

2024 Computed Tomography (CT) Maxillofacial Sinus

Diagnostic Imaging

CT-Max-HH

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Computed Tomography (CT) Maxillofacial Sinus



NCD 220.1

See also, **NCD 220.1**: Computed Tomography at https://www.cms.gov/medicare-coverage-database/search.aspx if applicable to individual's healthplan membership.

CT General Contraindications

Computed tomography (CT) may be contraindicated for ANY of the following: [1]

- Allergy to contrast (if contrast is used)
- Pregnancy
- Renal impairment and dialysis unmanageable (if contrast is used)

Preamble: Pediatric Diagnostic Imaging

HealthHelp's clinical guidelines for the Diagnostic Imaging program, are intended to apply to both adults and pediatrics (21 years of age or younger), unless otherwise specified within the criteria.

CT Maxillofacial Sinus Guideline

Computed tomography (CT) of the maxillofacial sinus area is considered medically appropriate when the documentation demonstrates **ANY** of the following:

 Anosmia or dysosmia is known, persistent AND of unknown origin, to evaluate for peripheral sinonasal disease and/or bone-related pathology.

References: [16]

- 2. Cancer is suspected or known, for **ANY** of the following:
 - a. Cancer of the face and sinuses is suspected or known, based on clinical findings.
 - b. Recurrence or metastasis is suspected.
 - c. Staging evaluation
 - d. Surveillance following the National Comprehensive Cancer Network (NCCN) Guidelines recommended schedule (see *Surveillance*section).
 - e. Tumor, sinonasal mass, face mass or lesion, based on exam, nasal endoscopy or prior imaging.

References: [6] [4] [9] [12] [16]



- 3. Cerebrospinal fluid (CSF) rhinorrhea is known, to further characterize a bony defect. **References:** [12]
- 4. Granulomatosis with polyangiitis (Wegener's granulomatosis) disease *References:* [10]
- 5. Infectious or inflammatory condition evaluation for **ANY** of the following:
 - a. Abscess is suspected or known.
 - Infectious adenopathy is suspected, AFTER at least 2 weeks of antibiotic management AND symptoms persist (eg, elevated white blood cells, fever, swelling).
 - c. Osteomyelitis is suspected **AFTER** prior X-ray is non-diagnostic or indeterminate **AND MRI** is contraindicated or unavailable.
 - d. Rhinosinusitis (sinusitis) evaluation for **ANY** of the following:
 - i. Acute (less than 4 weeks) or subacute (4 to 12 weeks), [23]ymptoms (eg, fever, pain, rhinorrhea) persist **AND EITHER**:
 - A. Medication management (eg, antihistamines, nasal saline irrigation, steroids) AND antibiotics were attempted for 2 courses of at least 5 days each AND symptoms persist.
 - B. Recurrent (at least 4 occurrences in a year) infections.
 - ii. Chronic (more than 12 weeks) infection and **ALL** of the following:
 - A. **AT LEAST 2** of the following:
 - I. Facial pain, pressure, fullness
 - II. Discharge is mucopurulent.
 - III. Nasal obstruction or congestion
 - IV. Taste or smell are decreased or absent.
 - B. Medication management (eg, antibiotics, antihistamines, nasal saline irrigation, steroids) **FAILED**.
 - iii. Complications (eg, cavernous sinus thrombosis, infection [intracranial, preseptal or orbital], osteomyelitis, suspected cerebrospinal fluid [CSF] leak) are suspected.
 - iv. Fungal sinusitis is suspected.
 - v. Nasal polyp is <u>known</u> (especially unilaterally) **AND** extension outside the nasal cavity is <u>suspected</u>.



- vi. Nasal polyp or obstruction (unilateral) is suspected.
- vii. Pediatric individual and **ANY** of the following:
 - A. Fungal infection (more common in immunocompromised children) is suspected.
 - B. Orbital or central nervous system involvement (eg, altered level of consciousness, nerve deficit, proptosis, seizure, swollen eye) is suspected.
 - Sinusitis is persistent or recurrent and is **NOT** responding to treatment (primarily antibiotics, treatment may require a change of antibiotics)
- viii. Symptoms (eg, elevated white blood cells, fever, rhinorrhea) persist despite medical management **AND** is a possible surgical candidate.
- e. Sialadenitis is suspected, symptoms are bilateral (eg, fever, pain, swelling), abscess is suspected **OR** <u>ultrasound is non-diagnostic or indeterminate</u>.

