# Cohere Medicare Advantage Policy - Computed Tomography (CT), Chest

***Clinical Policy for Medical Necessity Review***

**Version:** 2
**Cohere Health UMC Approval Date: October 16, 2025**
Last Annual Review: October 16, 2025
Revision: Not Applicable
Next Annual Review: October 16, 2026

# Important Notices

## Notices & Disclaimers:

**GUIDELINES ARE SOLELY FOR COHERE'S USE IN PERFORMING MEDICAL NECESSITY REVIEWS AND ARE NOT INTENDED TO INFORM OR ALTER CLINICAL DECISION-MAKING OF END USERS.**

Cohere Health, Inc. ("**Cohere**") has published these clinical guidelines to determine the medical necessity of services (the "**Guidelines**") for informational purposes only, and solely for use by Cohere's authorized "**End Users**". These Guidelines (and any attachments or linked third-party content) are not intended to be a substitute for medical advice, diagnosis, or treatment directed by an appropriately licensed healthcare professional. These Guidelines are not in any way intended to support clinical decision-making of any kind; their sole purpose and intended use is to summarize certain criteria Cohere may use when reviewing the medical necessity of any service requests submitted to Cohere by End Users. Always seek the advice of a qualified healthcare professional regarding any medical questions, treatment decisions, or other clinical guidance. The Guidelines, including any attachments or linked content, are subject to change at any time without notice. This policy may be superseded by existing and applicable Centers for Medicare & Medicaid Services (CMS) statutes.



---

## Other Notices:



Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein.



---

## Policy Information:

**Specialty Area:** Diagnostic Imaging
**Policy Name:** Cohere Medicare Advantage Policy - Computed Tomography (CT), Chest
**Type:** [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17 yo)

**Table of Contents**

# Medical Necessity Criteria

***Service: Computed Tomography (CT), Chest***

## Related CMS Documents

Please refer to the CMS Medicare Coverage Database for the most current applicable CMS National Coverage.[1-5]

- National Coverage Determination (NCD). Computed tomography (220.1)
- Local Coverage Determination (LCD). Computerized axial tomography (CT), thorax (L33459)
  - Billing and Coding: Computerized axial tomography (CT), thorax (A56580)
- Local Coverage Determination (LCD). Multiple imaging in oncology (L35391)
  - Billing and Coding: Multiple imaging in oncology (A56848)

## Description

Diagnostic examinations of the head (head scans) and of other parts of the body (body scans) performed by computerized tomography (CT) scanners are covered if medical and scientific literature and opinion support the effective use of a scan for the condition, and the scan is reasonable and necessary for the individual patient. CT scans have become the primary diagnostic tool for many conditions and symptoms. CT scanning used as the primary diagnostic tool can be cost-effective because it can eliminate the need for a series of other tests, is non-invasive and thus virtually eliminates complications, and does not require hospitalization.[1] CT of the chest can be performed as a screening examination in high-risk patients and to diagnose and evaluate a myriad of thoracic processes involving the lungs, mediastinum/hilum, pleura, and chest wall. Contrast usage is guided by the clinical scenario being investigated.[6]

## Medical Necessity Criteria

### Indications

**Computed tomography (CT), chest** is considered appropriate if **ANY** of the following is **TRUE**[1]:

- Chest radiograph and/or physical examination have been performed and are indeterminate, or findings require further evaluation for **ANY** of the following:
  - Evaluation of pulmonary, mediastinal, pleural, or chest wall infections and their complications[2]; **OR**
  - Diagnosis and management of mediastinal neoplasms and other processes, including but not limited to thymoma and mediastinal lymphadenopathy[2,4,7]; **OR**
  - For the evaluation of cardiopulmonary failure or insufficiency (e.g., unexplained shortness of breath, heart failure)[2]; **OR**
  - Neoplastic or hematologic conditions with involvement or potential involvement of the thorax for **ANY** of the following[2,8,9]:
    - Initial staging[4]; **OR**
    - Treatment planning[4]; **OR**
    - Response assessment[4]; **OR**
    - Surveillance with **ANY** of the following[4]:
      - The patient is assumed to have either no known disease or disease that is stable or clinically insignificant (every 6-12 months for an overall duration [e.g., 5 years]); **OR**
      - Suspected recurrence/progression; **OR**
      - Evaluating response to treatment, when a change in therapy is contemplated (no more often than after 2 cycles of chemotherapy and/or 6-8 weeks since the prior imaging evaluation); **OR**
  - Detection and determination of nature and extent of cardiovascular abnormalities, such as, but not limited to, aneurysm, dissection, embolism, thrombosis, congenital anomalies, postoperative complications, and sequelae of atherosclerotic disease[2,6]; **OR**
  - For assessing and/or guiding drainage of pulmonary or pleural fluid collections such as abscess, empyema, effusion, or pneumothorax[2]; **OR**

