Cohere Medical Policy -
Magnetic Resonance Imaging (MRI), Cardiac

Clinical Policy for Medical Necessity Review

Version: 5
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Revision: Not Applicable
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Important Notices

Notices & Disclaimers:

GUIDELINES ARE SOLELY FOR COHERE'S USE IN PERFORMING MEDICAL NECESSITY REVIEWS AND ARE NOT INTENDED TO INFORM OR ALTER CLINICAL DECISION-MAKING OF END USERS.

Cohere Health, Inc. ("**Cohere**") has published these clinical guidelines to determine the medical necessity of services (the "**Guidelines**") for informational purposes only, and solely for use by Cohere's authorized "**End Users**". These Guidelines (and any attachments or linked third-party content) are not intended to be a substitute for medical advice, diagnosis, or treatment directed by an appropriately licensed healthcare professional. These Guidelines are not in any way intended to support clinical decision-making of any kind; their sole purpose and intended use is to summarize certain criteria Cohere may use when reviewing the medical necessity of any service requests submitted to Cohere by End Users. Always seek the advice of a qualified healthcare professional regarding any medical questions, treatment decisions, or other clinical guidance. The Guidelines, including any attachments or linked content, are subject to change at any time without notice.

Other Notices:

Policy Information:

Specialty Area: Diagnostic Imaging
Policy Name: Cohere Medical Policy - Magnetic Resonance Imaging (MRI), Cardiac
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17 yo)

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Medical Necessity Criteria

Service: Magnetic Resonance Imaging (MRI), Cardiac

Cohere Health takes an evidence-based approach to reviewing imaging and procedure requests, meaning that sufficient clinical information must be provided at the time of submission to determine medical necessity. Documentation must include a recent and detailed history, physical examination related to the onset or change in symptoms, relevant lab results, prior imaging, and details of previous treatments. Advanced imaging or procedures should be requested after a clinical evaluation by the treating provider, which may include a referral to a specialist.

- When a specific clinical indication is not explicitly addressed in the Cohere Health medical policy, medical necessity will be determined based on established clinical best practices, as supported by evidence-based literature, peer-reviewed sources, professional society guidelines, and state or national recommendations, unless otherwise directed by the health plan.
- Requests submitted without clinical documentation, or those that do not align with the provided clinical information—such as mismatched laterality, body part, or CPT code—may be denied for lack of medical necessity due to insufficient or inconsistent clinical information.
- Repeat diagnostic testing due to technical issues—such as patient motion, incomplete exams, or incorrect imaging sequences—may not be considered medically necessary, as it is the responsibility of the imaging center to deliver appropriate, high-quality studies as originally authorized. Similarly, repeat imaging requested at a different facility based solely on provider preference may not be approved for medical necessity.
- When there are multiple diagnostic or therapeutic procedures requested simultaneously or within the past three months, each will be reviewed independently. Clinical documentation must clearly justify all of the following:
    - The medical necessity of each individual request

    - Why prior imaging or procedures were inconclusive or why additional/follow-up studies are needed
    - How the results will impact patient management or treatment decisions
- Requests involving adjacent or contiguous body parts may be considered not medically necessary if the documentation demonstrates that the patient's primary symptoms can be adequately assessed with a single study or procedure.
- Cohere Health evaluates imaging exams based on medical necessity, regardless of contrast use. If an initial non-contrast study is completed and the radiologist later determines that contrast is needed to clarify a finding, the original authorization number may be used—provided the contrast-enhanced exam is performed at the same imaging center and within the original request's validity period, unless otherwise directed by the health plan.

Description

Cardiac magnetic resonance imaging (MRI) offers exquisite anatomic detail and can also provide valuable functional information through various sequences. While not a first-line imaging modality, it proves highly useful when structural abnormalities (congenital or acquired) or functional deficiencies require further investigation of the heart and pericardial structures.

Medical Necessity Criteria

Indications

Cardiac magnetic resonance imaging (MRI) is considered appropriate if **ALL** of the following are **TRUE:**

- First-line cardiac imaging modality such as transthoracic echocardiogram (TTE) is inconclusive/nondiagnostic, and further imaging is indicated for diagnostic and therapeutic purposes; **AND**
- **ANY** of the following is **TRUE**:
    - Neoplastic conditions (including masses or mass-like conditions) such as cardiac or para-cardiac mass[1]; **OR**
    - Infection or an infectious disorder, including suspected infective endocarditis, myocarditis, or complications not diagnosable by other imaging modalities[2]; **OR**
    - Cardiovascular conditions, known or suspected, including **ANY** of the following:

