



Cohere Medicare Advantage Policy – Magnetic Resonance Imaging (MRI), Neck/Orbit/Face

Clinical Policy for Medical Necessity Review

Version: 2

Cohere Health UMC Approval Date: October 23, 2025

Last Annual Review: October 23, 2025

Revision: Not Applicable

Next Annual Review: October 23, 2026

Important Notices

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Policy Information:

Specialty Area: Diagnostic Imaging

Policy Name: Cohere Medicare Advantage Policy - Magnetic Resonance Imaging (MRI), Neck/Orbit/Face

Type: Adult (18+ yo) | Pediatric (0-17 yo)

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Medical Necessity Criteria

Service: Magnetic Resonance Imaging (MRI), Neck/Orbit/Face

Related CMS Documents

Please refer to the [CMS Medicare Coverage Database](#) for the most current applicable CMS National Coverage.¹⁻⁵

- [National Coverage Determination \(NCD\). Magnetic resonance imaging \(MRI\)\(220.2\)](#)
- [Local Coverage Determination \(LCD\). MRI and CT scans of the head and neck \(L35175\)](#)
 - [Billing and Coding: MRI and CT scans of the head and neck \(A57215\)](#)
- [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) is a noninvasive diagnostic tool that provides detailed images of the soft tissues and hard structures of the extracranial head. MRI allows for the evaluation of the morphology and pathology of extracranial structures, including the neck, orbit, and jaw. The medical imaging technique can be performed with or without contrast and does not require the use of radiation.⁶

Medical Necessity Criteria

Indications

Magnetic resonance imaging (MRI), neck/orbit/face is considered appropriate if **ANY** of the following is **TRUE**:

- **ANY** of the following orbital indications:
 - Trauma-related conditions, including traumatic visual defect with suspected orbital injury⁷; **OR**
 - Trauma that is not related to the cervical spine; **OR**
 - **ANY** of the following conditions, known or suspected:
 - Congenital conditions (e.g., capillary hemangioma, optic nerve hypoplasia); **OR**
 - Detection or follow-up of neoplastic conditions, benign or malignant, (e.g., dermoid, lymphoma, metastases)^{7,8}; **OR**
 - Orbital pseudotumor or orbital inflammatory disease; **OR**
 - Osseous lesions (e.g., fibrodysplasia, Paget's disease), when computed tomography (CT) has been completed or contraindicated, and further evaluation is needed; **OR**
 - Foreign body, suspected clinically or seen on prior imaging when CT has been completed or contraindicated and further evaluation is needed; **OR**
 - Orbital infectious process, and **ANY** of the following:
 - Medical management has failed (e.g., orbital cellulitis not responding appropriately to antibiotics); **OR**
 - The patient is pediatric; **OR**
 - The patient is immunocompromised; **OR**
 - Optic nerve inflammation is suspected, including optic neuritis; **OR**
 - Scleritis, confirmed clinically, with failure of medical management or with complication suspected⁹; **OR**
 - Uveitis, confirmed clinically, with complication suspected; **OR**
 - Thyroid eye disease in **ANY** of the following circumstances¹⁰:
 - Needed to exclude other etiologies of symptoms; **OR**
 - To identify apical crowding in severe or atypical cases (e.g., narrowing of the space at the orbital apex); **OR**
 - To prepare for orbital or strabismus surgery; **OR**
 - Venous conditions such as orbital varices; **OR**

