

# 2025 Magnetic Resonance Imaging (MRI) Face/Sinus, Internal Auditory Canal (IAC), Neck, Orbits

---

## *Diagnostic Imaging*

MRI-Orbits-HH  
Copyright © 2025 WNS (Holdings) Ltd.

**Last Review Date: 04/14/2025**  
Previous Review Date: 10/28/2024  
Guideline Initiated: 06/30/2019

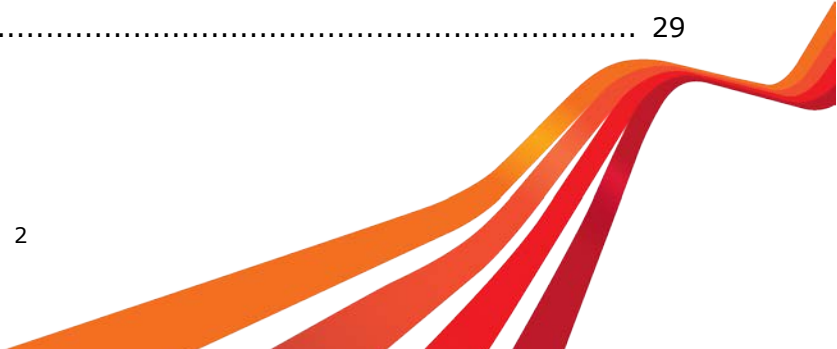




A WNS COMPANY

# Table of Contents

- Magnetic Resonance Imaging (MRI) Face/Sinus • MRI Internal Auditory Canal (IAC) • MRI Neck (Soft Tissue) • MRI Orbit ..... 3
  - Clinical Judgment ..... 3
  - MRI Face/Sinus, IAC, Neck and Orbits Related National Coverage Determination (NCD)/Local Coverage Determination (LCD) ..... 3
  - MRI General Contraindications ..... 3
  - Preamble: Pediatric Diagnostic Imaging ..... 4
  - MRI Face/Sinus Guideline ..... 4
  - MRI Internal Auditory Canal (IAC) Guideline ..... 5
  - MRI Neck (Soft Tissue) Guideline ..... 6
  - MRI Orbit Guideline ..... 9
  - Combination CT and MRI for Metastases Evaluation Guideline ..... 10
  - Head and Neck Cancer Surveillance section ..... 10
    - Bone Cancer Surveillance ..... 10
    - Central Nervous System (CNS) Cancer Surveillance ..... 12
    - Esophageal and Esophagogastric Junction Cancer Surveillance ..... 13
    - Head and Neck Cancers Surveillance ..... 14
    - Histiocytic Neoplasms Surveillance ..... 14
    - Melanoma: Uveal Surveillance ..... 15
    - Pediatric Central Nervous System Cancers ..... 16
    - Soft Tissue Sarcoma Surveillance ..... 16
    - Thymomas and Thymic Carcinomas Surveillance ..... 17
    - Thyroid Carcinoma Surveillance ..... 17
  - MRI Face/Sinus, IAC, Neck and Orbits Summary of Changes ..... 18
  - MRI Face/Sinus, Neck and Orbits Procedure Codes ..... 18
- MRI Face/Sinus, Neck and Orbits Definitions ..... 18
- MRI Face/Sinus, Neck and Orbits References ..... 24
- Disclaimer section ..... 27
  - Purpose ..... 27
  - Clinician Review ..... 28
  - Payment ..... 28
  - Registered Trademarks (®/™) and Copyright (©) ..... 28
  - National and Local Coverage Determination (NCD and LCD) ..... 28
    - Background ..... 29
    - Medical Necessity Codes ..... 29



# Magnetic Resonance Imaging (MRI) Face/Sinus • MRI Internal Auditory Canal (IAC) • MRI Neck (Soft Tissue) • MRI Orbit

## Clinical Judgment

These medical policies are designed to provide clinical guidance and do not supplant a provider’s independent professional judgment. Physicians retain full and independent authority to determine appropriate care based on each patient’s individual clinical circumstances. Although services may be subject to documentation requirements, medical necessity review, or coverage limitations, nothing in this policy is intended to restrict or interfere with a physician’s independent medical judgment.

## MRI Face/Sinus, IAC, Neck and Orbits Related National Coverage Determination (NCD)/Local Coverage Determination (LCD)

Please refer to <https://www.cms.gov/medicare-coverage-database/search.aspx> if applicable to the individual's health plan membership.

Type/ID Number	Title
NCD 220.2	MRI
LCD 34425	Magnetic Resonance Imaging of the Orbit, Face, and/or Neck
LCD 35175	MRI and CT Scans of the Head and Neck
LCD 37373	MRI and CT Scans of the Head and Neck

## MRI General Contraindications

MRI is contraindicated for **ANY** of the following:

- Safety, related to clinical status (body mass index exceeds MRI capability, intravascular stents within recent 6 weeks)
- Safety, related to implanted devices (aneurysm clips, cochlear implant, implantable cardio-defibrillators, insulin pump, permanent pace maker, spinal cord stimulator)<sup>1</sup>

**References:** [31] [8] [18]

<sup>1</sup>Some implanted devices that were once absolute contraindications to a MRI may now be accepted, including if the specific MRI is able to accommodate the device or the device itself is deemed safe for MRI.

## 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.

### MRI Face/Sinus Guideline

Magnetic resonance imaging (MRI) of the face and/or sinus is considered medically appropriate when the documentation demonstrates **ANY** of the following:

1. Anosmia (smell loss) or dysosmia (smell dysfunction) is persistent, demonstrated on objective testing (eg, nasal endoscopy, physical exam, prior imaging) **AND** etiology is unknown.  
**References:** [36] [49]
2. Bell's palsy/hemifacial spasm, to evaluate the extracranial nerve course and **ANY** of the following:
  - a. Atypical signs (eg, dizziness, dysphagia, headache)
  - b. Facial twitching/spasms prior to onset
  - c. Recurrent
  - d. **NO** improvement at 2 to 4 months

**References:** [36] [41] [21]

3. Cancer or tumor of face, hypopharynx, nasopharynx, oral cavity, oropharynx, salivary glands, sinuses, skull base or tongue is known for **ANY** of the following:
  - a. Initial staging
  - b. Recurrence or metastasis is suspected.
  - c. Restaging during treatment
  - d. Surveillance appropriate for tumor type and stage following the **National Comprehensive Cancer Network (NCCN) Guidelines** recommended schedule (see **Surveillance** section)

**References:** [4] [43] [14] [17]

4. Infection (eg, abscess, osteomyelitis) is suspected and **ANY** of the following:
  - a. Abscess is suspected with signs of infection (eg, fever, pain, swelling).
  - b. Immunocompromised
  - c. Osteomyelitis is suspected **AFTER** X-rays are completed.

