HEALTHHELP®

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2024 Magnetic Resonance Imaging (MRI) Face/Sinus, Internal Auditory Canal (IAC), Neck, Orbits

Diagnostic Imaging

MRI-Face-HH

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

NCD 220.2
See also, **NCD 220.2**: Magnetic Resonance Imaging at https://www.cms.gov/medicare-coverage-database/search.aspx *if applicable to individual's healthplan membership*.

MRI General Contraindications

MRI may be 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, insulin pump, spinal cord stimulator)[1]

References: [36] [10] [23]

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 dyssomnia (smell dysfunction) is persistent, demonstrated on objective testing (eg, nasal endoscopy, physical exam, prior imaging) **AND** etiology is unknown.
   References: [47] [44] [56]
2. Bell's palsy/hemifacial spasm, to evaluate the extracranial nerve course, with **ANY** of the following:

[1]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.

a. Facial twitching/spasms occurred before onset.

b. Resolution takes longer than 3 weeks (slow).

c. Signs presenting are atypical (eg, dysphagia, fever, headache).

d. **NO** improvement at 4 months.

References: [44]

3. Cancer or tumor of face, hypopharynx, nasopharynx, oral cavity, oropharynx, salivary glands, skull base, sinuses 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: [5] [51] [19] [22]

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: [24] [28] [41]

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 identified on physical exam **AND** prior imaging (ultrasound/X-ray) is non-diagnostic or indeterminate.

b. Sinonasal obstruction or mass is suspected, based on exam, nasal endoscopy or prior imaging.

References: [51] [19] [17] [24]

6. Peri-procedural care to guide area-associated pre-procedure or invasive procedure planning, or post-procedural follow-up.

7. Polyangiitis (Wegener's granulomatosis disease) with granulomatosis
   References: [37] [20]
8. Prior MRI face/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. 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: [28] [24] [55]
10. 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]. Cerebrospinal fluid (CSF) rhinorrhea: sinus computed tomography [CT] is appropriate to characterize a bony defect. CSF otorrhea: temporal bone CT is appropriate. Intermittent leaks and complex cases: CT/MRI/Nuclear Cisternography may be considered.)*
    References: [29]
11. Trigeminal neuralgia/neuropathy with atypical features (eg, bilateral hearing loss, dizziness/vertigo, numbness, sensory loss, visual changes), to evaluate the extracranial nerve course.
    References: [16] [7] [44] [57]
12. Venous complications (eg, cavernous sinus} are suspected.
    References: [50]

Combination MRI Brain/MRI Face and/or Sinus Guideline

A magnetic resonance imaging (MRI) of the brain **combined** with MRI of the face/sinus(s) is considered medically appropriate when the documentation demonstrates **ANY** of the following conditions:

1. Granulomatosis with polyangiitis (Wegener's granulomatosis disease)
   References: [12] [20] [37]
2. Trigeminal neuralgia/neuropathy with atypical features (eg, bilateral hearing loss, dizziness/vertigo, numbness, visual changes, sensory loss), to evaluate the extracranial nerve course.
   References: [44] [57] [7] [16]
3. Vascular malformation of the face, when extension into brain is suspected.

4. Indications above are approvable, age is less than 8 years old, anesthesia is needed **AND** concurrent intracranial pathology is suspected.

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: [13]
2. Bell's palsy/hemifacial spasm, to evaluate the extracranial nerve course, with **ANY** of the following:
   a. Facial twitching/spasms occurred before onset.
   b. Resolution takes longer than 3 weeks (slow).
   c. Signs presenting are atypical (eg, dysphagia, fever, headache).
   d. **NO** improvement at 4 months.

   References: [48] [44]
3. Cerebrospinal fluid (CSF) otorrhea to characterize a bony defect. (*__NOTE__: *CSF fluid should always be confirmed with laboratory testing [Beta-2 transferrin assay]*.) Intermittent leaks and complex cases consider CT/magnetic resonance [MR]/nuclear cisternography.
   References: [24]
4. Congenital or childhood sensorineural hearing loss, in a pediatric individual, **AND** structural abnormality is suspected.
5. Cholesteatoma is suspected.
   References: [49] [60]
6. Glomus tumor is suspected.
7. Peri-procedural care to guide area-associated pre-procedure or invasive procedure planning, or post-procedural follow-up
8. Prior MRI IAC 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. Pulsatile tinnitus evaluation

References: [30]

10. Sensorineural hearing loss on audiogram is asymmetric.
    References: [49]
11. Tinnitus is non-pulsatile and unilateral.
    References: [1] [30]
12. Vertigo is episodic or persistent.
    References: [49]

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. Facial twitching/spasms occurred before onset.
    b. Resolution takes longer than 3 weeks (slow).
    c. Signs presenting are atypical (eg, dysphagia, fever, headache).
    d. **NO** improvement at 4 months.

