
- Worst headache of your life
- Sudden change in headache pattern
- New onset of headache over the age of 50
- Recent head injury with headache
- Coital headaches
- Headaches which are clearly positional or worsen with coughing, sneezing
- History of cancer or HIV
- Headache during pregnancy
- Uncontrolled vomiting
- New headache with a first degree family history (sibling, parent or child) of aneurysm
- Abnormal neurological exam findings

Cognitive dysfunction:

- Mini-Mental State Examination (MMSE) testing with a score less than 25 or Montreal
- Cognitive Assessment (MoCA) testing with a score of less than 26 and have been screened for major depression. (Current recommendations do not specify modality thus CT can be utilized in certain clinical scenarios)
- Acute onset of mental status changes

Brain Tumor

- Follow up after completion of treatment or with new signs/symptoms
- Surveillance according to accepted clinical standards
- Suspected pituitary tumor with abnormal blood work or vision changes
- Screening for metastatic disease with known wide spread disease or for certain malignancies with a high association of metastatic brain disease.

Seizure

- New onset
- Chronic, with a change in character or unresponsive to therapy

Congenital Conditions

- Known or suspected neurocutaneous disease (conditions such as neurofibromatosis, tuberous sclerosis)
- Evaluation of known or suspected congenital brain abnormalities

- Macrocephaly in a child greater than six months of age. Should have ultrasound as initial study if less than six months of age.
- Microcephaly
- Follow up of a ventricular shunt
- Known or suspected Arnold Chiari malformation
- Developmental delay (The diagnosis of Autism and its spectrum of diseases is made clinically based on a careful history, clinical examination, and observation of behavior.
- Routine imaging is not recommended unless this diagnosis remains in question or there is concern for underlying pathology based on other factors.)

Head Trauma

- Headaches
- Vomiting
- Mental status changes
- Seizures
- Abnormal neurological exam findings

Infection/Inflammatory Disease

- Suspected meningitis or encephalitis
- Underlying medical condition associated with inflammatory conditions of the brain and symptoms suggestive of brain involvement

Pre/Post Procedural

- Pre-operative evaluation
- Post-operative for routine recommended follow up or for potential post-operative complications.
- A repeat study may be needed to help evaluate a patient's progress after treatment procedure intervention or surgery. The reason for the repeat study and that it will affect care must be clear.

Other

- Follow up of known hemorrhage or hematoma
- For further evaluation of an abnormality seen on a Brain CT
- Vertigo felt to be of central origin
- Abnormal EEG

Brain MRI with Internal Auditory Canal (IAC)

- Suspected acoustic neuroma (sensorineural hearing loss, tinnitus, or ataxia)
- Tinnitus and other causes have been ruled out

Brain/Cervical Spine MRI Combination

- For evaluation of known Multiple Sclerosis
- Follow up of Arnold Chiari malformation, syrinx, or syringomyelia

ADDITIONAL INFORMATION

The above medical necessity recommendations are used to determine the best diagnostic study based on a patient's specific clinical circumstances. The recommendations were developed using evidence based

studies and current accepted clinical practices. Medical necessity will be determined using a combination of these recommendations as well as the patient's individual clinical or social circumstances.

REFERENCES USED FOR DETERMINATIONS

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CPT	Description
70551	MRI (Magnetic Resonance Imaging) Brain without contrast
70552	MRI (Magnetic Resonance Imaging) Brain with contrast
70553	MRI (Magnetic Resonance Imaging) Brain without and with contrast