**References:** [20] [35]

5. Mass is suspected or known and **ANY** of the following:
  - a. Facial, and **ANY** of the following:
    - i. Adenopathy, infectious, is suspected **AFTER** 2 weeks of **FAILED** treatment.
    - ii. Head and neck cancer is suspected or known.
    - iii. Mass demonstrated on physical exam **AND** prior imaging (ultrasound/X-ray) is non-diagnostic or indeterminate.
  - b. Sinonasal obstruction or mass is suspected and demonstrated on exam, nasal endoscopy or prior imaging.

**References:** [43] [14] [20]

6. Polyangiitis (Wegener's granulomatosis disease) with granulomatosis

**References:** [56]

7. Post-surgical assessments for evaluation of complications or disease recurrence.

8. Rhinosinusitis and **EITHER** of the following:

- a. Fungal infection of sinuses is suspected.
- b. Intracranial/orbital complications (eg, cavernous sinus thrombosis, central nervous system, orbital or preseptal infection or osteomyelitis) are suspected.

**References:** [20] [47]

9. Trauma, facial **AND** soft tissue injury is suspected, for treatment planning. (**\*NOTE:** CSF fluid should always be confirmed with laboratory testing [Beta-2 transferrin assay].)

**References:** [25]

10. Trigeminal neuralgia/neuropathy with atypical features (eg, bilateral hearing loss, dizziness/vertigo, numbness, sensory loss, visual changes), to evaluate the extracranial nerve course.

**References:** [36] [50]

## **MRI Internal Auditory Canal (IAC) Guideline**

(\***NOTE:** Does **NOT** include brain)

Magnetic resonance imaging (MRI) of the internal auditory canal (IAC) is considered medically appropriate when the documentation demonstrates **ANY** of the following:

1. Acoustic neuroma (Schwannoma) or cerebellopontine angle tumor is suspected and symptomatic (eg, altered sense of taste, disturbed balance or gait, facial weakness, headache, unilateral hearing loss by audiometry, unilateral tinnitus).

**References:** [9]

2. Bell's palsy/hemifacial spasm, to evaluate the extracranial nerve course, with **ANY** of the following:
  - a. Atypical signs (eg, dizziness, dysphagia, headache)
  - b. Facial twitching/spasms prior to onset [21]
  - c. Recurrent
  - d. **NO** improvement at 2 to 4 months

**References:** [41] [36]

3. Cerebrospinal fluid (CSF) otorrhea to characterize a bony defect. (**\*NOTE:** CSF fluid should always be confirmed with laboratory testing [Beta-2 transferrin assay].)

**References:** [20]

4. Cholesteatoma is suspected.

**References:** [42] [54]

5. Congenital or childhood sensorineural hearing loss, in a pediatric individual, **AND** structural abnormality is suspected.

**References:** [39]

6. Glomus tumor is suspected.

**References:** [40]

7. Post-surgical assessments for evaluation of complications or disease recurrence.

8. Pulsatile tinnitus evaluation

**References:** [26]

9. Sensorineural hearing loss on audiogram is asymmetric.

**References:** [42]

10. Tinnitus is non-pulsatile and unilateral.

**References:** [52] [26]

11. Vertigo is episodic or persistent.

**References:** [42]

## **MRI Neck (Soft Tissue) Guideline**

Magnetic resonance imaging (MRI) of the neck (soft tissue) is considered medically appropriate when the documentation demonstrates **ANY** of the following:

1. Bell's palsy/hemifacial spasm, to evaluate the extracranial nerve course, with **ANY** of the following:
  - a. Atypical signs (eg, dizziness, dysphagia, headache)

- b. Facial twitching/spasms prior to onset [21]
- c. Recurrent
- d. **NO** improvement at 2 to 4 months

**References:** [36] [41]

2. Brachial plexopathy is suspected, neck is involved based on mechanism of injury **OR** suspicious electromyography/nerve conduction study (EMG/NCS).

**References:** [6] [45]

3. Cancer or tumor is known of the hypopharynx, larynx, nasopharynx, oral cavity, orbits, oropharynx, salivary glands, sinuses, skull base or tongue for **ANY** of the following:

- a. Initial staging
- b. Recurrence or metastasis is suspected.
- c. Restaging during treatment
- d. Surveillance appropriate for tumor type and stage following the **National Comprehensive Cancer Network (NCCN) Guidelines** recommended schedule (see **Surveillance** section).

**References:** [4] [43] [14] [17]

4. Cancer or tumor is suspected of the hypopharynx, larynx, nasopharynx, oral cavity, orbits, oropharynx, salivary glands, sinuses, skull base or tongue and **ANY** of the following: (**\*NOTE:** For discrete, cystic lesions of the neck, ultrasound is initial imaging unless high suspicion of malignancy.)

- a. Lesions in mouth or throat are suspicious.
- b. Mass or lymphadenopathy of the neck (non-parotid or non-thyroid) is suspected and **ANY** of the following:
  - i. Infectious adenopathy is suspected (eg, fever, pain swelling) and **FAILED** 2 weeks of antibiotic treatment.
  - ii. Malignancy risk is increased with **ANY** of the following:
    - A. Cancer history
    - B. Mass consistency is firm.
    - C. Mass fixation to adjacent tissues
    - D. Mass is larger than 1.5 cm.
    - E. Mass is present for at least 2 weeks (or uncertain duration), **WITHOUT** symptoms fluctuation and infectious cause is **NOT** suspected.

- F. Ulceration of overlying skin
- iii. Mass is present on physical exam and ultrasound is non-diagnostic or indeterminate.
- iv. Pediatric individual (age is 18 years or less) and **EITHER** of the following:
  - A. Cancer history
  - B. Prior ultrasound is non-diagnostic or indeterminate.
- v. Prior imaging is non-diagnostic or indeterminate and needs further evaluation.
- c. Mass in the **parotid area** is demonstrated on prior ultrasound and further evaluation is needed.
- d. Mass in the **thyroid area** is known, ultrasound is non-diagnostic or indeterminate and **ANY** of the following:
  - i. Airway compromise is suspected.
  - ii. Thyroid cancer is known, for staging and monitoring of recurrence.
  - iii. Thyroid tissue extent assessment, when prior imaging demonstrates extension into the mediastinum.
- e. Mass or tumor is demonstrated on prior imaging that needs further evaluation.

**References:** [4] [43] [14] [2] [10] [28] [24] [7]

- 5. Cranial nerve palsy (CN IX-XII), objective, to evaluate the extracranial nerve course  
**References:** [36]
- 6. Hyperparathyroidism, primary, for pre-procedure planning **AND** ultrasound or nuclear imaging is non-diagnostic or indeterminate.  
**References:** [22] [55] [46]
- 7. Infection (abscess or deep space) in the neck or pharynx is suspected or known **AND** is symptomatic (eg, fever, pain, swelling).  
**References:** [23] [3]
- 8. Pain in the ear is unexplained and **ALL** of the following:
  - a. Malignancy risk factors (eg, age over 50 years, alcohol use, dysphagia, tobacco use, weight loss) are known.
  - b. Ordered by an ear, nose and throat specialist (ENT) or otolaryngologist, for treatment planning
  - c. Otoscopic exam, nasolaryngoscopy and laboratory evaluation (complete blood count [CBC], erythrocyte sedimentation rate [ESR]) are completed.

