Cohere Medicare Advantage Policy - Computed Tomography (CT), Face/Sinus

Clinical Guidelines for Medical Necessity Review

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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. This policy may be superseded by existing and applicable Centers for Medicare & Medicaid Services (CMS) statutes.

Other Notices:

Guideline Information:

Specialty Area: Diagnostic Imaging
Guideline Name: Cohere Medicare Advantage Policy - CT Face/Sinus
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Medical Necessity Criteria

Service: *Computed Tomography (CT), Face/Sinus*

Benefit Category

Diagnostic Services in Outpatient Hospital
Diagnostic Tests (other)

Please Note: This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service.

Related CMS Documents

Please refer to CMS Medicare Coverage Database for the most current applicable CMS National Coverage.[16-20]

- National Coverage Determination (NCD). Computed Tomography (220.1)
- Local Coverage Determination (LCD). MRI and CT Scans of the Head and Neck (L37373).
- 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).
- Billing and Coding: MRI and CT Scans of the Head and Neck (A57204).

Recommended Clinical Approach

Computed tomography (CT) of the face/sinus is an advanced imaging modality best utilized per institutional ENT, oncologic, infectious, disease, and radiologic protocols. The specialty guidelines may be consulted before ordering and can direct appropriate contrast utilization patterns.

Evaluation of Clinical Harms and Benefits

Cohere Health uses the criteria below to ensure consistency in reviewing the conditions to be met for coverage of CT of the face/sinuses. This process helps to prevent both incorrect denials and inappropriate approvals of medically necessary services. Specifically, limiting incorrect approvals reduces the risks associated with unnecessary procedures, such as complications from surgery, infections, and prolonged recovery times.

The potential clinical harms of using these criteria may include:

- Inherent risk of procedure: There are inherent risks of imaging, including cumulative radiation exposure, contrast, allergy, nephrotoxicity, and contrast extravasation into surrounding tissues.[21-24]
- Potential danger to pregnancy: CT imaging completed during pregnancy confers a dose of ionizing radiation to the fetus and is generally only utilized when the potential benefits of this specific imaging modality outweigh the risks to the pregnancy.[25] Fetal risk includes fetal demise, intrauterine growth restriction, microcephaly, delayed intellectual development, risk of childhood cancer, and fetal thyroid injury.[25]
- Increased healthcare costs and complications from the inappropriate use of additional interventions.[26]

The clinical benefits of using these criteria include:

- CT scanning is cost-effective as a primary diagnostic tool because it provides a robust, encompassing view of target structures, conceivably reducing downstream tests and reducing healthcare costs overall.[16]
- Widespread availability of CT scanners has increased clinical adoption of CT as a preferred diagnostic imaging method.[27]
- CT is a faster imaging tool with lower scan duration than similar imaging modalities (i.e. - MRI) and decreased imaging processing time.[27]
- As an imaging modality, CT is noninvasive - particularly when compared to other modalities, such as endoscopic staging of sinus conditions.[5] It is widely accepted that noninvasive procedures are less costly, associated with fewer complications, and preferred by both patients and providers.
- Enhanced overall patient satisfaction and healthcare experience.

This policy includes provisions for expedited reviews and flexibility in urgent cases to mitigate risks of delayed access. Evidence-based criteria are employed to prevent inappropriate denials, ensuring that patients receive medically necessary care. The criteria aim to balance the need for effective treatment with the minimization of potential harms, providing numerous clinical benefits in helping avoid unnecessary complications from inappropriate care.

In addition, the use of these criteria is likely to decrease inappropriate denials by creating a consistent set of review criteria, thereby supporting optimal patient outcomes and efficient healthcare utilization.