- An additional evaluation, following a complete eye examination that includes funduscopy, is needed to determine the etiology of **ANY** of the following¹⁰:
 - Diplopia; **OR**
 - Enophthalmos; **OR**
 - Exophthalmos; **OR**
 - Eye pain, with history or other signs or symptoms indicating nonischemic pathology; **OR**
 - Orbital asymmetry; **OR**
 - Preseptal or postseptal orbital mass, otherwise unexplained; **OR**
 - Ophthalmoplegia; **OR**
 - Eye movement abnormality in a child (e.g., strabismus or nystagmus in a child greater than or equal to 6 months of age); **OR**
 - Proptosis; **OR**
 - Unilateral papilledema; **OR**
 - Orbital hemorrhage, when the underlying lesion is suspected, and CT has been completed; **OR**
 - Vision loss or visual field deficit with history or other signs or symptoms indicating nonischemic intraorbital pathology; **OR**
- Preoperative, postoperative, or pretreatment evaluation for surgery, radiation, or chemotherapy; **OR**
- Temporal bone and inner ear indications, including **ANY** of the following:
 - MRI-preferred indications, including **ANY** of the following:
 - Cholesteatoma, initial, and 9- to 12-month postoperative follow-up; **OR**
 - Sensorineural hearing loss, acquired or congenital; **OR**
 - Bell's palsy or other facial nerve abnormalities requiring evaluation of the extracranial portion of the nerve; **OR**
 - Tinnitus, unexplained by history or physical examination, that is worsening or affects daily function; **OR**
 - CT is contraindicated or has already been performed, and further evaluation is needed, including **ANY** of the following:
 - **ANY** of the following conditions, known or suspected¹¹:
 - Neoplastic conditions, detection, and follow-up (e.g., tumors of the internal or external auditory canal, inner ear, and mastoid); **OR**
 - Recurrent otitis media (at least 3 episodes in the past 12 months), with complications suspected (e.g., hearing loss, intracranial extension, mastoiditis); **OR**

- Malignant otitis externa, unresponsive to antibiotics; **OR**
- Mastoiditis; **OR**
- Other infectious processes involving the middle or inner ear, where imaging is needed to direct appropriate management; **OR**
- Symptoms or signs, evaluated by complete auditory examination, including **ANY** of the following¹¹:
 - Conductive, mixed-conductive, or congenital hearing loss; **OR**
 - Total deafness, otherwise unexplained; **OR**
 - Vertigo, unexplained by history or physical examination with **ANY** of the following:
 - Worsening symptoms; **OR**
 - Affected daily function; **OR**
 - Associated hearing loss or other neurological deficits; **OR**
 - History of prior infection, such as otitis or meningitis; **OR**
 - History of prior trauma; **OR**
- Trauma-related conditions related to the ear, further evaluation after CT completed¹²⁻¹⁴; **OR**
- Vascular conditions, known or suspected, related to the ear or temporal bone (e.g., pulsatile tinnitus)¹⁵; **OR**
- Face/paranasal sinus indications, including **ANY** of the following:
 - **ANY** of the following MRI-preferred indications:
 - Bell's palsy or other facial nerve abnormalities requiring evaluation of the extracranial portion of the nerve; **OR**
 - Trigeminal neuralgia with **ANY** of the following¹⁶:
 - Atypical trigeminal neuralgia, defined by **ANY** of the following symptoms:
 - Bilateral hearing loss; **OR**
 - Dizziness or vertigo; **OR**
 - Visual changes; **OR**
 - Sensory loss or numbness; **OR**
 - Pain lasting longer than 2 minutes; **OR**
 - Pain outside trigeminal nerve distribution and progression; **OR**
 - Refractory trigeminal neuralgia when done for surgical planning; **OR**
 - Conditions, known or suspected, with CT either contraindicated or already performed, and further evaluation is needed for **ANY** of the following¹¹:
 - Anatomic abnormalities (e.g., deviated septum), suspected as a

- cause of patient symptoms, and surgical management is being considered; **OR**
- Congenital conditions and craniofacial abnormalities⁶; **OR**
 - Sinusitis, if infective and **ANY** of the following^{6,17-19}:
 - A complication is suspected (e.g., abscess formation, involvement of adjacent structures such as orbits, cavernous sinus, or intracranial); **OR**
 - The patient is immunocompromised, and invasive fungal sinusitis is suspected; **OR**
 - Allergic fungal sinusitis (AFS) is suspected, with failed medical treatment or surgery is considered; **OR**
 - **ALL** of the following:
 - **ANY** of the following:
 - Four or more acute episodes per year and surgery or biologic therapy are contemplated; **OR**
 - Not resolving despite two courses of antibiotics; **OR**
 - Chronic rhinosinusitis, symptomatic (e.g., discharge, congestion, anosmia, pain), severity staging or restaging when management change is considered; **AND**
 - CT maxillofacial is nondiagnostic or contraindicated; **OR**
 - Osteomyelitis; **OR**
 - Odontogenic infections with suspected complications (e.g., abscess formation, facial swelling, nerve, sinus involvement); **OR**
 - Unexplained facial swelling (e.g., over the mandible); **OR**
 - Foreign body suspected, clinically or seen on prior imaging; **OR**
 - Neoplastic conditions for initial staging, treatment planning, response assessment, and surveillance; **OR**
 - Sinonasal polyposis detected on nasal endoscopy with **ALL** of the following^{17,20}:
 - The patient is symptomatic; **AND**
 - No relief with appropriate medical therapy (e.g., systemic corticosteroids, antihistamines, and antibiotics); **AND**
 - Surgical intervention or biologic therapy is being contemplated; **OR**
 - Known sinonasal polyposis with complications suspected (e.g., involvement of the orbits); **OR**
 - Noninfectious inflammatory involvement of the sinus is suspected based on clinical history and symptoms (e.g., a history of