**References:** [11]

9. Post-surgical assessments for evaluation of complications or disease recurrence.
10. Salivary duct evaluation (\***NOTE:** *Magnetic resonance sialography*)

**References:** [38]

11. Vocal cord lesions or vocal cord paralysis evaluation

**References:** [36]

## MRI Orbit Guideline

Magnetic resonance imaging (MRI) of the orbit(s) is considered medically appropriate when the documentation demonstrates **ANY** of the following: (\***NOTE:** *MRI is superior for visual pathways, globe and soft tissue. Computed tomography [CT] is preferred for bony detail and calcifications.*)

1. Cancer or tumor of larynx, nasopharynx, orbits, periorbital area, salivary glands, sinuses or skull base is known, for **ANY** of the following:
  - a. Initial staging
  - b. Recurrence or metastasis is suspected.
  - c. Restaging during treatment
  - d. Surveillance appropriate for tumor type and stage following the **National Comprehensive Cancer Network (NCCN) Guidelines** recommended schedule

**References:** [4] [43] [14] [17]

2. Complex strabismus syndromes (with ophthalmoplegia or ophthalmoparesis) are suspected or known.

**References:** [48]

3. Congenital orbital anomalies and ultrasound is non-diagnostic or indeterminate.

**References:** [30] [16]

4. Eye examination (external or direct) is abnormal and **ANY** of the following:

- a. Cranial nerve palsy (CN III, IV, VI), objective, to evaluate the extracranial nerve course
- b. Exophthalmos (abnormal protrusion of the eyes/eyeballs), enophthalmos (sunken eyes) or orbital asymmetry
- c. Ophthalmoplegia or diplopia and an orbital pathology is suspected.
- d. Optic disc(s) and **ANY** of the following
  - i. Optic disc(s) is/are abnormal (eg, optic disc blurring, edema, or pallor) **AND** is **NOT** caused from underlying known predisposing condition (eg, glaucoma, macular degeneration).

- ii. Optic disc swelling (papilledema) is known.
  - e. Visual field defect is unilateral **AND** is **NOT** caused from underlying known predisposing condition (eg, glaucoma, macular degeneration).
- References:** [27] [29] [36] [53]
5. Infection is suspected or known **AND ANY** of the following:
- a. Immunocompromised
  - b. Orbital infection (eg, cellulitis, scleritis, uveitis) is suspected.
  - c. Osteomyelitis is suspected when bony deformity is directly visualized **OR** X-rays are abnormal.
- References:** [27] [3] [35]
6. Inflammatory disease in the orbit(s) is suspected (eg, eye pain and restricted eye movement with suspected orbital pseudotumor).
- References:** [12]
7. Mass/tumor (ocular or orbital) is suspected or known.
- References:** [30] [14]
8. Optic neuritis is suspected.
- References:** [36] [27] [33]
9. Orbital trauma is suspected, with direct eye injury found on physical exam **OR** ultrasound or X-ray is non-diagnostic or indeterminate.
- References:** [27] [30]
10. Post-surgical assessments for evaluation of complications or disease recurrence.

## Combination CT and MRI for Metastases Evaluation Guideline

Combination CT/MRI studies (5 or less concurrent studies, with a CT or MRI appropriate for cancer location: abdomen, brain, cervical spine, chest, lumbar spine, neck, pelvis and/or thoracic spine) for **ANY** of the following situations:

- 1. Staging evaluation, for baseline pre-therapy
- 2. Surveillance following the National Comprehensive Cancer Network (NCCN) Guidelines recommended schedule (See **Surveillance** section)

## Head and Neck Cancer Surveillance section

### Bone Cancer Surveillance

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

1. Chondrosarcoma surveillance for **ANY** of the following:
  - a. Atypical cartilaginous tumor surveillance with cross-sectional imaging (CT + contrast, MRI ± contrast) every 6 to 12 months for 2 years, then annually as clinically indicated
  - b. Low-grade, extracompartmental appendicular tumor, grade I axial tumors or high-grade (grade II or III, clear cell or extracompartmental) tumors surveillance with **ALL** of the following:
    - i. Chest CT at least every 6 months for 5 years, then annually for at least 10 years, then if symptoms are new or progressing.
    - ii. MRI (± contrast) or CT (+ contrast) if symptoms are new or progressing.
2. Chordoma surveillance with **ALL** of the following:
  - a. Chest CT imaging every 6 months, annually for 5 years, then annually thereafter, then if symptoms are new or worsening.
  - b. Imaging of primary site, timing and modality (eg, MRI ± CT [both + contrast]) if symptoms are new or progressing, up to 10 years
3. Ewing Sarcoma after primary treatment completed surveillance with **ALL** of the following:
  - a. Chest CT: every 3 months
  - b. Primary site imaging with MRI ± CT (both + contrast), increase intervals after 24 months and after 5 years, annually, then if symptoms are new or progressing (indefinitely) (**\*NOTE: PET/CT [head-to-toe] is appropriate**)
4. Giant cell tumor of the bone surveillance with **ALL** of the following:
  - a. Chest CT or MRI imaging every 6 to 12 months for 4 years, then annually thereafter, then if symptoms are new or progressing
  - b. Surgical site imaging if symptoms are new or progressing (eg, CT and/or MRI, both with contrast)
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: PET/CT [head-to-toe] is appropriate.**)
  - 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, then if symptoms are new or progressing

**References:** [2025 Bone Cancer Version 1.2026]

## Central Nervous System (CNS) Cancer Surveillance

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 to 2 years, then every 4 to 6 months indefinitely
2. Glioblastoma, *IDH* wild-type, magnetic resonance imaging with (MRI) of the brain and **ANY** of the following:
  - a. Pre-operative and post-operative; within 48 hours
  - b. Pre-radiation planning; every 3 to 5 weeks, post-operatively
  - c. Post-radiation; 3 to 6 weeks post-radiation, then every 2 to 3 months for 3 years, then every 2 to 4 months indefinitely
3. Glioma, imaging with MRI of the brain and **ANY** of the following:
  - a. Astrocytoma, *IDH* mutated and **ANY** of the following:
    - i. Grade 2 and **ANY** of the following:
      - A. After radiation therapy (RT) **AND** chemotherapy: every 6 months until tumor progression
      - B. After RT **OR** chemotherapy: every 3 to 4 months for the 1<sup>st</sup> 5 years, then every 3 to 4 months until tumor progression
      - C. After surgery: every 3 to 4 months until tumor progression
    - ii. Grade 3 and **ANY** of the following;
      - A. After RT **AND** chemotherapy: every 6 months until tumor progression
      - B. After RT **OR** chemotherapy: every 3 to 4 months for the 1<sup>st</sup> 5 years, then every 3 to 4 months until tumor progression
    - iii. Grade 2 or 3, recurrent; image every 2 to 3 months
  - b. Oligodendroglioma, *IDH* mutated, 1p/19q co-deleted and **ANY** of the following:
    - i. Grade 2 and **ANY** of the following:
      - A. After radiation therapy (RT) **AND** chemotherapy: every 6 to 9 months until tumor progression
      - B. After RT **OR** chemotherapy: every 3 to 4 months for the 1<sup>st</sup> 5 years, then every 3 to 4 months until tumor progression

