Cohere Medicare Advantage Policy - Magnetic Resonance Imaging (MRI), Temporomandibular Joint (TMJ)

Clinical Policy for Medical Necessity Review

Version: 2.1
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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.

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Other Notices:

Policy Information:

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

Table of Contents

Medical Necessity Criteria

Service: Magnetic Resonance Imaging (MRI), Temporomandibular Joint (TMJ)

Related CMS Documents

Please refer to CMS Medicare Coverage Database for the most current applicable CMS National Coverage.[1-3]

- National Coverage Determination (NCD) 220.2. Magnetic resonance imaging (MRI)
- Local Coverage Determination (LCD). MRI and CT scans of the head and neck (L37373)
    - Billing and Coding: MRI and CT scans of the head and neck (A57204)

Description

Magnetic resonance imaging (MRI) of the temporomandibular joint (TMJ) is a non-invasive diagnostic tool that provides detailed images of the soft tissues and hard structures within the joint. It is highly effective in diagnosing internal derangements, such as disc displacement, inflammation, and degenerative changes. MRI can assess the position and condition of the articular disc, joint effusion, bone marrow edema, and other soft tissue abnormalities. Its superior contrast resolution makes it the gold standard for evaluating TMJ disorders, guiding treatment decisions, and monitoring the efficacy of interventions, particularly in complex cases requiring precise anatomical details.

Medical Necessity Criteria

Indications

Magnetic resonance imaging (MRI), temporomandibular joint (TMJ) is considered appropriate if **ANY** of the following is **TRUE**[4-5]:

- Suspected TMJ disorder with **ALL** of the following:
  - Failure of conservative management (e.g., rest, analgesics, soft diet, oral appliances) must be documented for a period of greater than 6 weeks; **AND**
  - The patient has **ANY** of the following clinical presentations or physical exam findings[6]:
    - Clicking sounds in the jaw joint when opening or closing the mouth; **OR**
    - Difficulty chewing; **OR**
    - Ear pain in front of or below the ear without any signs of infection; **OR**
    - Headaches exacerbated by jaw movement; **OR**
    - Irregular jaw movement with difficulty opening or closing the mouth; **OR**
    - Jaw pain or toothache when waking up after sleep; **OR**
    - Pain localized to the ear when speaking, chewing, or opening the mouth widely; **OR**
    - Pain in the jaw, tooth, neck, and shoulders when speaking, chewing, or opening the mouth widely; **OR**
    - Sensation of teeth not aligning properly; **OR**
- Assessment of known TMJ disorder after treatment; **OR**
- Assessment of known TMJ disorder with new, worsening, or persistent symptoms; **OR**
- Imaging needed before TMJ surgery; **OR**
- Inflammatory arthropathy with **ALL** of the following[5]:
  - Failure of conservative management (e.g., rest, analgesics, soft diet, oral appliances) must be documented for a period of greater than 6 weeks; **AND**
  - **ANY** of the following:
    - Ankylosing spondylitis; **OR**
    - Psoriatic arthritis; **OR**
    - Rheumatoid arthritis[7]; **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

Magnetic resonance imaging (MRI), temporomandibular joint (TMJ) 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.[8]

*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
70336	Magnetic resonance imaging (MRI) (e.g., proton); temporomandibular joint (TMJ)

Disclaimer: S Codes are non-covered per CMS guidelines due to their experimental or investigational nature.

Evaluation of Clinical Harms and Benefits

Clinical determinations for Medicare Advantage beneficiaries are made in accordance with 42 CFR 422.101 guidance outlining CMS's required approach to decision hierarchy in the setting of NCDs/LCDs identified as being "not fully established". When clinical coverage criteria are "not fully established" Medicare Advantage organizations are instructed to create publicly accessible clinical coverage criteria based on widely-accepted clinical guidelines and/or scientific studies backed by a robust clinical evidence base. Clinical coverage criteria provided by Cohere Health in this manner include coverage rationale and risk/benefit analysis.

