

04-70450-20

Original Effective Date: 09/15/09

Reviewed: 03/23/23

Revised: 09/30/23

Subject: Computed Tomography (CT) of the Neck for Soft Tissue Evaluation

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

[Position Statement](#)

[Billing/Coding](#)

[Reimbursement](#)

[Program Exceptions](#)

[Definitions](#)

[Related Guidelines](#)

[Other](#)

[References](#)

[Updates](#)

DESCRIPTION:

Computed tomography (CT) is a radiologic modality that provides clinical information in the detection, differentiation and demarcation of disease. CT is a form of medical imaging that involves the exposure of members to ionizing radiation. CT should only be performed under the supervision of a physician with training in radiation protection to optimize examination safety. Radiation exposure should be taken into account when considering the use of this technology. This guideline addresses the use of CT of the neck for soft tissue evaluation, diagnosis and management of neck (soft tissue) related conditions in the outpatient setting.

POSITION STATEMENT:

Computed tomography (CT) of the neck **meets the definition of medical necessity** for the following indications:

Suspected tumor or cancer

- Suspicious lesions in mouth or throat
- Suspicious mass/tumor found on another imaging study and needing clarification
- Neck mass or lymphadenopathy (not parotid region and not thyroid region):
 - Present on physical exam and remains non-diagnostic after ultrasound is completed
 - Mass or abnormality found on other imaging study and needing further evaluation
 - Increased risk for malignancy

- Failed 2 weeks of treatment for suspected infectious adenopathy

Note: For discrete cystic lesions of the neck, an ultrasound should be performed as initial imaging unless there is a high suspicion of malignancy.

- Neck mass (parotid region)
 - Parotid mass found on other imaging study and needing further evaluation
- Neck mass (thyroid region)
 - Staging and monitoring for recurrence of known thyroid cancer
 - To assess extent of thyroid tissue when other imaging suggests extension through the thoracic inlet into the mediastinum or concern for airway compression

Pediatric members

- Neck masses if ultrasound is inconclusive or suspicious
- History of malignancy.

Known or suspected deep space infections or abscesses of the pharynx or neck with signs or symptoms of infection

Known tumor or cancer of skull base, tongue, larynx, nasopharynx, pharynx, or salivary glands

- Initial staging
- Restaging during treatment
- Areas difficult to visualize on follow-up examination
- Suspected recurrence or metastases based on symptoms or examination findings.

Pre-operative/procedural evaluation

- Pre-operative evaluation for a planned surgery or procedure.

Post-operative/procedural evaluation (e.g. post neck dissection)

- A follow-up study may be needed to help evaluate a member's progress after treatment, procedure, intervention or surgery. Documentation required.

Other indications for neck CT

- Salivary gland stones
- To assess for foreign body when radiograph is inconclusive or negative
- Vocal cord lesions or vocal cord paralysis
- Evaluation of tracheal stenosis.

Dysphagia after appropriate work up including endoscopy and fluoroscopic studies

- Unexplained throat pain for more than 2 weeks
- Unexplained ear pain and MRI is contraindicated
- Diagnosed primary hyperparathyroidism when surgery is planned
 - Previous nondiagnostic ultrasound or nuclear medicine scan.
- Bell's palsy/hemifacial spasm (for evaluation of the extracranial nerve course)
- Objective cranial nerve palsy (CN IX-XII) (for evaluation of the extracranial nerve course).

BILLING/CODING INFORMATION:

CPT Coding:

70490	Computed tomography, soft tissue neck; without contrast material
70491	Computerized axial tomography, soft tissue neck; with contrast material(s)
70492	Computerized axial tomography, soft tissue neck; without contrast material followed by contrast material(s) and further sections
76380	Computed tomography, limited or localized follow-up study

REIMBURSEMENT INFORMATION:

Reimbursement for computed tomography (70490 – 70492, 76380) performed on the same anatomical area is limited to two (2) computed tomography (70490 – 70492, 76380) within a 6-month period. Computed tomography (70490 – 70492, 76380) in excess of two (2) computed tomography (70490 – 70492, 76380) within a 6-month period are subject to medical review of documentation to support medical necessity. Documentation should include radiology reason for study, radiology comparison study-date and time, radiology comparison study observation, radiology impression, and radiology study recommendation.