- C. After surgery: every 3 to 4 months until tumor progression  
(\*NOTE: For individuals who underwent gross total resection, every 6 to 9 months for 5 years post-surgery until tumor progression)
- ii. Grade 3 and **ANY** of the following:
  - A. After radiation therapy (RT) **AND** chemotherapy: every 6 to 9 months until tumor progression
  - B. After RT **OR** chemotherapy: every 3 to 4 months for the 1<sup>st</sup> 5 years, then every 3 to 4 months until tumor progression
- iii. Grade 2 or 3, recurrent, image every 3 to 4 months
- 4. Leptomeningeal metastases imaging with MRI of the brain and/or total spine every 2 to 3 months for the 1<sup>st</sup> 2 years, every 6 months until year 5, then annually indefinitely
- 5. Medulloblastoma, imaging with MRI of the brain every 2 to 3 months for 2 years
- 6. Primary CNS lymphoma, image every 2 to 3 months for 2 years

**References:** [32]

## Esophageal and Esophagogastric Junction Cancer Surveillance

Esophageal and esophagogastric junction cancer surveillance includes **ANY** of the following<sup>2</sup>:

- 1. Adenocarcinoma, squamous cell carcinoma; imaging studies if symptoms are new or progressing
- 2. Tumor classification T1b<sup>a</sup> (N0 on ultrasound) after endoscopic resection or ablation, imaging surveillance includes computed tomography (CT) chest and abdomen (+ contrast, unless **contraindicated**) every 6 months for the first 2 years and annually for up to 5 years
- 3. Tumor classification T1b or greater, any N<sup>a</sup> or T1a N+, imaging surveillance includes esophagectomy performed with or **WITHOUT** adjuvant therapy then surveillance includes chest and abdomen CT (+ contrast, unless **contraindicated**) every 6 months for the first 2 years and annually for up to 5 years
- 4. Tumor classification any T and/or any N, with neoadjuvant chemotherapy **OR** chemoradiotherapy **AND** esophagectomy, with or **WITHOUT** adjuvant treatment, imaging surveillance includes chest and abdomen CT (+ contrast, unless **contraindicated**) every 6 months for up to 2 years, then annually for up to 5 years and EGD, then if symptoms are new or progressing

---

<sup>2</sup>Routine esophageal/esophagogastric junction cancers are **NOT** recommended for cancer-specific surveillance, for more than 5 years after the end of treatment.

5. Tumor classification (pretreatment) N0 to N+, T1b to T4, T4b, with definitive chemoradiation (**WITHOUT** esophagectomy), surveillance imaging includes chest and abdomen CT (+ contrast unless **contraindicated**) every 3 to 6 months for the first 2 years and annually for up to 5 years

**References:** [1]

## Head and Neck Cancers Surveillance

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

1. Short-term surveillance (less than 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) 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) within 3 to 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 new or progressing symptoms. (**\*NOTE:** Use 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 CT, MRI, FDG PET/CT to obtain surveillance for lesions that are recurrent, second primary or at distant sites.<sup>3</sup>

**References:** [34]

## Histiocytic Neoplasms Surveillance

### NCCN Histiocytic Neoplasms Version 3.2024

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

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

---

<sup>3</sup>Per 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. Fluorodeoxyglucose (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 ( $\pm$  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 , 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 ( $\pm$  contrast) every 3 to 6 months until disease stabilization and then every 6 to 12 months

**References:** [15]

## Melanoma: Uveal Surveillance

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. 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. 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. MR (+ contrast) or ultrasound of liver

**References:** [44]

## Pediatric Central Nervous System Cancers

Pediatric central nervous system cancer surveillance includes **ANY** of the following:

1. Medulloblastoma and **ANY** of the following:
  - a. Risk is low or average (after completion of adjuvant/maintenance treatment) and **ALL** of the following:
    - i. Brain magnetic resonance imaging (MRI) every 3 to 4 months for 2 years, then every 6 months for 3 years, then if symptoms are new or progressing.
    - ii. Spine MRI (cervical, lumbar **AND** thoracic) every 6 months for 2 years, then if symptoms are new or progressing.
  - b. Risk is high or very high (after completion of adjuvant/maintenance treatment) and **ANY** of the following:
    - i. Brain MRI every 3 to 4 months for 2 years, then every 6 months for 3 years, then if symptoms are new or progressing.
    - ii. Spine MRI (cervical, lumbar **AND** thoracic) every 3 to 4 month for 2 years, then annually for 3 years, then if symptoms are new or progressing.
2. Pediatric diffuse high-grade glioma, image with brain MRI 2 to 6 weeks after radiation therapy, then every 2 to 3 months for year 1, then every 3 to 6 months indefinitely

**References:** [13]

## Soft Tissue Sarcoma Surveillance

Soft tissue sarcoma surveillance includes **ANY** of the following: (**\*NOTE:** Use contrast imaging; for long term surveillance to minimize radiation exposure, MRI may be substituted.)

1. Desmoid tumor (aggressive fibromatosis) imaging surveillance includes computed tomography (CT) or magnetic resonance imaging (MRI) every 3 to 6 months for 3 years, then every 6 to 12 months thereafter
2. Extremity, trunk or head and neck, for long-term follow-up with **ANY** of the following:
  - a. Long-term follow-up with **ALL** of the following:
    - i. Chest CT imaging (- contrast) to detect asymptomatic distant recurrence
    - ii. MRI for imaging of primary site
  - b. Stage I tumors and **ALL** of the following:
    - i. Chest CT imaging (- contrast) every 6 to 12 months
    - ii. Post-operative baseline and periodic imaging of primary site with MRI or CT if MRI is **contraindicated or unavailable**.

- c. Stage II and III tumors and **ANY** of the following:
  - i. Baseline and periodic imaging of primary site
  - ii. Chest and other known sites of metastatic disease imaging (CT [- contrast] or X-ray) every 2 to 6 months for 2 to 3 years, then every 6 months to complete a total of 5 years, then annually.
  - iii. Post-operative reimaging to assess the primary tumor site and rule out metastatic disease (MRI or CT if MRI is **contraindicated or unavailable**).
3. Retroperitoneal/intra-abdominal, after management of primary disease imaging surveillance includes chest/abdomen/pelvis CT or MRI every 3 to 6 months for 3 years, then every 6 months for the next 2 years, then annually.