The potential clinical harms of using these criteria for MRI, TMJ may include:

- Adverse effects from delayed or denied treatment, such as increased TMJ pain and progression of TMJ disorders.[9]
- There is a risk of increased healthcare costs and complications from the inappropriate use of additional interventions.[4]

The clinical benefits of using these criteria for MRI, TMJ may include:

- Improved patient selection for MRI, TMJ, resulting in better long-term outcomes. Ideal candidates should have severe symptoms, have a failed trial of conservative management, or be utilizing MRI for surgical planning purposes.[10]
- Improved diagnostic accuracy for patients with TMJ disorders. MRI can evaluate disc position, osteoarthritis, joint fluid, and bone marrow edema, which may not be fully identifiable from patient symptoms or physical exams.[9]
- Maintenance of rigorous patient safety standards aligned to the best available evidence. Patients with metallic clips on vascular aneurysms who undergo MRI, TMJ are at risk for hemorrhage and cerebral injury due to clip displacement or dislodgement.[11]
- Appropriate allocation of healthcare resources at the individual beneficiary and population level.

Medical Evidence

Sang et al. (2024) performed a systematic literature review to evaluate associations between clinical signs and symptoms of temporomandibular joint (TMJ) disorders and magnetic resonance imaging (MRI) findings. A total of 22 studies with 2905 patients were included, and most studies evaluated joint pain, muscle pain, and joint clicking. Half of the studies found a positive association between joint pain and MRI findings, such as joint effusion, bone marrow edema, disk displacement, and condylar erosion. This review also found that patients with primarily muscle pain were unlikely to benefit from an MRI. Overall, these results suggest that patients with joint pain and limited range of motion may benefit from MRI of the TMJ to better diagnose signs and symptoms of TMJ disorders.[12]

Kopp et al. (2024) conducted a prospective study to compare the image quality between 0.55 Tesla MRI and the standard 1.5 Tesla MRI for the assessment of temporomandibular disorders (TMDs). The disorders are often associated with enduring functional impairments and discomfort. The study included 17 patients (34 TMJs) with suspected intra-articular TMDs. Patients underwent 0.55 Tesla and 1.5 Tesla MRI scans on the same day. MRI is the standard imaging modality for assessing TMDs and provides detailed visualization of disc pathologies and structural changes within the joint. While advancements in MRI technology have focused on enhancing magnetic field strength to achieve higher spatial resolution, these high-field MRI systems necessitate extensive cooling systems, consume substantial energy, and incur significant maintenance expenses, limiting their accessibility in rural areas worldwide. Modern low-field MRI systems are a promising alternative due to their reduced energy requirements and lower maintenance costs. Additional research is needed concerning the suitability of contemporary low-field MRI for TMD evaluation.[13]

Gharavi et al. (2022) reviewed imaging techniques of the TMJ. Chronic TMJ pain affects 5-31% of individuals, with approximately 4% experiencing new onset pain annually. Disorders of the TMJ encompass a range of conditions affecting the TMJ and surrounding structures, ranking as the second most prevalent musculoskeletal ailment, following back pain. While internal

derangement stands as the most prevalent TMJ pathology, other less common conditions include inflammatory arthritis, infections, trauma, and neoplasms. MRI is the primary modality to assess intra-articular conditions due to the exceptional contrast resolution in soft tissues. Contrast-enhanced MRI and CT scans are used in the assessment of arthritis that affects the TMJ, as they offer comprehensive visualization of both acute inflammatory changes and subsequent degenerative arthritis.[5]

Hegab et al. (2021) performed a prospective clinical study on a new classification system for TMJ internal derangement based on MRI and clinical findings to aid nonsurgical treatment. The study involved 435 patients and 747 joints and measured outcomes like maximum mouth opening, pain (via visual analog scale), and joint sound. Results showed significant improvements in mouth opening, pain reduction, and reduced joint sounds over 12 months. The new classification system is comprehensive, and the nonsurgical treatment protocol is practical and tailored to joint pathology.[14]

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Policy Revision History/Information

Original Date: October 17, 2024		
Review History		
Version 2	10/02/2025	Annual review. Updated repeat imaging criteria. Added non-indication for imaging of the same body part within 3 months. Removed relative contraindications (contrast allergy, incompatible implantable devices, metallic foreign body). Revised the Harms and Benefits and Medical Evidence sections.
Version 2.1	11/21/2025	Updated references for L37373 and A57204 to reflect CMS update for 10/23/2025 (no criteria change).