    References: [48] [44]
2. Brachial plexopathy is suspected, based on mechanism of injury **OR** suspicious electromyography/nerve conduction study (EMG/NCS). (*__NOTE__: *Chest MRI is preferred; depending on the suspected injury location, a neck and/or shoulder MRI may be appropriate.*)
    References: [8] [52]
3. Cancer or tumor is known of the hypopharynx, larynx, nasopharynx, oral cavity, orbits, oropharynx, salivary glands, skull base, sinuses 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: [5] [51] [19] [22]
4. Cancer or tumor is suspected of the hypopharynx, larynx, nasopharynx, oral cavity, orbits, oropharynx, salivary glands, skull base, sinuses 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 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. Ulceration of overlying skin

      F. Mass is present for at least 2 weeks (or uncertain duration), **WITHOUT** symptoms fluctuation and infectious cause is **NOT** suspected.

   iii. Mass is present on physical exam and ultrasound is non-diagnostic or indeterminate.

   iv. Pediatric individual 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 imaging and further evaluation is needed. (*__NOTE__: *Ultrasound should be the initial imaging study of a mass in the parotid area.*)

d. Mass in the **thyroid area** is known, ultrasound is non-diagnostic or indeterminate and **ANY** of the following: (*__NOTE__: *Computed tomography [CT] is preferred over MRI in the evaluation of thyroid masses due to less respiratory motion artifact. Chest CT may be included for pre-operative assessment in clinically appropriate situations.*)

   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: [5] [51] [19] [14] [33] [3] [27] [9]

5. Cranial nerve palsy (CN IX-XII), objective, to evaluate the extracranial nerve course [34]
References: [44]

6. Hyperparathyroidism, primary, for pre-procedure planning **AND** ultrasound or other nuclear imaging is non-diagnostic or indeterminate.
References: [25] [62] [54]

7. Infection (abscess or deep space) in the neck or pharynx is suspected or known **AND** is symptomatic (eg, fever, pain, swelling).
References: [26] [4]

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: [15]

9. Peri-procedural care to guide area-associated pre-procedure or invasive procedure planning, or post-procedural follow-up

10. Prior MRI neck 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.*)

11. Salivary duct evaluation (*__NOTE__: *Magnetic resonance sialography*)
References: [45]

12. Vocal cord lesions or vocal cord paralysis evaluation
References: [44]

Combination MRI Brain and MRI Neck Guideline

A magnetic resonance imaging (MRI) brain **combined** with MRI neck 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. Facial twitching/spasms occurred before onset.
    b. Resolution takes longer than 3 weeks (slow).
    c. Signs presenting are atypical (eg, dysphagia, fever, headache).
    d. **NO** improvement at 4 months.

    References: [44] [34] [48]
2. Objective cranial nerve palsy (CN IX-XII) to evaluate the extracranial nerve course.
    References: [44] [34]

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*.) [43]

1. Cancer or tumor of larynx, nasopharynx, orbits, periorbital area, salivary glands, skull base or sinuses 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: [5] [51] [19] [22]
2. Complex strabismus syndromes (with ophthalmoplegia or ophthalmoparesis) are suspected or known.
    References: [31] [46]
3. Congenital orbital anomalies
    References: [2] [21]
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: [31] [34] [44] [59]

5. Infection is suspected or known **AND EITHER** 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: [31] [4] [41]

6. Inflammatory disease in the orbit(s) is suspected (eg, eye pain and restricted eye movement with suspected orbital pseudotumor).
References: [53] [18]

7. Mass/tumor (ocular or orbital) is suspected or known.
References: [61] [2]

8. Optic neuritis is suspected.
References: [44] [31] [39] [40]

9. Orbital trauma is suspected, with direct eye injury found on physical exam **OR** ultrasound or X-ray is non-diagnostic or indeterminate.
References: [31] [2]

10. Peri-procedural care to guide area-associated pre-procedure or invasive procedure planning, or post-procedural follow-up

11. Prior MRI orbit 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.)

Combination MRI Brain and MRI Orbit Guideline

A magnetic resonance imaging (MRI) of the brain **combined** with MRI of the orbit(s) is considered medically appropriate when the documentation demonstrates **ANY** of the following:

1. Congenital abnormality with unilateral vision loss in a child.
   References: [2]
2. Neuromyelitis optica spectrum disorder is suspected or known with bilateral, recurrent or severe optic neuritis.
   References: [11]
3. Optic disk swelling (papilledema) occurs bilaterally, with vision loss.
   References: [59] [2]
4. Optic neuritis is suspected.
   References: [44] [31] [39] [40]
5. Optic neuropathy or unilateral optic disk swelling of unclear etiology, for diagnosis or treatment planning
   References: [6] [44]
6. Retinoblastoma is suspected.
   References: [38]
7. Vision loss and optic tumor is suspected, with or **WITHOUT** neurofibromatosis history, in a child.
8. Indications above are approvable, age is less than 8 years old, anesthesia is needed **AND** concurrent intracranial pathology is suspected.