**References:** [51]

## Thymomas and Thymic Carcinomas Surveillance

Thymomas and thymic carcinomas surveillance after primary treatment includes **ANY** of the following:

1. R0 resection surveillance imaging with chest computed tomography (CT) (+ contrast) or magnetic resonance imaging (MRI) for **ANY** of the following:
  - a. Thymic carcinoma every 6 to 12 months for 2 years, then annually until year 5
  - b. Thymoma every 6 months for 2 years, then annually until year 10
2. R1 and R2 resection surveillance imaging with chest CT (+ contrast) or MRI for **ANY** of the following:
  - a. Thymic carcinoma every 3 to 6 months for 2 years, then annually for 5 years
  - b. Thymoma every 6 months for 2 years, then annually for 10 years
3. Locally advanced disease surveillance imaging with chest CT (+ contrast) or MRI for **ANY** of the following:
  - a. Thymic carcinoma every 3 to 6 months for 2 years, then annually for 5 years
  - b. Thymoma every 6 months for 2 years, then annually for 10 years

**References:** [37]

## Thyroid Carcinoma Surveillance

Thyroid carcinoma surveillance imaging includes **ANY** of the following:

1. Anaplastic carcinoma (stage IVC surveillance imaging includes computed tomography (CT) or magnetic resonance imaging (MRI) (+ contrast) of brain, neck, chest, abdomen and

pelvis at frequent intervals as clinically indicated (**\*NOTE:** *consider fluorodeoxyglucose-positron emission tomography (FDG-PET)/CT 3 to 6 months after initial therapy*)

2. Medullary carcinoma surveillance imaging includes **ANY** of the following:
  - a. MRI of whole body, if calcitonin levels are very elevated 150 pg/ml or more.
  - b. Calcitonin level is 150 pg/ml or more: surveillance with CT or MRI (+ contrast) of the neck, chest, and liver, as clinically indicated
  - c. FDG-PET/CT or Ga-68 DOTATE or MRI (+ contrast) of the neck, chest, abdomen with liver protocol, based on calcitonin/carcinoembryonic antigen (CEA) doubling time

**References:** [19]

## MRI Face/Sinus, IAC, Neck and Orbits Summary of Changes

MRI Face/Sinus, IAC, Neck and Orbits guideline had the following version changes from 2024 to 2025:

- Added "ultrasound is non-diagnostic or indeterminate" to "Congenital orbital anomalies" under CT Orbits as less advanced imaging is appropriate first.
- Citations updated per the evidence.
- Removed combination studies as they are redundant
- Removed "Venous complications" from MRI Face/Sinus guideline as MRV is more appropriate.

## MRI Face/Sinus, Neck and Orbits Procedure Codes

**Table 1. MRI Face/Sinus, Neck, Orbit Procedure Codes**

Codes	Description
70540	Magnetic resonance (eg, proton) imaging, orbit, face, and/or neck; without contrast material(s)
70542	Magnetic resonance (eg, proton) imaging, orbit, face, and/or neck; with contrast material(s)
70543	Magnetic resonance (eg, proton) imaging, orbit, face, and/or neck; without contrast material(s), followed by contrast material(s) and further sequences
0649T	Quantitative magnetic resonance for analysis of tissue composition (eg, fat, iron, water content), including multiparametric data acquisition, data preparation and transmission, interpretation and report, obtained with diagnostic MRI examination of the same anatomy (eg, organ, gland, tissue, target structure); single organ

## MRI Face/Sinus, Neck and Orbits Definitions

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

**Acoustic neuromas (vestibular schwannomas)** are noncancerous, usually slow growing tumors that form along the branches of the eighth cranial nerve (also called the vestibulocochlear nerve). This nerve leads from the brain to the inner ear and branches into divisions that play important roles in both hearing and balance.

**Adenopathy** is any disease or enlargement involving glandular tissue, specifically lymph glands.

**Amblyopia** is a neuro-developmental abnormality leading to decreased vision in one or both eyes due to insufficient stimulation during the critical period of visual development.

**Anophthalmia** is a rare congenital condition characterized by the complete absence of one or both eyes.

**Anosmia** is the loss or impairment of the sense of smell.

**Audiogram/Audiometric testing** is a graphic representation of the relation of vibration frequency and the minimum sound intensity for hearing.

**Bell's palsy** an acute, idiopathic, self-limited, typically monophasic paralysis of the face caused by dysfunction of the facial nerve (cranial nerve VII) with no detectable cause.

**Beta-2 transferrin** test is a laboratory assay used to detect cerebrospinal fluid (CSF) in cases of suspected CSF rhinorrhea or otorrhea.

**Brachial plexopathy** is a type of peripheral neuropathy that occurs when the brachial plexus is damaged. The brachial plexus is a group of nerves that run from the lower neck to the upper shoulder. These nerves send signals from the spine to the shoulder, arm and hand.

**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.

**Cellulitis** is an acute bacterial infection of the skin involving the deep dermis and subcutaneous tissue, characterized by spreading erythema, warmth, induration, and tenderness.

**Cerebellopontine angle (CPA) tumor** is a growth located at the junction of the cerebellum and pons, most commonly vestibular schwannomas, meningiomas and epidermoid cysts.

**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.

**Cholesteatoma** is a benign but locally destructive cystic mass of keratinizing squamous epithelium that can erode bone structures in the middle ear and mastoid.

**Complex strabismus syndrome** is a binocular misalignment that varies in magnitude depending on the direction of gaze.

**Computed tomography (CT)** is an imaging test that uses X-rays to computer analysis to generate cross sectional images of the internal structures of the body that can be displayed in multiple planes.

**Cranial nerve palsy** is a dysfunction or paralysis of one or more of the twelve cranial nerves, which can result in various neurological deficits depending on the affected nerve.

**Deep neck space infections (neck)** is a serious condition involving infection in the potential spaces and fascial planes of the neck, which can lead to life-threatening complications such as airway compromise and mediastinal spread of infection.

**Diplopia** is a disorder of vision in which two images of a single object are seen (as from unequal action of the eye muscles).

**Dysosmia** is a qualitative olfactory dysfunction characterized by altered perception of odors, including parosmia (distorted perception of odors) and phantosmia (false perception of odors without an odor source).

**Dysphagia** is difficulty with swallowing or the sensation of food getting stuck in the esophagus.

**Edema** an abnormal infiltration and excess accumulation of serous fluid in connective tissue or in a serous cavity.

**Electromyogram (EMG)** is a diagnostic test that measures the electrical activity of muscles at rest and during contraction using a needle electrode inserted into the muscle.

**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.

**Enophthalmos** is the term for when the eyes are sunken in.

**Erythrocyte sedimentation rate (ESR)** is a blood test that measures the rate at which red blood cells settle at the bottom of a test tube over one hour, indicating the presence of inflammation in the body.

**Exophthalmos (proptosis)** is the abnormal protrusion or bulging of the eyeball.

**Glaucoma** is a group of progressive optic neuropathies characterized by optic disc excavation (cupping) and vision loss, often associated with elevated intraocular pressure (IOP) but can occur with normal IOP.