References: [12] [15] [17] [8] [13] [7] [20] [3]

6. Osteonecrosis of the jaw is suspected or known.

References: [2] [11]

- 7. Peri-procedural care to guide invasive procedure planning **OR** post-operative follow-up.
- 8. Prior CT maxillofacial sinus imaging is non-diagnostic or indeterminate. (*NOTE: One follow-up is appropriate to evaluate for changes since preceding imaging finding[s]. Further surveillance is appropriate when lesion is specified as "highly suspicious" or there is a change since last exam.)
- 9. Salivary gland stones are suspected or known.
- 10. Structural abnormality (eg, deviated septum, polyp) or lesion is suspected or known and **ALL** of the following:
 - a. Airway obstruction is caused by lesion and/or structural abnormality.
 - b. Imaging is needed for treatment planning.
 - c. Seen on prior imaging or direct visualization

References: [22]

11. Trigeminal neuralgia or neuropathy is suspected or known, with atypical features (eg, bilateral hearing loss, dizziness/vertigo, numbness, pain more than 2 minutes, pain outside trigeminal nerve distribution, progression, sensory loss) and **MRI** is contraindicated or unavailable.



References: [16]

- 12. Trauma to the face is known and **ANY** of the following:
 - a. Cerebrospinal fluid (CSF) leak is <u>suspected</u>.
 - b. Facial injury is severe (eg, bony step-off, depression, ecchymosis, malocclusion, nasal deformity) and fracture is <u>suspected</u>.
 - c. Fracture is known, for treatment planning or surgical planning.

References: [14] [18]

Combination CT Abdomen and Pelvis/CT Chest/CT Sinus/MRI Brain

Computed tomography (CT) abdomen and pelvis combined with CT chest, CT sinus and magnetic resonance imaging (MRI) brain is considered medically appropriate when the documentation demonstrates a bone marrow transplant is planned, for initial work-up.

Combination CT Chest and CT Sinus

Computed tomography (CT) of the chest combined with CT of the sinus is considered medically appropriate when the documentation demonstrates granulomatosis with polyangiitis (Wegener's granulomatosis) disease.



LCD 37373

See also, **LCD 37373**: MRI and CT Scans of Head and Neck at https://www.cms.gov/medicare-coverage-database/search.aspx if applicable to individual's healthplan membership.



LCD 35175

See also, **LCD 35175**: MRI and CT Scans of the Head and Neck at https://www.cms.gov/medicare-coverage-database/search.aspx if applicable to individual's healthplan membership.

Brain and Head Surveillance

Surveillance imaging (after cancer treatment) of the brain and head is considered medically appropriate when the documentation demonstrates **ANY** of the following:



Bone Cancer Surveillance

NCCN Bone Cancer Version 1.2025

Bone cancer surveillance includes **ANY** of the following:

- 1. Chondrosarcoma surveillance for **ANY** of the following:
 - a. Atypical cartilaginous tumor surveillance with **ALL** of the following:
 - i. Chest imaging every 6 to 12 months for 2 years, then annually as clinically indicated
 - ii. Primary site X-rays and/or cross-sectional imaging magnetic resonance imaging (MRI) (with and without contrast) or computed tomography (CT) (with contrast) every 6 to 12 months for 2 years, then annually as clinically indicated
 - Low-grade, extracompartmental appendicular tumor, grade I axial tumors or highgrade (grade II or III, clear cell or extracompartmental) tumors surveillance with ALL of the following:
 - Chest imaging every 3 to 6 months, may include CT at least every 6 months for 5 years, then annually for at least 10 years, as clinically indicated
 - ii. Primary site X-rays and/or cross-sectional imaging MRI (with and without contrast) or CT (with contrast) as clinically indicated.
- 2. Chordoma surveillance with **ALL** of the following:
 - a. Chest imaging every 6 months, with CT included, annually for 5 years, then annually thereafter as clinically indicated
 - b. Imaging of primary site, timing and modality (eg, MRI \pm CT [both with contrast], X-ray) as clinically indicated up to 10 years
- 3. Ewing Sarcoma after primary treatment completed and stable/improved disease, surveillance with **ALL** of the following:
 - a. Chest imaging with X-ray or CT: every 3 months
 - b. Primary site imaging with MRI ± CT (both with contrast) and X-ray, increase intervals after 24 months and after 5 years, annually as clinically indicated (indefinitely) (*NOTE: Consider PET/CT [head-to-toe] and/or bone scan.)
- 4. Giant cell tumor of the bone surveillance with **ALL** of the following:
 - a. Chest imaging every 6 to 12 months for 4 years, then annually thereafter as clinically indicated