Medical Necessity Criteria

Indications

- ➔ **Computed tomography (CT), face/sinus (including soft tissues of the extracranial head and neck)** is considered appropriate for **ANY** of the following:
  - ◆ Conditions, known or suspected, including **ANY** of the following[1]:
    - Anatomic abnormalities (e.g. deviated septum), suspected as a cause of patient symptoms and surgical management is being considered; **OR**
    - Bell's palsy or other facial nerve abnormalities requiring evaluation of the extracranial portion of the nerve (MRI is contraindicated or cannot be performed); **OR**
    - Congenital conditions and craniofacial abnormalities[2]; **OR**
    - Sinusitis and **ANY** of the following is **TRUE**[2-5]:
      - Four or more acute episodes per year and surgery/biologic therapy are contemplated; **OR**
      - Not resolving despite 2 courses of antibiotics; **OR**
      - 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) suspected, with failed medical treatment or surgery is contemplated; **OR**
      - Chronic rhinosinusitis, symptomatic (discharge, congestion, anosmia, pain), severity staging or restaging when management change is contemplated; **OR**
    - Suspected osteonecrosis when the patient is on bisphosphonates or has had radiation; **OR**
    - Osteomyelitis; **OR**
    - Odontogenic infections with suspected complications (e.g., abscess formation, facial swelling, nerve, sinus involvement); **OR**

- Unexplained focal facial swelling; **OR**
- Foreign-body (suspected), clinically or seen on prior imaging; **OR**
- Neoplastic conditions for initial staging, treatment planning, response assessment, and surveillance; **OR**
- Lymphadenopathy with failure of conservative management (e.g., antibiotics, anti-inflammatory) that is documented for a period of greater than two weeks; **OR**
- Sinonasal polyposis detected on nasal endoscopy with **ALL** of the following[3,6]:
    - The patient is symptomatic; **AND**
    - No relief with appropriate medical therapy (e.g., corticosteroids, antihistamines, antibiotics); **AND**
    - Surgical intervention or biologic therapy is being contemplated; **OR**
- Known sinonasal polyposis with complications suspected, (e.g., involvement of the orbits); **OR**
- Non-infectious inflammatory involvement of the sinus is suspected based on clinical history and symptoms (e.g., history of granulomatosis with polyangiitis)[1]; **OR**
- Salivary stones, suspected[1]; **OR**
- Salivary gland inflammation (sialadenitis)[1]; **OR**
- Trigeminal neuralgia with **ANY** of the following[7]:
    - MRI is contraindicated or cannot be performed; **OR**
    - Atypical features present (e.g., symptoms outside of typical short-duration trigeminal nerve distribution pain); **OR**
    - Age less than 40; **OR**
    - Failure of conservative management with failure of at least two concurrent agents (e.g., gabapentin, duloxetine) and surgery is being considered; **OR**
- Vascular malformations (e.g., arterio-venous malformations)[1,8]; **OR**

◆ For evaluation of **ANY** of the following symptoms when applicable:

- Anosmia with **ANY** of the following[9]:
    - 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, confirmed on testing or strong clinical history (e.g., prior trauma or CSF leak that increases after Valsalva maneuvers)[3]; **OR**
    - Epistaxis with failure of conservative management (e.g., nasal packing/tampon, cautery, etc); **OR**
    - Epistaxis with detection of mass, polyp, or other pathology on examination that requires further evaluation[1]; **OR**
- ◆ Preoperative, postoperative, and pre-treatment evaluation for surgery, radiation, or chemotherapy; **OR**
- ◆ Maxillo-facial trauma based on history, swelling, prior imaging, and need for further evaluation; **OR**
- ◆ Repeat imaging (defined as repeat request following recent imaging of the same anatomic region with the same modality), in the absence of established guidelines, will be considered reasonable and necessary if **ANY** of the following is **TRUE**:
    - New or worsening symptoms, such that repeat imaging would influence treatment; **OR**
    - 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

- ➔ **Computed tomography (CT), face/sinus (including soft tissues of the extracranial head and neck)** is not considered appropriate if **ANY** of the following is **TRUE**[10]:
    - ◆ If contrast is used, history of anaphylactic allergic reaction to iodinated contrast media.

*NOTE: The referring professional and radiologist should discuss the risks and benefits of contrast media administration, including possible prophylaxis, in patients with chronic or worsening kidney disease or severe renal failure.
**NOTE: CT in pregnant patients should be requested at the discretion of the ordering provider and obstetric care provider.