**Glomerular filtration rate (GFR)** is defined as the volume of plasma filtered by the kidneys per unit of time, typically measured in milliliters per minute and normalized to body surface area (mL/min/1.73 m<sup>2</sup>).

**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.

**Hemifacial spasm** is a neurological disorder characterized by involuntary, irregular contractions of the muscles innervated by one facial nerve, typically caused by mechanical compression of the facial nerve after it has left the brainstem.

**Hemorrhage** is a copious or heavy discharge of blood from the blood vessels.

**Hyperparathyroidism** is the presence of excess parathyroid hormone in the body resulting in disturbance of calcium metabolism with increase in serum calcium and decrease in inorganic phosphorus, loss of calcium from bone and renal damage with frequent kidney-stone formation.

**Hypopharynx** is the most inferior part of the pharynx, extending from the level of the hyoid bone to the lower border of the cricoid cartilage, and includes structures such as the pyriform sinuses, lateral and posterior hypopharyngeal walls, and the postcricoid region.

**Immunocompromised** is a condition where the immune system's ability to fight infections and diseases is weakened or impaired.

**Indeterminate** findings are inconclusive or insufficient for treatment planning.

**Intracranial** means within the cranium, which is the bony skull that protects the brain.

**Macular degeneration** is an eye disease that can cause blurred central vision. It occurs when the macula, the part of the eye that controls sharp, straight-ahead vision, is damaged by aging.

**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.

**Magnetic resonance sialography** is an MRI technique utilized for evaluating salivary duct diseases in a non-invasive manner.

**Mediastinum** is the area in the middle of the chest that separates the lungs.

**Membranous labyrinth** is a collection of fluid-filled chambers and tubes in the inner ear that contain receptors for the senses of hearing and balance. It is located within the bony labyrinth, but is smaller and separated from it by a fluid called perilymph.

**Metastases** 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.

**Microphthalmia** is a condition characterized by abnormally small eyes with reduced axial length, typically at least 2 standard deviations below the mean for the age.

**Nasolaryngoscopy** refers to a procedure where a flexible, lighted scope (nasolaryngoscope) is inserted through the nose to examine the throat and larynx (voice box).

**Nasopharynx** is the upper part of the throat behind the nose. An opening on each side of the nasopharynx leads into the ear.

**Nerve conduction study (NCS)** is a test that measures how fast an electrical impulse moves through the nerve and can identify nerve damage.

**Neuromyelitis optica spectrum disorder (NMOSD)** is an inflammatory disorder of the central nervous system characterized by severe, immune-mediated demyelination and axonal damage predominantly targeting optic nerves and the spinal cord.

**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.

**Nuclear cisternography** is an imaging study to diagnose problems with the flow of spinal fluid. A lumbar puncture is performed and a radioisotope is injected into the spinal fluid. A nuclear scan is performed 1 to 6 hours after getting the injection, followed by a scan 24 hours later.

**Ophthalmoparesis** refers to weakness or paralysis of one or more extraocular muscles which are responsible for eye movements.

**Ophthalmoplegia** is paralysis of the extraocular muscles that control the movements of the eye. Ophthalmoplegia usually involves the third (oculomotor), fourth (trochlear) or sixth (abducens) cranial nerves. Double vision is the characteristic symptom in all three cases.

**Optic disc** or "optic nerve head". It refers to the circular area on the retina where the optic nerve (bundle of nerve fibers) exits the eye and sends visual information to the brain.

**Optic neuritis** is inflammation of the optic nerve.

**Orbital pseudotumor** is the swelling of tissue behind the eye which does not spread to other tissues or places in the body.

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

**Otorrhea** is drainage of liquid from the ear.

**Pallor** is skin paleness and can occur when the skin or mucous membranes, like the lining of the eyes, turn a lighter color than normal.

**Papilledema** is swelling of the optic nerve head due to increased intracranial pressure (ICP), which can lead to vision loss if not treated promptly.

**Parenchymal** the essential and distinctive tissue of an organ or an abnormal growth as distinguished from its supportive framework.

**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:

1. Infancy, between birth and 2 years of age
2. Childhood, from 2 to 12 years of age
3. Adolescence, from 12 to 21 years of age, further defined by the AAP into:
  - a. Early (ages 11–14 years)
  - b. Middle (ages 15–17 years),
  - c. Late (ages 18–21 years)
  - d. 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.

**Preseptal** refers to the area anterior to the orbital septum, a fibrous tissue sheet that separates the front of the eyelid and surrounding tissues from the deeper orbital structures.

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

**Pulsatile tinnitus** is a rhythmic pulsing noise in one or both ears that occurs in the absence of external sound and tends to be synced with the heartbeat.

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

**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.

**Schwannomas** are noncancerous, usually slow growing tumors that form along the branches of the eighth cranial nerve (also called the vestibulocochlear nerve). This nerve leads from the brain to the inner ear and branches into divisions that play important roles in both hearing and balance.

**Sensorineural hearing loss** is a type of hearing loss that occurs due to damage to the inner ear (cochlea) or the auditory nerve that carries sound signals to the brain.

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

**Strabismus** is a disorder in which both eyes do not line up in the same direction, therefore, they do not look at the same object at the same time and is caused by an imbalance of the muscles of the eyeball.

**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.

**Tinnitus** is a sensation of noise (such as a ringing or roaring) that is typically caused by a bodily condition (such as a disturbance of the auditory nerve or wax in the ear) and usually is of the subjective form which can only be heard by the one affected.

**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.

**Ulcerated** is a break in the skin or mucous membrane with loss of surface tissue, disintegration and necrosis of epithelial tissue and often pus.

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

**Uveitis**, refers to the inflammation of the uvea, the middle layer of the eye. The uvea consists of the iris, ciliary body and choroid. Inflammation in any of these structures can cause uveitis.