- b. Surgical site imaging as clinically indicated (eg, CT and/or MRI, both with contrast, X-ray)
- 5. Osteosarcoma surveillance with primary site and chest imaging (using same imaging that was done for initial work-up) for **ANY** of the following: (***NOTE**: Consider PET/CT [head-to-toe] and/or bone scan.)
 - a. Image every 3 months for years 1 and 2
 - b. Image every 4 months for year 3
 - c. Image every 6 months for years 4 and 5
 - d. Image annually for year 6 and thereafter, as clinically indicated

Central Nervous System (CNS) Cancer Surveillance

NCCN Central Nervous System Cancer Version 3.2024

Central nervous system (CNS) cancer surveillance includes **ANY** of the following:

- 1. Brain metastasis, limited **OR** extensive, image with brain magnetic resonance imaging (MRI) every 2 to 3 months for 1-2 years, then every 4 to 6 months indefinitely
- 2. Glioma and **ANY** of the following:
 - a. Low-grade glioma, image with brain MRI every 3 to 6 months for years 3 through 5, then at least annually as clinically indicated
 - b. High grade glioma, image with brain MRI 2 to 8 weeks after radiation therapy, then every 2 to 4 months for 3 years, then every 3 to 6 months indefinitely
- 3. Medulloblastoma, image with brain MRI every 3 months for 2 years, then every 6 to 12 months for years 5 through 10, then every 1 to 2 years as clinically indicated. (***NOTE**: For patients with previous spine disease, concurrent spine imaging as clinically indicated.)
- 4. Meningiomas, WHO Grade 1 or 2 **OR** unresectable, image with brain MRI at months 3, 6 and 12, then every 6 to 12 months for 5 years, then every 1 to 3 years as clinically indicated. WHO grade 3 meningiomas: Brain MRI, every 2–4 months for 3 years, then every 3–6 months.
- 5. Primary CNS lymphoma, image with brain MRI every 3 months for 2 years, then every 6 months until year 5, then annually indefinitely (*NOTE: for individuals with previous spine disease, concurrent spine imaging and cerebrospinal fluid (CSF) sampling as clinically indicated)
- 6. Primary spinal cord tumors and **ANY** of the following:
 - a. Low-grade tumors, image with spine MRI every 3 to 6 months until year 5, then at least annually indefinitely



- b. High-grade tumors, image with spine MRI every 2 to 6 weeks after treatment, then every 2 to 4 months until year 2-3, then every 3 to 6 months until year 5, then every 6 to 12 months indefinitely
- 7. Spine metastasis, image with spine MRI or computed tomography (CT) 1 to 3 months after treatment, then every 3 to 4 months for 1 year, then clinically as indicated

Head and Neck Cancers Surveillance

NCCN Head and Neck Cancers Version 4.2024

Head and neck cancers surveillance for locoregionally advanced disease after treatment, includes **ANY** of the following:

- Short-term surveillance (less then 6 months after treatment), if there is high-risk of early recurrence, symptoms of early recurrence or before starting adjuvant post-operative therapy:
 - a. Computed tomography (CT) and/or magnetic resonance imaging (MRI) within 3 to 4 months post-operatively to establish a new baseline for future comparisons
 - b. FDG positron emissions tomography/computed tomography (FDG PET/CT) should be performed within 3–6 months of definitive radiation or systemic therapy/RT.
 - c. Incomplete response is suspected: CT or MRI scan earlier (eg, 4 to 8 weeks) based on the clinical situation. (*NOTE: Consider an ultrasound [US] of the neck for targeted sampling.)
- 2. Long-term surveillance (6 months or more from end-of-treatment, up to 5 years after treatment) with ultrasound, CT, MRI, PET/CT and/or FDG PET/CT (as appropriate) to obtain surveillance for lesions that are recurrent, second primary or at distant sites.¹

Histiocytic Neoplasms Surveillance

NCCN Histiocytic Neoplasms Version 2.2024

Histiocytic neoplasms surveillance imaging includes **ANY** of the following:

1. Erdheim-Chester disease surveillance imaging includes **ANY** of the following:

¹Per the National comprehensive cancer network (NCCN) Guidelines for Head and Neck Cancers, there are no consensus guidelines for the surveillance imaging type, frequency or duration for locoregionally advanced disease. If an FDG PET/CT at 3 months post-treatment is negative, there are no data to support substantial benefit for further routine imaging when asymptomatic with negative exam. In the absence of multi-institutional prospective data, a tailored approach to surveillance with attention to tumor type, stage, prognostic factors, symptomatology, and physical exam changes or restrictions is recommended.