- granulomatosis with polyangiitis)¹; **OR**
 - Salivary gland disorder (e.g., chronic unexplained xerostoma, autoimmune involvement, palpable mass, or salivary duct evaluation via MR sialography); **OR**
 - Vascular malformations (e.g., arteriovenous malformations)^{6.15}; **OR**
- For evaluation of **ANY** of the following symptoms when applicable:
 - Anosmia with **ANY** of the following²¹:
 - Persistent anosmia with nondiagnostic endoscopy; **OR**
 - Abnormal endoscopy with further evaluation needed; **OR**
 - Known or suspected neoplasm; **OR**
 - History of head or facial trauma; **OR**
 - Cerebrospinal fluid (CSF) leak (MR cisternography), confirmed on testing or strong clinical history such as prior trauma or CSF leak that increases after Valsalva maneuvers¹⁷; **OR**
 - Epistaxis with failure of conservative management (e.g., nasal packing or tampon, cautery); **OR**
 - Epistaxis with detection of mass, polyp, or other pathology on examination that requires further evaluation⁶; **OR**
- Neck indications, including **ANY** of the following:
 - Initial staging, treatment assessment, and surveillance of known malignant conditions in the neck not otherwise listed (e.g., nasopharynx, oropharynx, hypopharynx, larynx, salivary glands, jaw, oral cavity); **OR**
 - Thyroid masses or goiter when ultrasound is nondiagnostic or requires further work-up; **OR**
 - Lymphadenopathy or palpable mass, and **ANY** of the following^{7.22}:
 - Ultrasound was suspicious for malignancy; **OR**
 - Has been present for at least 2 weeks; **OR**
 - Not felt to be due to infection; **OR**
 - Mass does not resolve after treatment with antibiotics for suspected infection; **OR**
 - Lymphadenopathy or mass is larger than 1.5 cm; **OR**
 - Ulceration of skin over the mass; **OR**
 - Mass or lesion detected on laryngoscopy; **OR**
 - Assessment of signs and symptoms, including **ANY** of the following:
 - Odynophagia; **OR**
 - Globus sensation or dysphagia when clinical examination, including endoscopy and fluoroscopy, are negative or require further evaluation; **OR**

- Vocal cord paralysis; **OR**
- Neck pain that is not related to cervical spine or dissection and has not resolved with conservative treatment (e.g., rest and analgesics) that is documented for a period of greater than 4 weeks; **OR**
- Cranial neuropathy of cranial nerves (CN) 9–11; **OR**
- Brachial plexus pathology, suspected due to anatomic (e.g., cervical rib) or clinical symptoms (e.g., positive electromyography results, symptoms related to scalene muscles, symptoms that worsen with arm overhead), including, but not limited to, trauma, neurogenic thoracic outlet syndrome, neuropathies affecting brachial plexus (e.g., chronic inflammatory demyelinating polyneuropathy [CIDP], or suspected or known mass); **OR**
- Ear pain unexplained by otolaryngological evaluation and a trial of conservative therapy (e.g., topical and systemic antibiotics, ear drops); **OR**
- Infectious conditions (e.g., tonsillitis, epiglottitis, cellulitis) and **ANY** of the following:
 - Suspected compromise of the airway; **OR**
 - Surgery is planned; **OR**
 - Lack of improvement with appropriate therapy; **OR**
 - Retropharyngeal abscess, suspected; **OR**
 - Ludwig’s angina, suspected; **OR**
- Localization of parathyroid adenoma when lab tests indicate primary hyperparathyroidism and neck ultrasound and Sestamibi scan (nuclear medicine scan) are normal or nondiagnostic²³; **OR**
- Presurgical evaluation, planning, or guidance, including radiation planning; **OR**
- Foreign body when initial radiographs and CT are nondiagnostic, unavailable, or contraindicated; **OR**
- Suspected extracapsular spread of a tumor into the surrounding neck structures; **OR**
- Suspected recurrent thyroid cancer or rising thyroglobulin, with negative ultrasound, and physical exams to detect occult neck nodes²⁴; **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), neck/orbit/face may not be 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.²⁵