**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.

## MRI Face/Sinus, Neck and Orbits References

- [1] Ajani, J.A., D'Amico, T.A., Yoon, H.H. (2025). Esophageal and Esophagogastric Junction Cancers Version 3.2025. *National Comprehensive Cancer Network*. Retrieved: June 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/esophageal.pdf](https://www.nccn.org/professionals/physician_gls/pdf/esophageal.pdf)
- [2] Aulino, J.M., Kirsch, C.F.E., . . . Bykowski, J. (2019). ACR Appropriateness Criteria Neck Mass-Adenopathy. *Journal of the American College of Radiology*, 16(5S), S150-S160.
- [3] Baba, A., Kurokawa, R., . . . Srinivasan, A. (2023). Advanced imaging of head and neck infections. *Journal of Neuroimaging*, 33(4), 477-492.
- [4] Bestic, J.M., Wessell, D.E., . . . Kransdorf, M.J. (2020). ACR Appropriateness Criteria Primary Bone Tumors. *Journal of the American College of Radiology*, 17(5S), S226-S238.
- [5] Bierman, J.S., Hirbe, A., . . . Wustrack, R.L. (2025). Bone Cancer Version 2.2025. *National Comprehensive Cancer Network*. Retrieved: June 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/bone.pdf](https://www.nccn.org/professionals/physician_gls/pdf/bone.pdf)
- [6] Boulter, D.J., Job, J., . . . Corey, A.S. (2021). ACR Appropriateness Criteria Plexopathy: 2021 Update. *Journal of the American College of Radiology*, 18(11S), S423-S441.
- [7] Calle, S., Choi, J., . . . Learned, K.O. (2021). Imaging of the Thyroid: Practical Approach. *Neuroimaging Clinics of North America*, 31(3), 265-284.
- [8] Carpenter, J.P., Litt, H. & Gowda, M. (2023). Magnetic Resonance Imaging and Arteriography. A.N. Sidawy (Eds.). *Rutherford's Vascular Surgery and Endovascular Therapy* (30). (pp. 336-394.e4). Philadelphia, PA: Elsevier.
- [9] Connor, S.E.J. (2021). Imaging of the Vestibular Schwannoma: Diagnosis, Monitoring, and Treatment. *Neuroimaging Clinics of North America*, 31(4), 451-471.
- [10] Coudert, H., Mirafzal, S., . . . Montoriol, P.F. (2021). Multiparametric magnetic resonance imaging of parotid tumors: A systematic review. *Diagnostic and Interventional Imaging*, 102(3), 121-130.
- [11] Cutri, R.M., Shakya, D. & Shibata, S.B. (2022). Neuralgia and Atypical Facial, Ear, and Head Pain. *Otolaryngologic Clinics of North America*, 55(3), 595-606.
- [12] Fang, Y., Shen, B., . . . Wang, M. (2023). Orbital inflammatory pseudotumor: new advances in diagnosis, pathogenesis, and treatment. *European Journal of Medical Research*, 28(1), 395.
- [13] Gaijar, A., Mahajan, A., . . . Zaky, W. (2025). Pediatric Central Nervous System Cancers Version 3.2025. *National Comprehensive Cancer Network*. Retrieved: September 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/ped\\_cns.pdf](https://www.nccn.org/professionals/physician_gls/pdf/ped_cns.pdf)
- [14] Gamer, H.W., Wessell, D.E., . . . Chang, E.Y. (2023). ACR Appropriateness Criteria Soft Tissue Masses: 2022 Update. *Journal of the American College of Radiology*, 20(5), S234-S245.

- [15] Go, R.S., Jacobsen, E., . . . Zurbruggen, L. (2025). Histiocytic Neoplasms Version 3.2025. *National Comprehensive Cancer Network*. Retrieved: June 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/histiocytic\\_neoplasms.pdf](https://www.nccn.org/professionals/physician_gls/pdf/histiocytic_neoplasms.pdf)
- [16] Guarmera, A., Valente, P., . . . Rossi-Espagnet, M.C. (2023). Congenital Malformations of the Eye: A Pictorial Review and Clinico-Radiological Correlations. *Journal of Ophthalmology*, 2024, 5993083.
- [17] Gule-Monroe, M.K., Calle, S., . . . Burns, J. (2023). ACR Appropriateness Criteria Staging and Post-Therapy Assessment of Head and Neck Cancer. *Journal of the American College of Radiology*, 20(11), S521-S564.
- [18] Gupta, S.K., Ya'qoub, L., . . . Saeed, I.M. (2020). Safety and Clinical Impact of MRI in Patients with Non-MRI-conditional Cardiac Devices. *Radiology: Cardiothoracic Imaging*, 2(5), e200086.
- [19] Haddad, R.I., Bischoff, L., . . . Yeh, M.W. (2025). Thyroid Carcinoma Version 1.2025. *National Comprehensive Cancer Network*. Retrieved: June 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/thyroid.pdf](https://www.nccn.org/professionals/physician_gls/pdf/thyroid.pdf)
- [20] Hagiwara, M., Policeni, B., . . . Corey, A.S. (2022). ACR Appropriateness Criteria Sinonasal Disease: 2021 Update. *Journal of the American College of Radiology*, 19(5S), S175-S193.
- [21] Hennessy, M., Ouyang, T. & Slonimsky, E. (2021). Imaging of facial nerve pathologies and anatomic abnormalities. *Operative Techniques in Otolaryngology-Head and Neck Surgery*, 32(4), 197-204.
- [22] Hinde, E. Schwartz, P., . . . Taieb, D. (2021). Primary hyperparathyroidism: defining the appropriate preoperative imaging algorithm. *Journal of Nuclear Medicine*, 62(Supplement 2), 3S-12S.
- [23] Hirvonen, J., Heikkinen, J., . . . Nurminen, J. (2023). MRI of acute neck infections: evidence summary and pictorial review. *Insights into Imaging*, 14(1), 5.
- [24] Hoang, J.K., Oldan, J.D., . . . Cory, A.S. (2019). ACR Appropriateness Criteria Thyroid Disease. *Journal of the American College of Radiology*, 16(5), S300-S314.
- [25] Iyer, J., Hariharan, A., . . . Tran, S.D. (2021). Acquired Facial, Maxillofacial, and Oral Asymmetries—A Review Highlighting Diagnosis and Management. *Symmetry*, 13(9), 1661.
- [26] Jain, V., Policeni, B., . . . Burns, J. (2023). ACR Appropriateness Criteria Tinnitus: 2023 Update. *Journal of the American College of Radiology*, 20(11), S574-S591.
- [27] Kennedy, T.A., Corey, A.S., . . . Bykowski, J. (2018). ACR Appropriateness Criteria Orbits Vision and Visual Loss. *Journal of the American College of Radiology*, 15(5S), S116-S131.
- [28] Kim, S.Y., Borner, U., . . . Vogel, D.W.T. (2022). Magnetic resonance imaging of parotid gland tumors: a pictorial essay. *BMC Medical Imaging*, 22(1), 1-14.
- [29] Klimaj, Z., Klein, J.P., & Szatmary, G. (2020). Cranial Nerve Imaging and Pathology. *Neurologic Clinics*, 38(1), 115-147.