- a. FDG-positron emission tomography/computed tomography (PET/CT) every 3 to 6 months after starting therapy until stabilization of the disease, and as clinically indicated after 2 years.
- b. Organ specific imaging with CT (+ contrast) or MRI (± contrast) every 3 to 6 months until disease stabilization and then every 6 to 12 months
- 2. Langerhans cell histiocytosis surveillance imaging includes FDG-PET/CT (preferred), FDG-PET or CT/magnetic resonance imaging (MRI) every 3 to 6 months for the first 2 years after completion of therapy, then no more than annually (*NOTE: For individuals who are asymptomatic with a single-site bone lesion, imaging surveillance can end after 1 year, with continued tracking of symptoms)
- 3. Rosai-Dorfman disease (RDD), surveillance imaging includes **ANY** of the following: (***NOTE**: for individuals who are asymptomatic with a single-site bone lesion, imaging surveillance can end after 1 year, with continued tracking of symptoms)
 - a. FDG-PET/CT every 3 to 6 months after starting therapy until stabilization of disease
 - b. Organ specific imaging with CT (+ contrast) or MRI (± contrast) every 3 to 6 months until disease stabilization and then every 6 to 12 months

Melanoma: Uveal Surveillance

NCCN Melanoma: Uveal Version 1.2024

Uveal melanoma surveillance imaging includes **ANY** of the following:

- 1. Low risk disease surveillance imaging every 12 months for 5 years or clinically as indicated, includes **ANY** of the following:
 - a. Chest/abdomen/pelvis computed tomography (CT) (+ contrast)
 - b. Chest X-ray (dual subtraction)
 - c. Magnetic resonance (MR) (+ contrast) or ultrasound of liver
- 2. Medium risk disease surveillance imaging every 6 to 12 months for 10 years, then as clinically indicated, includes **ANY** of the following:
 - a. Chest/abdomen/pelvis CT (+ contrast)
 - b. Chest X-ray (dual subtraction)
 - c. MR (+ contrast) or ultrasound of liver
- 3. High risk disease surveillance imaging every 3 to 6 months for 5 years, then every 6 to 12 months for 10 years, then clinically as indicated, includes **ANY** of the following:
 - a. Chest/abdomen/pelvis CT (+ contrast)



- b. Chest X-ray (dual subtraction)
- c. MR (+ contrast) or ultrasound of liver

Neuroendocrine and Adrenal Tumors Surveillance

NCCN Neuroendocrine and Adrenal Tumors Version 2.2024

Neuroendocrine and adrenal cancer surveillance includes **ANY** of the following:²

- 1. Adrenal gland tumors surveillance imaging includes **ANY** of the following:
 - Localized disease: chest computed tomography (CT) (± contrast) and abdominal CT or magnetic resonance imaging (MRI) (+ contrast) every 12 weeks to 12 months up to 5 years, then clinically as indicated
 - Locoregional unresectable or metastatic disease; chest CT (± contrast) and abdominal/pelvic CT or MRI (+ contrast) or FDG positron emission tomography (PET)/CT every 12 weeks to 12 months up to 5 years, then clinically as indicated
- 2. Carcinoid syndrome surveillance imaging includes **BOTH** of the following:
 - a. Abdominal/pelvic multiphasic CT or MRI every 12 weeks to 12 months and chest CT (\pm contrast) as clinically indicated
 - b. Echocardiogram every 1 to 3 years or as clinically indicated **without** known carcinoid heart disease (CHD) and at least annually for patients with established CHD.
- 3. Gastrointestinal (GI) tract (jejunum/ileum/colon, duodenum, rectum), lung and/or thymus neuroendocrine tumor (NET) surveillance includes <u>imaging post-resection</u> with **ANY** of the following:
 - a. Jejunum/ilium/colon, duodenum, rectum and thymus, surveillance imaging with abdominal \pm pelvic multiphasic CT or MRI according to **ONE** of the following levels of frequency:³
 - i. Within 12 weeks to 12 months post-operatively
 - ii. After 12 months, image every 12 to 24 months for 10 years
 - iii. After 10 years as clinically indicated
 - b. Lung/thymus tumors surveillance chest CT (± contrast) for primary tumors, (as clinically indicated for primary GI tumors) according to **ONE** of the following levels of frequency:

²No surveillance is indicated for appendiceal tumors 2 cm or smaller without aggressive features.

³High-grade tumors may be appropriate for more frequent monitoring.