Combination CT and MRI for Metastases Evaluation

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. Cancer recurrence or metastasis is suspected.
2. Staging evaluation, for baseline pre-therapy
3. Surveillance following the **NCCN Guidelines** recommended schedule (see *Surveillance* section)

LCD 34425
See also, **LCD 34425**: Magnetic Resonance Imaging of the Orbit, Face, and/or Neck at https://www.cms.gov/medicare-coverage-database/search.aspx *if applicable to individual's healthplan membership*.

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*.

Head and Neck Cancer Surveillance section

Soft Tissue Sarcoma Surveillance

NCCN Soft Tissue Sarcoma Version 1.2024

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 long-term 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)

Bone Cancer Surveillance

NCCN Bone Cancer Version 2.2024

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

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 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 ± 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 2 to 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

Esophageal and Esophagogastric Junction Cancer Surveillance

NCCN Esophageal or Esophagogastric Junction Cancers Version 3.2024

Esophageal and esophagogastric junction cancer surveillance includes **ANY** of the following:[2]

1. Adenocarcinoma, squamous cell carcinoma; imaging studies as clinically indicated
2. Tumor classification is Tis (tumor in situ) or T1a (± Barret's esophagus [BE]), after endoscopic resection or ablation, imaging surveillance includes **ALL** of the following[3]:
    a. Upper gastrointestinal endoscopy (EGD) every 3 months for the first year
    b. EGD every 6 months for the second year
    c. EGD annually thereafter (indefinitely)
3. Tumor classification is Tis, T1a, N0, after esophagectomy, imaging surveillance includes **ALL** of the following[4]:
    a. Upper gastrointestinal endoscopy (EGD) every 3 months for the first year
    b. EGD every 6 months for the second year
    c. EGD annually thereafter (indefinitely)
4. Tumor classification T1b[a] (N0 on ultrasound) after endoscopic resection or ablation, imaging surveillance includes **ALL** of the following:
    a. Computed tomography (CT) chest/abdomen (+ contrast, unless contraindicated) may be considered every 6 months for the first 2 years and annually for up to 5 years
    b. EGD every 3 months for the first year, every 4 to 6 months for the second year, then annually thereafter (indefinitely)
5. Tumor classification T1b or greater, any N[a] or T1a N+, imaging surveillance includes esophagectomy performed with or **WITHOUT** adjuvant therapy then surveillance includes **ALL** of the following:
    a. Chest/abdomen CT (+ contrast, unless contraindicated) every 6 months for the first 2 years and annually for up to 5 years
    b. EGD as clinically indicated **OR** if incompletely resected BE after ablation: EGD every 3 months for the first year, every 6 months for the second year, then annually indefinitely

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[2]Routine esophageal/esophagogastic junction cancers are not recommended for cancer-specific surveillance, for more than 5 years after the end of treatment.

[3]Imaging studies for surveillance are **NOT** recommended.

[4]Imaging studies for surveillance are **NOT** recommended.

6. Tumor classification any T and/or any N, with neoadjuvant chemotherapy **OR** chemoradiotherapy **AND** esophagectomy, with or **WITHOUT** adjuvant treatment, imaging surveillance includes chest/abdomen CT (+ contrast, unless contraindicated) every 6 months for up to 2 years, then annually for up to 5 years.
7. Tumor classification (pretreatment) N0 to N+, T1b to T4, T4b, with definitive chemoradiation (without esophagectomy), surveillance imaging includes **ALL** of the following:
    a. Chest/abdomen CT (+ contrast unless contraindicated) every 3 to 6 months for the first 2 years and annually for up to 5 years
    b. EGD every 3 to 6 months for the first 2 years, then annually for 3 more years

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:

1. 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.[5]

[5]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.