- [30] Maheshwari, M., Bosemani, T., . . . Pruthi, S. (2024). ACR Appropriateness Criteria Orbital Imaging and Vision Loss-Child. *Journal of the American College of Radiology*, 21(6), S219-S236.
- [31] Maralani, P.J., Schieda, N., . . . Weinreb, J. (2020). MRI safety and devices: An update and expert consensus. *Journal of Magnetic Resonance Imaging*, 51(3), 657-674.
- [32] Nabors, L.B., Portnow, J., . . . Willmarth, N.E. (2025). Central Nervous System Cancers Version 1.2025. *National Comprehensive Cancer Network*. Retrieved: June 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/cns.pdf](https://www.nccn.org/professionals/physician_gls/pdf/cns.pdf)
- [33] Petzold, A., Fraser, C.L., . . . Plant, G.T. (2022). Diagnosis and classification of optic neuritis. *The Lancet Neurology*, 21(12), 1120-1134.
- [34] Pfister, D.G., Spencer, S., . . . Zhen, W. (2025). Head and Neck Cancer Version 2.2025. *National Comprehensive Cancer Network*. Retrieved: February 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/head-and-neck.pdf](https://www.nccn.org/professionals/physician_gls/pdf/head-and-neck.pdf)
- [35] Pierce, J.L., Perry, M.T., . . . Beaman, F.D. (2022). ACR Appropriateness Criteria Suspected Osteomyelitis, Septic Arthritis, or Soft Tissue Infection (Excluding Spine and Diabetic Foot): 2022 Update. *Journal of the American College of Radiology*, 19(11), S473-S487.
- [36] Rath, T.J., Policeni, B., . . . Corey, A.S. (2022). ACR Appropriateness Criteria Cranial Neuropathy: 2022 Update. *Journal of the American College of Radiology*, 19(11), S266-303.
- [37] Riely, G.J., Wood, D.E., . . . Yau, E. (2025). Thymomas and Thymic Carcinomas Version 2.2025. *National Comprehensive Cancer Network*. Retrieved: February 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/thymic.pdf](https://www.nccn.org/professionals/physician_gls/pdf/thymic.pdf)
- [38] Riyaz, M.A. (2021). Diagnostic Salivary Gland Imaging – A Review. *Integrated Journal of Medical Sciences*, 8, 296.
- [39] Robson, C.D. Lewis, M. & D'Arco, F. (2023). Non-Syndromic Sensorineural Hearing Loss in Children. *Neuroimaging Clinics of North America*, 33(4), 531-542.
- [40] Rodriguez, J.D., Selleck, M., . . . Huang, B.Y. (2022). Update on MR Imaging of Soft Tissue Tumors of Head and Neck. *Magnetic Resonance Imaging Clinics of North America*, 30(1), 151-198.
- [41] Savary, T., Fieux, M., . . . Trinigali, S. (2023). Incidence of underlying abnormal findings on routine magnetic resonance imaging for Bell Palsy. *JAMA Network Open*, 6(4), e239158.
- [42] Sharma, A., Kirsch, C.F.E., . . . Bykowski, J. (2018). ACR Appropriateness Criteria Hearing Loss and/or Vertigo. *Journal of the American College of Radiology*, 15(11S), S321-S331.
- [43] Stanborough, R., Demertzis, J.L., . . . Beaman, F.D. (2022). ACR Appropriateness Criteria Malignant or Aggressive Primary Musculoskeletal Tumor-Staging and Surveillance: 2022 Update. *Journal of the American College of Radiology*, 19(11), S374-S389.
- [44] Swetter, S.M., Johnson, D., . . . Xing, Y. (2025). Melanoma: Uveal Version 1.2025. *National Comprehensive Cancer Network*. Retrieved: July 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/uveal.pdf](https://www.nccn.org/professionals/physician_gls/pdf/uveal.pdf)

- [45] Szaro, P., McGrath, A. . . . Geijer, M. (2022). Magnetic resonance imaging of the brachial plexus. Part 1: Anatomical considerations, magnetic resonance techniques, and non-traumatic lesions. *European Journal of Radiology Open*, 9, 100392.
- [46] Tay, D., Das, J.P. & Yeh, R. (2021). Preoperative localization for primary hyperparathyroidism: a clinical review. *Biomedicines*, 9(4), 390.
- [47] Tekes, A., Patasis, S., . . . Kamazyn, B. (2018). ACR Appropriateness Criteria Sinusitis-Child. *Journal of the American College of Radiology*, 15(11), S403-S412.
- [48] Tien, D.R. & Meyer Tien, A. (2025). Strabismus. *Clinical Key*. Retrieved: March 2025. [https://www.clinicalkey.com/#!/content/derived\\_clinical\\_overview/76-s2.0-B978032375576400867X#hl0000173](https://www.clinicalkey.com/#!/content/derived_clinical_overview/76-s2.0-B978032375576400867X#hl0000173)
- [49] Tung, I.M., Misirovs, R., . . . Gardiner, Q. (2023). Magnetic resonance imaging findings in patients with idiopathic olfactory dysfunction and normal findings on nasoendoscopy. *The Journal of Laryngology and Otology*, 137(1), 85-88.
- [50] Utukuri, P.S., Shih, R.Y., . . . Burns, J. (2023). ACR Appropriateness Criteria Headache: 2022 Update. *Journal of the American College of Radiology*, 20(5), S70-S93.
- [51] von Mehren, M., Kane, J.M., . . . Zimel, M. (2025). Soft Tissue Sarcoma Version 1.2025. *National Comprehensive Cancer Network*. Retrieved: June 2025. [https://www.nccn.org/professionals/physician\\_gls/pdf/sarcoma.pdf](https://www.nccn.org/professionals/physician_gls/pdf/sarcoma.pdf)
- [52] Wang, L.L., Thompson, T.A., . . . Policeni, B. (2024). ACR Appropriateness Criteria Dizziness and Ataxia: 2023 Update. *Journal of the American College of Radiology*, 21(6), S100-S125.
- [53] Xie, J.S., Donaldson, L. & Margolin, E. (2022). Papilledema: A review of etiology, pathophysiology, diagnosis, and management. *Survey of Ophthalmology*, 67(4), 1135-1159.
- [54] Xun, M., Liu, X., . . . Liu, J.P. (2023). The diagnostic utility of diffusion-weighted magnetic resonance imaging and high-resolution computed tomography for cholesteatoma: A meta-analysis. *Laryngoscope Investigative Otolaryngology*, 8(3), 627-635.
- [55] Zander, D., Bunch, P.M., . . . Corey, A.S. (2021). ACR Appropriateness Criteria Parathyroid Adenoma. *Journal of the American College of Radiology*, 18(11S), S406-S422.
- [56] (2025). Granulomatosis With Polyangiitis. *Clinical Key*. Retrieved: March 2025. [https://www.clinicalkey.com/#!/content/clinical\\_overview/67-s2.0-fe1993e3-662f-44e9-b9de-b9e92091128f#diagnostic-procedures-heading-20](https://www.clinicalkey.com/#!/content/clinical_overview/67-s2.0-fe1993e3-662f-44e9-b9de-b9e92091128f#diagnostic-procedures-heading-20)

## 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.

## Registered Trademarks (®/™) and Copyright (©)

All trademarks, product names, logos, and brand names are the property of their respective owners and are used for purposes of information and/or illustration only. Current Procedural Terminology (CPT)<sup>®</sup>™ is a registered trademark of the American Medical Association (AMA). No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, or otherwise, without permission from HealthHelp.

## 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>.



A WNS COMPANY

## 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.

## For Internal Use Only:

11248 11249 11253 11282 11325 11328 11333 11349 11350 11351 11352 11354 11355 11356  
11358 11359 11360 11361 11362 11365 11366 11367 11368 11369 11370 11374 11375 11394  
11395 11396 11565