        - Chest pain of suspected cardiac origin[3,4]; **OR**
        - Dyspnea (or other ischemic equivalent) of suspected cardiac origin[5,6]; **OR**
        - Suspected pulmonary hypertension[7]; **OR**
        - Presyncope or syncope of suspected cardiac origin[8]; **OR**
        - Intermediate to high probability of coronary artery disease[9,10]; **OR**
        - Cardiac valve dysfunction, stenosis, or regurgitation; **OR**
    - For evaluation of **ANY** of the following uncategorized/miscellaneous symptoms when applicable:
        - Suspected hypertrophic cardiomyopathy[11]; **OR**
        - Suspected infiltrative cardiomyopathy (e.g., amyloidosis, hemochromatosis)[11]; **OR**
        - Suspected or confirmed new-onset heart failure[4,12]; **OR**
        - Suspected restrictive pericardial disease[13]; **OR**
    - Preoperative or pretreatment evaluation (e.g., myocardial viability assessment, before cardiac ablation procedures for arrhythmias, etc); **OR**
    - Known or suspected congenital heart disease[14]; **OR**
    - Repeat imaging (defined as a repeat request following recent imaging of the same anatomic region with the same or similar modality) will be considered reasonable and necessary if **ALL** of the following are **TRUE**:
        - There are no established guidelines; **AND**
        - **ANY** of the following:
            - There are new or worsening symptoms not addressed in the guidelines, such that repeat imaging would influence treatment; **OR**
            - There is need for a one-time clarifying follow-up of a prior indeterminate finding; **OR**
            - In the absence of change in symptoms, there is an established need for monitoring which would influence management.

Non-Indications

Cardiac magnetic resonance imaging (MRI) is not considered appropriate if **ANY** of the following is **TRUE**:

- The patient has undergone advanced imaging of the same body part within 3 months without undergoing treatment or developing new or worsening symptoms[15].

*NOTE: MRI in patients with claustrophobia should be requested at the discretion of the ordering provider.
**NOTE: MRI in pregnant patients should be requested at the discretion of the ordering provider and obstetric care provider

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
75557	Cardiac magnetic resonance imaging (MRI) without contrast material, for evaluation of morphology and function
75559	Cardiac magnetic resonance imaging (MRI) with stress imaging, without contrast material, for evaluation of morphology and function
75561	Cardiac magnetic resonance imaging (MRI) without contrast material, followed by contrast material and further sequences, for evaluation of morphology and function
75563	Cardiac magnetic resonance imaging (MRI) with stress imaging, without contrast material, followed by contrast material and further sequences, for evaluation of morphology and function
75565	Cardiac magnetic resonance imaging (MRI) for velocity flow mapping (List separately in addition to code for primary procedure)

C9762	Cardiac magnetic resonance imaging (MRI) for morphology and function, quantification of segmental dysfunction; with strain imaging
C9763	Cardiac magnetic resonance imaging (MRI) for morphology and function, quantification of segmental dysfunction; with stress imaging
S8042	Magnetic resonance imaging (MRI), low-field

Medical Evidence

Miller et al. (2023) CMR-IMPACT (Cardiac Magnetic Resonance Imaging Strategy for the Management of Patients with Acute Chest Pain and Detectable to Elevated Troponin) trial conducted from September 2013 to July 2018 at four U.S. tertiary care hospitals. The trial involved the management of patients with acute chest pain and detectable elevated troponin levels. The 312 participants were randomized into two care pathways: invasive-based (156 participants) and CMR-based (156 participants), with adjustments permitted based on the patient's condition. The primary outcome measured was a composite of death, myocardial infarction, and cardiac-related hospital readmissions or emergency visits. The study followed 312 participants (mean age 60.6 years, 59.9% women) over a median of 2.6 years. The authors conclude no significant difference between clinical and safety outcomes. Benefits include reducing the long-term utilization of invasive angiography, positive discharge outcomes, and enhanced therapeutic yield of angiography. (Clinicaltrials.gov Identifier NCT01931852).[16]

Alabed et al. (2020) performed a meta-analysis concerning patient mortality due to pulmonary arterial hypertension (PAH). A total of 1938 patients in 22 studies were included. Research indicates that CMR-derived metrics for right ventricular (RV) volume and function, rather than left ventricular (LV) measurements, predict clinical deterioration. This insight is pertinent for regulatory authorities seeking clinically relevant trial endpoints. Further, this meta-analysis reaffirms the prognostic significance of CMR metrics across a large patient cohort, enabling assessment of how changes in these metrics relate to clinical outcomes such as worsening health and mortality. The authors reaffirm CMR as a useful prognostic marker in PAH among a large cohort. The study confirms that RV function, RV, and left ventricular volumes predict mortality and clinical deterioration in PAH. The study underscores the rationale for using CMR as a meaningful clinical endpoint in trials testing PAH therapies.[17]

Kwong et al. (2019) conducted a retrospective study to evaluate the prognostic value of stress cardiac magnetic resonance imaging (CMR). The study enrolled 2349 patients with a chest pain syndrome from 13 centers across 11 states. The median follow-up was 5.4 years. Patients who did not

have ischemia or late gadolinium enhancement (LGE) by CMR saw a low incidence of adverse cardiac events and a reduced need for coronary revascularization, suggesting that stress CMR may offer effective cardiac prognostication in patients with a chest pain syndrome.[18]

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Policy Revision History/Information

Original Date: April 8, 2022		
Review History		
Version 2	12/01/2023	Policy criteria reviewed and updated per medical literature
Version 3	08/13/2024	Annual review and policy restructure
Version 4	10/30/2024	Edited repeated imaging criteria language.
Version 5	08/21/2025	Annual review Updated content layout to align with revised template, including repeat imaging criteria Revised Kwong summary in Medical Evidence section