***NOTE: CT in patients with claustrophobia should be requested at the discretion of the ordering provider.

Disclaimer on Radiation Exposure in Pediatric Population

Due to the heightened sensitivity of pediatric patients to ionizing radiation, minimizing exposure is paramount. At Cohere, we are dedicated to ensuring that every patient, including the pediatric population, has access to appropriate imaging following accepted guidelines. Radiation risk is dependent mainly on the patient's age at exposure, the organs exposed, and the patient's sex, though there are other variables. The following technical guidelines are provided to ensure safe and effective imaging practices:

Radiation Dose Optimization: Adhere to the lowest effective dose principle for pediatric imaging. Ensure that imaging protocols are specifically tailored for pediatric patients to limit radiation exposure.[11-12]

Alternative Modalities: Prioritize non-ionizing imaging options such as ultrasound or MRI when clinically feasible, as they are less likely to expose the patient to ionizing radiation. For instance, MRI or ultrasound should be considered if they are more likely to provide an accurate diagnosis than CT, fluoroscopy, or radiography.[11-12]

Cumulative Dose Monitoring: Implement systems to track cumulative radiation exposure in pediatric patients, particularly for those requiring multiple imaging studies. Regularly reassess the necessity of repeat imaging based on clinical evaluation.[11-12]

CT Imaging Considerations: When CT is deemed the best method for achieving a correct diagnosis, use the lowest possible radiation dose that still yields reliable diagnostic images.[11-12]

Cohere Imaging Gently Guideline

The purpose of this guideline is to act as a potential override when clinically indicated to adhere to Imaging Gently and Imaging Wisely guidelines and As Low As Reasonably Possible (ALARA) principles.

Level of Care Criteria

Inpatient and Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
70486	Computed tomography (CT), maxillofacial area; without contrast material
70487	Computed tomography (CT), maxillofacial area; with contrast material(s)
70488	Computed tomography (CT), maxillofacial area; without contrast material, followed by contrast material(s) and further sections
76380	Computed tomography, limited or localized follow-up study

Disclaimer: G, S, I, and N Codes are non-covered per CMS guidelines due to their experimental or investigational nature.

Medical Evidence

Bedernik et al. (2022) conducted a randomized control trial (RCT) to assess image quality by comparing single-energy computed tomography (SECT) with automated tube voltage adaptation (TVA) to dual-energy CT (DECT) weighted average images. A total of 80 patients underwent SECT or radiation dose-matched DECT. The effective radiation dose (ED) showed no significant difference between the SECT and DECT study groups. Compared to the SECT group, the DECT group exhibited significantly higher contrast-to-noise ratio differences (CNRD) for jugular veins relative to fatty tissue and muscle tissue relative to fatty tissue. However, the CNRD for jugular veins relative to muscle tissue was comparable between groups. Image artifacts were also less pronounced, and overall diagnostic acceptability was higher in the DECT group. Overall, DECT-weighted average images demonstrate superior objective and subjective image quality compared to SECT performed with TVA in head and neck imaging.[13]

Smith-Bindman et al. (2020) performed an RCT to study the efficacy of interventions to lower the amount of radiation patients are exposed to. The RCT included 864,080 adults at 100 facilities who underwent a CT scan, including CT Head (n = 1,156,657 scans). The study included two primary measures: the percentage of high-dose CT scans and the average effective dose administered at the facility level. The study's secondary measure included the doses received by specific organs. Outcomes were assessed with respect to the impact of the interventions and outcomes post-intervention. Data were contrasted with pre-intervention data, utilizing hierarchical generalized linear models that accounted for temporal patterns and patient attributes. In conclusion, data regarding CT radiation dosage and practical recommendations may improve quality, including significant dose reductions, especially for organ-specific doses.[14]

Aulino et al. (2018) report on a clinical trial that focused on an assessment tool for the late effect continuum of lymphedema and fibrosis (LEF) for patients with head and neck cancer (HNC) undergoing CT. The tool evaluates areas of soft tissue damage resulting from tumors, surgical interventions, or radiation therapy. The tool analyzed CT scans taken before and after treatment in 10 patients with HNC. The finalized tool comprised 11 elements, including the assessment of fat stranding at six specific sites, epiglottic thickness measurement, and measurement of prevertebral soft tissue thickness at C3. A total of 176 CT scans from the 20 patients (with a range of 4-14 scans per patient) were evaluated. The final version of the LEF assessment tool (CT-LEFAT) offers a standardized approach to assess critical

sites affected by soft tissue damage. Studies continue to evaluate reliability and validity.[15]

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Clinical Guideline Revision History/Information

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