- i. Within 12 weeks to 12 months post-operatively
- ii. After 12 months, image every 12 to 24 months for 10 years
- iii. After 10 years as clinically indicated
- 4. Grade 3, well-differentiated neuroendocrine surveillance includes chest CT (\pm contrast) as clinically indicated for **ANY** of the following:
 - a. Locally advanced/metastatic disease with <u>favorable biology</u> (low Ki-67 [eg, less than 55%], positive somastatin receptor [SSTR] based PET imaging) includes abdominal/pelvic MRI (+ contrast) or abdominal/pelvic multiphasic CT for surveillance with **ANY** of the following:
 - Resectable disease surveillance every 12 weeks to 24 weeks for 2 years, then every 6 to 12 months for up to 10 years and chest CT as clinically indicated
 - ii. Unresectable disease surveillance every 12 weeks to 24 weeks (depending on tumor biology) **AND** chest CT (± contrast); as clinically indicated.
 - b. Locally advanced/metastatic disease with <u>unfavorable biology</u> (high Ki-67 [eg 55% or higher], rapid growth rate, FDG avid tumors, negative SSTR-based PET imaging), includes surveillance imaging, every 8 weeks to 12 weeks (depending on tumor biology) with **ALL** of the following:
 - i. Abdominal/pelvic MRI (+ contrast) or abdominal/pelvic multiphasic CT and FDG PET/CT as clinically indicated
 - ii. Chest CT (± contrast) as clinically indicated
 - iii. FDG-PET/CT as clinically indicated
 - Locoregional disease (resectable) abdominal/pelvic MRI (+ contrast) or abdominal/ pelvic multiphasic CT with frequency of **ONE** of the following:
 - Every 12 weeks to 24 weeks for 2 years (depending on tumor biology, Ki-67) and chest CT as clinically indicated
 - ii. Every 6 months to 12 months for up to 10 years (depending on tumor biology, Ki-67) and chest CT as clinically indicated
 - d. Multiple endocrine neoplasia, type 1 (MEN1) screening surveillance for **ANY** of the following tumor types: (***NOTE**: For prolonged surveillance, imaging studies without radiation are preferred.)
 - i. Lung/thymic NETs: chest CT or MRI (+ contrast) every 1 to 3 years
 - ii. PanNET: abdominal/pelvic CT or MRI (+ contrast) every 1 to 3 years and consider serial endoscopic ultrasound (EUS)



- iii. Parathyroid: if calcium rises, re-image with neck ultrasound and/or parathyroid sestamibi with single-photon emission computed tomography (SPECT) scan (SPECT-CT preferred) or 4D-CT
- iv. Pituitary: pituitary or sella MRI (+ contrast) of the pituitary every 3 to 5 years
- e. Poorly differentiated large or small cell carcinoma and/or mixed neuroendocrine/ non-neuroendocrine neoplasm or unknown primary, imaging surveillance includes **ALL** of the following:
 - Locoregional unresectable or metastatic disease surveillance imaging includes EITHER chest CT (± contrast) with abdominal/pelvic MRI (+ contrast) OR chest/abdominal/pelvic multiphasic CT; every 6 weeks to 16 weeks
 - ii. Resectable surveillance imaging includes **EITHER** chest CT (\pm contrast) with abdominal/pelvic MRI (+ contrast) **OR** chest/abdominal/pelvic multiphasic CT; every 12 weeks for the 1st year, and every 6 months thereafter
- f. Post-operative from potentially curative surgery surveillance for at least 10 years (longer if high-risk)
- 5. Pancreatic neuroendocrine tumor surveillance imaging, <u>post-resection</u>, includes chest CT (± contrast) as clinically indicated and abdominal multiphasic CT or MRI with imaging frequency of **ONE** of the following:³
 - a. Within 3 to 12 months post-operatively
 - b. After 12 months, image every 6 to 12 months for 10 years
 - c. After 10 years as clinically indicated
- 6. Pheochromocytoma/Paranganglioma surveillance imaging and **ANY** of the following:
 - a. Locally unresectable disease or distant metastases includes **ANY** of the following:
 - i. Chest/abdominal/pelvic CT with contrast
 - ii. Chest CT (± contrast) and abdominal/pelvic MRI without contrast (if risk for hypertensive episode)
 - iii. FDG-PET/CT for bone dominant disease
 - iv. Meta-iodobenzylguanidine (MIBG) with single-photon emission computerized tomography/CT (SPECT) (if previous MIBG-positive or concern for disease progression) prior to considering radionuclide therapy



