

Subject: Chest MRI, (71550, 71551, 71552)		Original Effective Date: 12/13/17
Policy Number: MCR: 614	Revision Date(s): 11/6/18	
Review Date: 12/13/17, 12/13/18		

DISCLAIMER

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

MRI (Magnetic Resonance Imaging) is a non-X-ray (no ionizing radiation) imaging scan that uses a strong magnetic field and radiofrequency waves to produce detailed cross sectional views of soft tissues, bones and vascular structures. These cross sectional images can be reconstructed, rotated and displayed in many different planes. A MR scan can be performed either without (non-enhanced) or with (contrast enhanced) injection of gadolinium containing contrast material into a vein.

Chest CT is the preferred imaging modality to study most structures of the chest. MRI can be performed if there is a known allergy to iodinated intravenous contrast material and an allergy protocol is not able to be performed.

APPROVAL SUPPORT

Known Tumor or Mass

- Initial evaluation of a recently diagnosed cancer
- Follow up of a known tumor or mass after completion of treatment or with new signs/symptoms
- Surveillance of a known tumor or mass according to accepted clinical standards.
- Evaluation of hilar or mediastinal adenopathy
- Evaluation of chest wall soft tissue mass
- Differentiation of solid vs cystic lesion

Vascular Disease

- For evaluation of known or suspected vascular disease. CTA or MRA may be a more appropriate study.

Other

- For evaluation of suspected thymoma in the setting of Myasthenia Gravis.
- Brachial Plexus evaluation
- Suspected thoracic outlet syndrome and initial x-ray has been performed
- Vocal cord paralysis
- Evaluation of an indeterminate lesion seen on Chest CT scan

Pre/Post Procedural

- Pre-operative evaluation when surgery is planned on the chest
- 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.

ADDITIONAL CRITICAL INFORMATION

REFERENCES USED FOR DETERMINATIONS

1. UpToDate 2018, Magnetic resonance imaging of the thoraxMagnetic resonance imaging of the thoraxMagnetic Resonance Imaging of the thorax;
https://www.uptodate.com/contents/magnetic-resonance-imaging-of-the-thorax?search=chest%20mri&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1
2. Hatabu H, Stock KW, Sher S, et al. Magnetic resonance imaging of the thorax. Past, present, and future. Radiol Clin North Am 2000; 38:593.
3. Kuhlman JE, Bouchardy L, Fishman EK, Zerhouni EA. CT and MR imaging evaluation of chest wall disorders. Radiographics 1994; 14:571.
4. Hierholzer J, Luo L, Bittner RC, et al. MRI and CT in the differential diagnosis of pleural disease. Chest 2000; 118:604.
5. McGarvey LPA, Polley L, and MacMahon J, Review series: chronic cough: common causes and current guidelines, Chronic Respiratory Disease, 2007; 4:215-223.
6. Miller, J.C., Greenfield, A.J., Cambria, R.P., & Lee, S.I. (2008). Aortic aneurysms Journal of the American College of Radiology, 5(5), 678-681. doi: 10.1016/j.jacr.2008.01.016.
7. American College of Radiology (ACR) Appropriateness Criteria, 2013
<https://acsearch.acr.org/docs/3082590/Narrative/>

8. Erasmus, J.J., McAdams, H.P., Donnelly, L.F., & Spritzer, C.E. (2000). MR imaging of mediastinal masses. *Magnetic Resonance Imaging Clinics of North America*, 8(1), 59-89. PMID: 10730236.
9. Russo, V., Renzulli, M., LaPalombara, C., & Fattori, R. (2006). Congenital diseases of the thoracic aorta. Role of MRI and MRA. *European Radiology*, 16(3), 676-684. doi: 10.1007/s00330-005-0027-y.
10. Hierholzer J, Luo L, Bittner RC, et al, MRI and CT in the differential diagnosis of pleural disease, *Chest*, 2000; 118:604-609.
11. Todd M, Shah G and Mukherji S, MR imaging of the brachial plexus, *Top in Mag Reson Imaging*, 2004; 15:113-125.

CODING INFORMATION: THE CODES LISTED IN THIS POLICY ARE FOR REFERENCE PURPOSES ONLY. LISTING OF A SERVICE OR DEVICE CODE IN THIS POLICY DOES NOT IMPLY THAT THE SERVICE DESCRIBED BY THIS CODE IS COVERED OR NON-COVERED. COVERAGE IS DETERMINED BY THE BENEFIT DOCUMENT. THIS LIST OF CODES MAY NOT BE ALL INCLUSIVE.

	Description
71550	MRI (Magnetic Resonance Imaging) Chest without contrast
71551	MRI (Magnetic Resonance Imaging) Chest with contrast
71552	MRI (Magnetic Resonance Imaging) Chest without and with contrast