Reimbursement for computed tomography (70490 – 70492, 76380) for an oncologic condition undergoing active treatment or active treatment completed within the previous 12 months on the same anatomical area is limited to four (4) computed tomography (70490 – 70492, 76380) within a 12-month period. Computed tomography (70490 – 70492, 76380) for an oncologic condition in excess of four (4) computed tomography (70490 – 70492, 76380) within a 12-month period are subject to medical review of documentation to support medical necessity. Documentation should include radiology reason for study, radiology comparison study-date and time, radiology comparison study observation, radiology impression, and radiology study recommendation.

Re-imaging or additional imaging due to poor contrast enhanced exam or technically limited exam is the responsibility of the imaging provider.

LOINC Codes:

The following information may be required documentation to support medical necessity: physician history and physical, physician progress notes, plan of treatment and reason for computed tomography (CT) of the neck for soft tissue evaluation.

Documentation Table	LOINC Codes	LOINC Time Frame Modifier Code	LOINC Time Frame Modifier Codes Narrative
Physician history and physical	28626-0	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Attending physician progress note	18741-9	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Plan of treatment	18776-5	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology reason for study	18785-6	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology comparison study-date and time	18779-9	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology comparison study observation	18834-2	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology-study observation	18782-3	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology-impression	19005-8	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim
Radiology study-recommendation (narrative)	18783-1	18805-2	Include all data of the selected type that represents observations made six months or fewer before starting date of service for the claim

PROGRAM EXCEPTIONS:

Federal Employee Plan (FEP): Follow FEP guidelines.

Medicare Advantage products:

No Local Coverage Determination (LCD) was found at the time of the last guideline reviewed date.

The following National Coverage Determination (NCD) was reviewed on the last guideline reviewed date: Computed Tomography, (220.1) located at cms.gov.

DEFINITIONS:

No guideline specific definitions apply.

RELATED GUIDELINES:

[Computed Tomography to Detect Coronary Artery Calcification, 04-70450-02](#)

[Computed Tomographic Angiography \(CTA\), 04-70450-03](#)

[Computerized Axial Tomography \(CT\), Head/Brain 04-70450-18](#)

[Computerized Axial Tomography \(CT\), Temporal Bone/Mastoid & Maxillofacial 04-70450-19](#)

[Computerized Axial Tomography \(CT\), Thorax \(Chest\) 04-70450-21](#)

[Computerized Axial Tomography \(CT\) Abdomen and Pelvis 04-70450-22](#)

[Computerized Axial Tomography \(CT\), Spine \(Cervical, Thoracic, Lumbar\) 04-70450-23](#)

[Computerized Axial Tomography \(CT\), Extremity \(Upper & Lower\) 04-70450-24](#)

[Whole Body Computed Tomography \(CT\), 04-70450-25](#)

OTHER:

Other name used to report computed tomography (CT):

CAT scanning

Pediatric Examinations

The use of CT in pediatric examinations requires assessment of the risks, benefits and use of the studies. The lowest possible radiation dose consistent with acceptable diagnostic image quality should be used in pediatric examinations. Radiation doses should be determined periodically based on a reasonable sample of pediatric examinations. Technical factors should be appropriate for the size and the age of the child and should be determined with consideration of parameters (e.g., characteristics of the imaging system, organs in the radiation field, lead shielding).

REFERENCES:

1. ACR–ASNR–SPR Practice Parameter for the Performance of Computed Tomography (CT) of the Extracranial Head and Neck, 2021.
2. Brown RE, Harave S. Diagnostic imaging of benign and malignant neck masses in children-a pictorial review. Quant Imaging Med Surg. 2016 Oct;6(5):591-604.