- v. SSTR-PET/CT or SSTR-PET/MRI (if previous SSTR-positive or concern for disease progression) prior to considering radionuclide therapy
- b. Resectable disease, post-resection includes chest CT (± contrast) and abdominal/ pelvic CT or MRI (+contrast), if clinically indicated with imaging frequency of **ONE** of the following:
 - i. 12 weeks to 12 months after resection
 - ii. Every 6 to 12 months for the 1st 3 years
 - iii. Annually from year 4 up to 10.
 - iv. Annually up to 10 years, then as clinically indicated



TIP

NCCN recommends following the surveillance protocols from designated guidelines for the following hereditary endocrine neoplasia syndromes :

- Thyroid cancer guideline, use for: Multiple endocrine neoplasia, type 2 (MEN2) with genetic evaluation of inherited syndromes
- Kidney cancer, use for:
 - Hereditary paraganglioma/pheochromocytoma syndrome
 - Tuberous sclerosis complex (TSC1 and TSC2)
 - von Hippel Lindau syndrome (VHL)
- Genetic/Familial High-Risk Assessment: Breast, Ovarian, and Pancreatic, use for:
 - Neurofibromatosis type 1 (NF1)
 - Li-Fraumeni syndrome (TP53)
 - Lynch syndrome (MLH1, EPCAM/MSH2, MSH6, PMS2)
- Genetic/Familial High-Risk Assessment: Colorectal, use for:
 - Lynch syndrome (MLH1, EPCAM/MSH2, MSH6, PMS2)
 - Familial adenomatous polyposis (APC)



Occult Primary Cancer Surveillance

NCCN Occult Primary Cancer Version 2.2025

Occult primary cancer surveillance imaging for long-term surveillance includes diagnostic tests based on symptomatology.

Soft Tissue Sarcoma Surveillance

NCCN Soft Tissue Sarcoma Version 3.2024

Soft tissue sarcoma surveillance includes **ANY** of the following: ***NOTE**: Contrasted imaging is preferred; for long term surveillance to minimize radiation exposure, X-rays or MRI may be substituted.

- 1. Desmoid tumor (aggressive fibromatosis) imaging surveillance includes **ANY** of the following:
 - a. CT or MRI every 3 to 6 months for 2 to 3 years, then every 6 to 12 months thereafter
 - b. Ultrasound may be considered for select locations (eg, abdominal wall) for longterm follow-up
- 2. Retroperitoneal/intra-abdominal, after resection imaging surveillance includes CT or MRI (consider PET/CT) every 3 to 6 months for 2 to 3 years, then every 6 months for the next 2 years, then annually.
- 3. Stage IA/IB tumor surveillance includes **ALL** of the following:
 - a. Chest imaging with CT (+contrast) or MRI (± contrast) as clinically indicated
 - b. Magnetic resonance imaging (MRI) at baseline and periodically (frequency based on estimated recurrence)
- 4. Stage II/III resectable with acceptable functional outcomes surveillance includes **ANY** of the following:
 - a. Chest imaging with CT (+contrast) or MRI (± contrast) at end of treatment and periodic imaging of primary site (based on estimated risk of locoregional recurrence)
 - b. Chest imaging and imaging of primary site with CT (+contrast) or MRI (± contrast) as clinically indicated
- 5. Stage II, III or select stage IV (any T, N1, M0), resectable with adverse functional outcomes **OR** unresectable primary disease surveillance imaging includes **ANY** of the following:
 - a. Baseline and periodic imaging of primary site as clinically indicated



- b. Chest imaging with CT (+contrast) or MRI (± contrast) as clinically indicated
- 6. Stage IV synchronous disease imaging surveillance includes **ANY** of the following:
 - a. Chest and other known metastatic sites imaging with CT (+contrast) or MRI (± contrast) as clinically indicated
 - b. MRI (± contrast) (preferred) and/or CT (+ contrast) at baseline and periodically (frequency based on estimated recurrence)

CT Maxillofacial Sinus Procedure Codes

Table 1. CT Maxillofacial/Sinus Associated Procedure Codes

CODE	DESCRIPTION
70486	Computed tomography, maxillofacial area; without contrast material
70487	Computed tomography, maxillofacial area; with contrast material(s)
70488	Computed tomography, maxillofacial area; without contrast material, followed by contrast material(s) and further sections

CT Maxillofacial Sinus Summary of Changes

CT Maxillofacial Sinus guideline had the following version changes from 2023 to 2024:

- Added the following to keep in line with current research:
 - Combination studies
 - "Facial injury is severe" under "Trauma to the face"
 - "Nasal polyp is known" under "Rhinosinusitis"
 - "Nasal polyp or obstruction" under "Rhinosinusitis"
- Removed the following as current research does not support the indication:
 - Indications under "Tumor"
- Mid-cycle update: added Pediatric Preamble and pediatric indications

CT Maxillofacial Sinus Definitions

Abscess is a swollen area within body tissue, containing an accumulation of pus.