*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
70540	Magnetic resonance imaging (MRI) (e.g., proton); orbit, face and/or neck; without contrast material(s)
70542	Magnetic resonance imaging (MRI) (e.g., proton); orbit, face and/or neck; with contrast material(s)
70543	Magnetic resonance imaging (MRI) (e.g., proton); orbit, face and/or neck; without contrast material(s) and further sequences

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 may include:

- A potential exists for allergic reactions to contrast material, if used in the study. The MRI department staff will monitor the patient for an allergic reaction and treat as recommended by a physician.^{6,29,30}
- Use of gadolinium-based contrast is not recommended during pregnancy or in patients with acute or chronic kidney injury or disease.^{6,29,30}
- If sedation is used for the study (for anxiety or claustrophobia), there is a risk of over-sedation. The patient will be monitored during the procedure to reduce this risk.
- There is uncertain risk for magnetic resonance imaging (MRI) in pregnant patients. The decision to image in a pregnant patient should be made on an individual basis in consultation with the patient's obstetric provider.³¹
- There is a risk of increased healthcare costs and complications from the inappropriate use of emergency services and additional interventions.³²

The clinical benefits of using these criteria include:

- MRI of the orbits can reveal abnormal thickening of medial and inferior recti muscles associated with orbital inflammatory syndrome when serologic laboratory data is unrevealing.³³
- MRI is the most widely studied modality in patients with suspected olfactory dysfunction, along with detailed medical history and orthonasal smell tests. Anosmia and hyposmia have many etiologies, including trauma, chronic sinusitis, neoplasms, and respiratory viral infections. Criteria for the timing and sequence of imaging modalities vary in patients with olfactory dysfunction.^{26,27}

- MRI and computed tomography (CT) are the primary imaging modalities used to evaluate patients with visual loss and are often complementary in evaluating these patients.³⁴
- Enhanced overall patient satisfaction and healthcare experience.
- Appropriate allocation of healthcare resources at the individual beneficiary and population levels.

Medical Evidence

Guggenberger et al. (2023) conducted a systematic review and individual participant data meta-analysis of orbital magnetic resonance imaging (MRI) of giant cell arteritis with ocular manifestations. The review included 32 studies in their review, representing 51 patients. The authors of the review concluded that MRI can be used as a supplemental tool in the detection and diagnosis of inflammation and ischemia in an asymptomatic eye.²⁶

Gregurić et al. (2021) conducted a systematic review of MRI and CT diagnostic accuracy and reliability in the staging of chronic rhinosinusitis. The authors reviewed 21 studies, 12 of which included original data. The authors concluded that when MRI is used as a staging tool, it has a comparable diagnostic accuracy to CT examinations.¹⁹

Bond et al. (2020) present a review of the diagnostic evaluation of anosmia and hyposmia, including etiology (e.g., trauma, chronic sinusitis, neoplasms, respiratory viral infections). Smell tests primarily diagnose the conditions; however, MRI is often widely used. Functional MRI can diagnose suspected post-traumatic abnormalities.²⁷

Nael et al. (2015) conducted a study to identify distinctive MR perfusion patterns (PTAs) to allow differentiation from neighboring thyroid tissue and cervical lymph nodes, which may exhibit similar imaging characteristics. Utilizing dynamic 4D contrast-enhanced MR imaging enables the exploitation of the hypervascular features of PTAs. Multiparametric MR perfusion analysis demonstrates a diagnostic accuracy of 96% in distinguishing PTAs from adjacent thyroid tissue or lymph nodes.²⁸

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Policy Revision History/Information

Original Date: October 24, 2024

Review History

Version 2	10/23/2025	<p>Annual review.</p> <p>Reframed and reworded eye examination indications.</p> <p>Removed overlapping lymphadenopathy indications.</p> <p>Rearranged bullets for improved usability and organization.</p> <p>Updated Harms and Benefits section.</p> <p>Updated and expanded medical evidence section, replacing older studies with more recent research.</p>
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