3. Cicero G, D'angelo T, Racchiusa S, et al. . Cross-sectional Imaging of Parotid Gland Nodules: A Brief Practical Guide. *J Clin Imaging Sci*. 2018 Apr 16; 8:14.
4. Dankbaar JW, Pameijer FA. Vocal cord paralysis: anatomy, imaging and pathology. *Insights Imaging*. 2014 Dec;5(6):743-51.
5. Earwood JS, Rogers TS, Rathjen NA. Ear Pain: Diagnosing Common and Uncommon Causes. *Am Fam Physician*. 2018 Jan 1;97(1):20-27.
6. Expert Panel on Gastrointestinal Imaging: Levy AD, Carucci LR, Bartel TB, et al. ACR Appropriateness Criteria® Dysphagia. *J Am Coll Radiol*. 2019 May;16(5S): S104-S115.
7. Expert Panel on Neurologic Imaging: Aulino JM, Kirsch CFE, Burns J, et al. ACR Appropriateness Criteria® Neck Mass-Adenopathy. *J Am Coll Radiol*. 2019 May;16(5S): S150-S160.
8. Expert Panel on Neurological Imaging: Hoang JK, Oldan JD, Mandel SJ, et al. ACR Appropriateness Criteria® Thyroid Disease. *J Am Coll Radiol*. 2019 May;16(5S): S300-S314.
9. Expert Panel on Neurological Imaging: McDonald MA, Kirsch CFE, Amin BY, et al. ACR Appropriateness Criteria® Cervical Neck Pain or Cervical Radiculopathy. *J Am Coll Radiol*. 2019 May;16(5S):S57-S76.
10. Gharib H, Papini E, Garber JR, et al. AACE/ACE/AME Task Force on Thyroid Nodules. American Association of Clinical Endocrinologists, American College of Endocrinology, and Associazione Medici Endocrinologi Medical Guidelines for Clinical Practice for the Diagnosis and Management of Thyroid Nodules--2016 update. *Endocr Pract*. 2016 May;22(5):622-39.
11. Haynes J, Arnold KR, Aguirre-Oskins C, et al. Evaluation of neck masses in adults. *Am Fam Physician*. 2015 May 15;91(10):698-70
12. King AD. Multimodality imaging of head and neck cancer. *Cancer Imaging* 2007 Oct; 7 Spec No A:S37-S46.
13. Kuno H, Onaya H, Fujii S, et al. Primary staging of laryngeal and hypopharyngeal cancer: CT, MR imaging and dual-energy CT. *Eur J Radiol*. 2014 Jan;83(1): e23-35. [Abstract].
14. Pynnonen MA, Gillespie MB, Roman B, et al. Clinical Practice Guideline: Evaluation of the Neck Mass in Adults Executive Summary. *Otolaryngol Head Neck Surg*. 2017 Sep;157(3):355-371.
15. Schwetschenau E, Kelley DJ. The adult neck mass. *M Fam Physician* 2002 Sep; 66(5): 831-838.
16. Talukdar R, Yalawar RS, Kumar A. CT evaluation of neck masses. *IOSR Journal of Dental and Medical Science* 2014; 14(12):39-49.
17. Tharin BD, Kini JA, York GE, et al. Brachial plexopathy: a review of traumatic and nontraumatic causes. *AJR Am J Roentgenol* 2014 Jan; 202(1): W67-75.
18. Wai K, Wang T, Lee E, et al. Management of persistent pediatric cervical lymphadenopathy. *Arch Otorhinolaryngol Head Neck Surg*. 2020; 4(1):1 DOI: 10.24983.

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy and Coverage Committee on 03/23/23.

GUIDELINE UPDATE INFORMATION:

09/15/09	New Medical Coverage Guideline.
01/01/10	Revised Florida Blue Radiology Management program exception section.
08/15/11	Scheduled review. Updated position statement. Added general consideration statement for magnetic resonance imaging (MRI). Added 76380. Revised limitation to two (2) within a 6-month period. Updated references.
10/01/11	Revision; formatting changes.
05/15/12	Revised and expanded position statement: added neck to lymphadenopathy and duration, added tumor or cancer to skull base mass, added neck (tumor, mass, cancer), parathyroid tumor and nasopharyngeal tumor. Deleted but is not limited to. Updated references.
09/15/13	Scheduled review; MCG subject changed to "Computed Tomography (CT) of the Neck for Soft Tissue Evaluation". Deleted hoarseness. Added pre-operative evaluation. Updated Medicare Advantage program exception and references.
05/15/14	Added limitation statement for an oncologic condition; limited to four (4) computed tomography within a 12-month period.
01/01/15	Scheduled review; maintain position statement. Updated references.
03/15/18	Revision; revised position statement. Added position statement for tumor, cancer, mass, combination studies, inflammatory disease or infection, and pre/post-operative evaluation. Updated references.
11/15/19	Revised position statements for (tumor or cancer, combination studies, suspected tumor or cancer, other indications for neck CT). Added deep space infections or abscesses of the pharynx or neck. Deleted inflammatory disease or infection and combination studies. Updated references.
04/15/20	Review/revision. Expanded and revised criteria for: combination studies, tumor or cancer and other indications for neck CT. Added pediatric indication, an ultrasound as an initial imaging. Updated references.
03/15/22	Review/revision. Revised and expanded criteria for: tumor or cancer and other indications for neck CT. Revised pre-operative/procedural evaluation. Added indication for: pediatric, deep space infections or abscesses, tumor or cancer. Updated references.
06/03/22	Revision; deleted when ordered by specialist.
07/01/22	Revision to Program Exceptions section.
09/30/23	Review: position statements and references updated.