Adenopathy is any disease or enlargement involving glandular tissue, specifically lymph glands. **Anosmia** is the loss or impairment of the sense of smell.

Asthma is a chronic lung disorder that is marked by recurring episodes of airway obstruction (as from bronchospasm) manifested by labored breathing accompanied especially by wheezing and



coughing and by a sense of constriction in the chest, and that is triggered by hyperreactivity to various stimuli (such as allergens or rapid change in air temperature).

Avascular necrosis is localized death of bone tissue due to impaired or disrupted blood supply (as from traumatic injury or disease).

Bony step-off is a type of malunion that occurs when bones heal but the joint surfaces are not aligned. A bony step-off can be seen and felt by an examiner when a fracture or dislocation is severe.

Cavernous sinus thrombosis is a rare blood clot that can form in response to an infection in your face or head and can be life threatening.

Cerebrospinal fluid (CSF) is a colorless liquid that is comparable to serum, is secreted from the blood into the lateral ventricles of the brain, and serves chiefly to maintain uniform pressure within the brain and spinal cord.

Cerebrospinal fluid (CSF) leak is a leak of cerebrospinal fluid that results from a hole or tear in the dura (the outermost layer of the meninges).

Cerebrospinal fluid (CSF) rhinorrhea is a condition where the fluid that surrounds the brain leaks into the nose and sinuses.

Computed tomography (CT) refers to a computerized X-ray imaging procedure in which a three-dimensional image of a body structure is revealed through a series of cross-sectional images or "slices."

Deviated septum occurs when the thin wall (nasal septum) between your nasal passages is displaced to one side.

Dysosmia is a change in the sense of smell.

Ecchymosis is a bruise, or contusion, is a skin discoloration that occurs when blood vessels under the skin are damaged and leak blood. The dark purple spot appears on the skin when blood leaks out of blood vessels.

Endoscopy is a procedure that uses an endoscope to examine the inside of the body. An endoscope is a thin, tube-like instrument with a light and a lens for viewing. It may also have a tool to remove tissue to be checked under a microscope for signs of disease.

Granulomatosis is a chronic condition marked by the formation of numerous masses or nodules of chronically inflamed tissue with granulations that are usually associated with an infectious process.

Indeterminate findings are inconclusive or insufficient for treatment planning.

Magnetic resonance imaging (MRI) is a non-invasive diagnostic technique that produces computerized images of internal body tissues and is based on nuclear magnetic resonance of atoms within the body induced by the application of radio waves.

Metastasis is the spread of a disease-producing agency (such as cancer cells) from the initial or primary site of disease to another part of the body.

Neuropathy is damage, disease or dysfunction of one or more nerves, especially of the peripheral nervous system, that is typically marked by burning or shooting pain, numbness,



tingling, muscle weakness or atrophy It is often degenerative and is usually caused by injury, infection, disease, drugs, toxins or vitamin deficiency.

Non-diagnostic is a result that does not lead to a confirmed diagnosis.

Osteomyelitis is an infectious, inflammatory disease of bone. It is often painful, bacterial in origin and may result in the death of bone tissue.

Osteonecrosis is localized death of bone tissue due to impaired or disrupted blood supply. **Pediatric approximate ages** are defined by the US Department of Health (USDH), the Food and Drug Administration (FDA), and the American Academy of Pediatrics (AAP) as the following:

- Infancy, between birth and 2 years of age
- Childhood, from 2 to 12 years of age
- Adolescence, from 12 to 21 years of age, further defined by the AAP into:
 - 1. Early (ages 11–14 years)
 - 2. Middle (ages 15-17 years),
 - 3. Late (ages 18–21 years)
 - 4. Older ages may be appropriate for children with special healthcare needs.

Polyangiitis is the inflammation of multiple types of vessels, such as small arteries and veins. **Polyps** are mucosal or submucosal abnormal tissue growths.

Proptosis (exophthalmos) is the abnormal protrusion or bulging, of the eyeball.

Recurrence is a new occurrence of something that happened or appeared before.

Refractory is resistance to treatment or cure.

Rhinorrhea is excessive mucous drainage from the nose.