Histiocytic Neoplasms Surveillance

NCCN Histiocytic Neoplasms Version 1.2024

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

1. Erdheim-Chester disease surveillance imaging includes **ANY** of the following:
    a. FDG-positron emission tomography/computed tomography (PET/CT) every 3 to 6 months for the 1st 2 years after starting therapy until stabilization of disease, then as clinically indicated
    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

Occult Primary Cancer Surveillance

NCCN Occult Primary Cancer Version 2.2024

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

Thymomas and Thymic Carcinomas Surveillance

NCCN Thymomas and Thymic Carcinomas Version 1.2024

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

1. R0 resection surveillance imaging with chest CT (+ contrast) or MRI (in certain clinical situations) for **ANY** of the following:

   a. Thymic carcinoma every 6 to 12 months for 2 years, then annually for 5 years

   b. Thymoma every 6 months for 2 years, then annually for 10 years

2. R1 and R2 resection surveillance imaging with chest CT (+ contrast) or MRI (in certain clinical situations) 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 (in certain clinical situations) 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

Thyroid Carcinoma Surveillance

NCCN Thyroid Carcinoma Version 2.2024

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

1. Anaplastic carcinoma (stage IVC[d] surveillance imaging includes CT or MRI (+ contrast) of brain, neck, chest, abdomen and pelvis at frequent intervals as clinically indicated (*__NOTE__: *consider FDG-PET/CT 3 to 6 months after initial therapy*)
2. Follicular, oncocytic and papillary carcinoma surveillance imaging includes **ANY** of the following:
    a. Low-risk papillary thyroid cancer, follow-up includes a neck ultrasound every 6 months for 1 to 2 years, then annually
    b. Papillary carcinoma after lobectomy, follow-up includes a neck ultrasound at 6 to 12 months
    c. Papillary carcinoma after total thyroidectomy, with radioactive iodine (RAI) and **ANY** of the following:
        i. RAI avid disease is present on post-therapy scan, follow-up includes neck ultrasound at 6 to 12 months (*__NOTE__: *consider TSH-stimulated RAI whole body scan*)
        ii. RAI avid disease is **ABSENT** on post-therapy scan, follow-up includes neck ultrasound at 6 to 12 months
    d. Papillary carcinoma after total thyroidectomy **WITHOUT** RAI, follow-up includes a neck ultrasound at 6 to 12 months
    e. Recurrent disease, follow-up includes a neck ultrasound, clinically as indicated
3. Medullary carcinoma surveillance imaging includes **ANY** of the following:
    a. Bone scan and magnetic resonance imaging (MRI) of whole body, if appropriate (eg, very elevated calcitonin levels)
    b. Calcitonin level is 150 pg/ml or more: surveillance with computed tomography (CT) or MRI (+ contrast) of the neck, chest, and liver, as clinically indicated
    c. FDG-positron emission tomography/CT (PET) or Ga-68 DOTATE or MRI (+ contrast) of the neck, chest, abdomen with liver protocol, based on calcitonin/CEA doubling time
    d. Neck ultrasound as clinically indicated

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)

Codes	Description
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, Orbits Summary of Changes

MRI Face/Sinus, Neck, Orbits guideline had the following version changes from 2023 to 2024:

- Added the following to keep in line with current research:
  - Indications under "Infection"
  - MRI Internal Auditory Canal indications
  - Pediatric indications
  - "Prior imaging is non-diagnostic" under "Mass or lymphadenopathy"
  - "Prior imaging is non-diagnostic" indication
  - "Venous complications" indication
  - "Vertigo" indication
- Citations updated per the evidence.
- Mid-cycle update: added Pediatric Preamble and pediatric indications

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.
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 is paralysis of the facial nerve producing distortion on one side of the face.
Beta-2 transferrin is a test to detect spinal fluid in body fluids, such as ear or nasal fluid.
Brachial plexopathy 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.

Cerebellopontine angle (CPA) tumor is a tumor that occurs between the brain stem and the lower part of the brain. The CPA is a triangular space in the posterior fossa, which is the most common location for tumors in that area.

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 an epidermoid cyst usually in the brain arising from aberrant embryonic rests and appearing as a compact shiny flaky mass.

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."

Cranial nerve palsy is a condition that causes a decreased or complete loss of function in one or more cranial nerves.

Deep neck space infections (neck) most commonly arise from a septic focus of the mandibular teeth, tonsils, parotid gland, deep cervical lymph nodes, middle ear, or sinuses.

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

Dysosmia is a change in the sense of smell.

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

Electromyogram (EMG) is a test that converts the electrical activity associated with functioning skeletal muscle into a visual record or into sound used to diagnose neuromuscular disorders and in biofeedback training.

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 your eyes are sunken in.

Erythrocyte sedimentation rate (ESR) is a commonly performed hematology test that may indicate and monitor an increase in inflammatory activity within the body caused by one or more conditions such as autoimmune disease, infections or tumors.

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

Glomus tumor is a type of neuroendocrine tumor that forms near certain blood vessels and nerves outside of the adrenal glands.

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.
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.
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.
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.
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.
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 preformed and a radioisotope is injected into the spinal fluid. A nuclear scan is preformed 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 neuritis is inflammation of the optic nerve.

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 a disease that causes swelling of the optic discs in both eyes. This swelling is caused by increased intracranial pressure (ICP).
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:

- 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.
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.
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 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.

MRI Face/Sinus, Neck and Orbits 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.

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