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

Clinical Policy for Medical Necessity Review

Version: 4
Cohere Health UMC Approval Date: August 21, 2025
Last Annual Review: August 21, 2025
Revision: Not Applicable
Next Annual Review: August 21, 2026

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), Temporomandibular Joint (TMJ)
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17 yo)

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Medical Necessity Criteria

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

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

Magnetic resonance imaging (MRI) of the temporomandibular joint (TMJ) is a noninvasive 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**[1,2]:

- Suspected TMJ disorder and **ALL** of the following are **TRUE**:
    - 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 from their clinical presentation and physical exam findings[3]:

        - 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 in the ear area when speaking, chewing, or opening the mouth widely; **OR**
        - Pain in the jaw joint area, tooth, neck, and shoulders; **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 is needed before TMJ surgery; **OR**
- Inflammatory arthropathy and **ALL** of the following are **TRUE**[2]:
    - Failure of conservative management of suspected TMJ disorder (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[4]; **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[5].

*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

Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
70336	Magnetic resonance imaging (MRI) (e.g., proton); temporomandibular joint (TMJ)

Medical Evidence

Kopp et al. (2024) conducted a prospective study to compare the image quality between 0.55 Tesla magnetic resonance imaging (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 temporomandibular joints [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.[6]

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 conditions such as 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 it offers comprehensive visualization of both acute inflammatory changes and subsequent degenerative arthritis.[2]

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.[7]

References

1. American College of Radiology (ACR). ACR-ASNR-SPR practice parameter for the performance of magnetic resonance imaging (MRI) of the head and neck - Resolution 7. Updated 2023. https://www.acr.org/-/media/ACR/Files/Practice-Parameters/MR-HeadNeck.pdf
2. Gharavi SM, Qiao Y, Faghihimehr A, et al. Imaging of the temporomandibular joint. *Diagnostics (Basel)*. 2022 Apr 16;12(4):1006. doi:10.3390/diagnostics12041006
3. Gauer RL, Semidey MJ. Diagnosis and treatment of temporomandibular disorders. *Am Fam Physician*. 2015 Mar 15;91(6):378-86
4. Ahmad M, Schiffman EL. Temporomandibular joint disorders and orofacial pain. *Dent Clin North Am*. 2016 Jan;60(1):105-24. doi:10.1016/j.cden.2015.08.004
5. Wasser EJ, Prevedello LM, Sodickson A, Mar W, Khorasani R. Impact of a real-time computerized duplicate alert system on the utilization of computed tomography. *JAMA Intern Med*. 2013;173(11):1024-1026. doi:10.1001/jamainternmed.2013.543
6. Kopp M, Wiesmueller M, Buchbender N, et al.. MRI of temporomandibular joint disorders: A comparative study of 0.55 T and 1.5 T MRI. *Investigative Radiology.* 2024 Mar;59(3):223-229. doi:10.1097/RLI.0000000000001008
7. Hegab AF, Al Hameed HI, Karam KS. Classification of temporomandibular joint internal derangement based on magnetic resonance imaging and clinical findings of 435 patients contributing to a nonsurgical treatment protocol. *Sci Rep*. 2021 Oct 22;11(1):20917. doi:10.1038/s41598-021-00456-7

Policy Revision History/Information

Original Date: April 1, 2022		
Review History		
Version 2	08/05/2024	Annual review and policy restructure.
Version 3	10/30/2024	Edited repeat imaging criteria language
Version 4	08/21/2025	Annual review Updated to align with revised template, including repeat imaging criteria