Rhinosinusitis is inflammation of the mucous membranes of the nose and one or more paranasal sinuses that includes the following symptoms: mucopurulent discharge, nasal obstruction, congestion, facial pain, pressure, fullness and/or decreased sense of smell.

Seizure is a sudden, uncontrolled electrical disturbance in the brain. It can cause changes in behavior, movements or feelings, and in levels of consciousness.

Sialadenitis is a salivary gland infection that causes inflammation and enlargement of one or more major salivary glands. It can be caused by bacteria or viruses.

Staging in cancer is the process of determining how much cancer is within the body (tumor size) and if it has metastasized (spread).

Surveillance in cancer is the ongoing, timely and systematic collection and analysis of information on new cancer cases, extent of disease, screening tests, treatment, survival and cancer deaths.

Thrombosis is the formation of a blood clot (partial or complete blockage) within blood vessels, whether venous or arterial, limiting the natural flow of blood and resulting in clinical sequela.



Trigeminal neuralgia is an intense paroxysmal neuralgia (pain radiating along the course of one or more nerves usually without demonstrable changes in the nerve structure) involving one or more branches of the trigeminal nerve.

Ultrasound is the diagnostic or therapeutic use of ultrasound and especially a noninvasive technique involving the formation of a two-dimensional image used for the examination and measurement of internal body structures and the detection of bodily abnormalities.

Vertigo is a sensation of motion or spinning that is often described as dizziness. People with vertigo feel as though they are actually spinning or moving, or that the world is spinning around them.

Wegener's Granulomatosis is an uncommon disease of unknown cause characterized by inflammation of small blood vessels and granuloma formation, especially in the upper and lower respiratory tracts and kidneys, that typically has an onset during the ages of 40 to 65 years old.

CT Maxillofacial Sinus References

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Disclaimer section

Purpose

The purpose of the HealthHelp's clinical guidelines is to assist healthcare professionals in selecting the medical service that may be appropriate and supported by evidence to safely improve outcomes. Medical information is constantly evolving, and HealthHelp reserves the right to review and update these clinical guidelines periodically. HealthHelp reserves the right to include in these guidelines the clinical indications as appropriate for the organization's program objectives. Therefore the guidelines are not a list of all the clinical indications for a stated procedure, and associated Procedure Code Tables may not represent all codes available for that state procedure or that are managed by a specific client-organization.

Clinician Review

These clinical guidelines neither preempt clinical judgment of trained professionals nor advise anyone on how to practice medicine. Healthcare professionals using these clinical guidelines are responsible for all clinical decisions based on their assessment. All Clinical Reviewers are instructed to apply clinical indications based on individual patient assessment and documentation, within the scope of their clinical license.

Payment

The use of these clinical guidelines does not provide authorization, certification, explanation of benefits, or guarantee of payment; nor do the guidelines substitute for, or constitute, medical advice. Federal and State law, as well as member benefit contract language (including definitions and specific contract provisions/exclusions) take precedence over clinical guidelines and must be considered first when determining eligibility for coverage. All final determinations on coverage and payment are the responsibility of the health plan. Nothing contained within this document can be interpreted to mean otherwise.

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National and Local Coverage Determination (NCD and LCD)



NOTICE

To ensure appropriate review occurs to the most current NCD and/or LCD, always defer to https://www.cms.gov/medicare-coverage-database/search.aspx.

Background

National Coverage Determinations (NCD) and Local Coverage Determinations (LCD) are payment policy documents outlined by the Centers for Medicare and Medicaid Services (CMS) and the government's delegated Medicare Audit Contractors (MACs) that operate regionally in jurisdictions.

CMS introduced variation between different jurisdictions/Medicare Audit Contractors (MACs) and their associated covered code lists with the transition to ICD 10. The variation resulted in jurisdictions independently defining how codes are applied for exclusions, limitations, groupings, ranges, etc. for the medical necessity indications outlined in the NCD and LCD. Due to this variation, there is an inconsistent use/application of codes and coverage determinations across the United States between the different MACs.

In addition, **WITHOUT** notice, CMS can change the codes that indicate medical necessity and the format of the coverage determinations/associated documents (eg, Articles). This is an additional challenge for organizations to keep up with ongoing, unplanned changes in covered codes and medical necessity indications.

Medical Necessity Codes

Due to the variation in code application between jurisdictions/MACs and that updates can happen without notification, HealthHelp is not able to guarantee full accuracy of the codes listed for any Coverage Determination, and advises that prior to use, the associated Coverage Determination Articles are reviewed to ensure applicability to HealthHelp's programs and any associated NCDs and LCDs.



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