- For characterizing and follow-up evaluation of interstitial and alveolar lung disease due to idiopathic, allergic, collagen-vascular, environmental, or other causes[2,6]; **OR**
- For evaluating thoracic sequelae of remote processes, including, but not limited to, pancreatitis, gastrointestinal perforation, and other processes[2]; **OR**
- For assessing injury, potential injury, or thoracic sequelae after trauma, burn, surgery, transplantation, radiation therapy, chemotherapy, or invasive procedure such as pacemaker placement, chest tube placement, or mechanical ventilation[2]; **OR**
- Evaluation of the patient with symptoms that may be arising from the chest, or be referred to the chest, including, but not limited to, cough, hemoptysis, chest pain, abdominal pain, and others[2]; **OR**
- To further characterize a suspected abnormality detected by another imaging test[2]; **OR**
- For the evaluation of a patient with myasthenia gravis to rule out thymic tumors[2]; **OR**
- Performance of CT-guided biopsies and drainage procedures when fluoroscopy is inadequate[2]; **OR**
- Repeat imaging (defined as repeat request following recent imaging of the same anatomic region with the same or similar modality) will be considered reasonable and necessary if **ALL** of the following are **TRUE**:
    - There are no established guidelines; **AND**
    - **ANY** of the following:
        - There are new or worsening symptoms not addressed in the guidelines, such that repeat imaging would influence treatment; **OR**
        - There is need for a one-time clarifying follow-up of a prior indeterminate finding; **OR**
        - In the absence of a change in symptoms, there is an established need for monitoring, which would influence management.

### Non-Indications

**Computed tomography (CT), chest with contrast** is not considered appropriate if **ANY** of the following is **TRUE**:

- The patient has undergone advanced imaging of the same body part and for the same indication within 3 months without undergoing treatment or developing new or worsening symptoms.[10]

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

## Disclaimer on Radiation Exposure in Pediatric Population

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

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

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

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

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

### Cohere Imaging Gently Guideline

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

## Definitions

| Fleischner Society 2017 Guidelines for Management of Incidentally Detected Pulmonary Nodules in Adults[13] | | | | |
|---|---|---|---|---|
| **Solid Nodules*** | | | | |
| | **Size** | | | |
| **Nodule Type** | **<6mm (<100 $mm^3$)** | **6–8 mm (100–250 $mm^3$)** | **>8 mm (>250 $mm^3$)** | **Comments** |
| *Single* | | | | |
| Low Risk** | No routine follow-up | CT at 6–12 months, then consider CT at 18–24 months | Consider CT at 3 months, PET/CT, or tissue sampling | Nodules <6 mm do not require routine follow-up in low-risk patients (recommendation 1A). |
| High Risk** | Optional CT at 12 months | CT at 6–12 months, then CT at 18–24 months | Consider CT at 3 months, PET/CT, or tissue sampling | Certain patients at high-risk with suspicious nodule morphology, upper lobe location, or both may warrant a 12-month follow-up (recommendation 1A). |
| *Multiple* | | | | |
| Low Risk** | No routine follow-up | CT at 3–6 months, then consider CT at 18–24 months | CT at 3–6 months, then consider CT at 18–24 months | Use most suspicious nodule as guide to management. Follow-up intervals may vary according to size and risk (recommendation 2A). |
| High Risk** | Optional CT at 12 months | CT at 3–6 months, then at 18–24 months | CT at 3–6 months, then at 18–24 months | Use most suspicious nodule as guide to management. Follow-up intervals may vary according to size and risk (recommendation 2A). |

| **Subsolid Nodules*** | | | |
|---|---|---|---|
| | **Size** | | |
| **Nodule Type** | **<6mm (<100 $mm^3$)** | **≥ 6 mm (>100 mm3)** | **Comments** |
| *Single* | | | |
| Ground Glass | No routine follow-up | CT at 6–12 months to confirm persistence, then CT every 2 years until 5 years | In certain suspicious nodules <6 mm, consider follow-up at 2 and 4 years. If solid component(s)or growth develops, consider resection. (Recommendations 3A and 4A). |
| Part Solid | No routine follow-up | CT at 3–6 months to confirm persistence. If unchanged and solid component remain <6 mm, annual CT should be performed for 5 years. | In practice, part-solid nodules cannot be defined as such until ≥6 mm, and nodules <6 mm do not usually require follow-up. Persistent part-solid nodules with solid components 6mm should be considered highly suspicious (recommendations 4A-4C). |
| *Multiple* | CT at 3–6 months. If stable, consider CT at 2 and 4 years | CT at 3–6 months. Subsequent management based on the most suspicious nodule(s) | Multiple <6 mm pure ground-glass nodules are usually benign, but consider follow-up in selected patients at high risk at 2 and 4 years(recommendation 5A). |

| Lung-RADS® (2022)[14] | | | |
|---|---|---|---|
| **Lung-RADS** | **Category Descriptor** | **Findings** | **Management** |
| **0** | **Incomplete** Estimated Population Prevalence: ~1% | Prior chest CT examination being located for comparison (see note 9) | Comparison to prior chest CT |
| | | Part of all of the lungs cannot be evaluated | Additional lung cancer screening CT imaging needed |
| | | Findings suggestive of an inflammatory or infectious process (see note 10) | 1-3 month LDCT |
| **1** | **Negative** Estimated Population Prevalence: 39% | **No lung nodules;** OR | 12-month screening LDCT |
| | | **Nodule with benign features:**<br>• Complete, central, popcorn, or concentric ring calcifications; OR<br>• Fat-containing | |
| **2** | **Benign**<br><br>Based on imaging features or indolent behavior<br><br>Estimated Population Prevalence: 45% | **Juxtapleural Nodule**<br>• < 10 mm (524 $mm^3$) mean diameter at baseline or new; AND<br>• Solid; smooth margins; and oval, lentiform, or triangular shape | |
| | | **Solid Nodule**<br>• < 6 mm (< 113 $mm^3$) at baseline; OR<br>• New <4 mm (< 34 $mm^3$) | |
| | | **Part Solid Nodule**<br>• < 6 mm (< 113 $mm^3$) total mean diameter at baseline | |
| | | **Non-Solid Nodule (GGN)**<br>• <30 mm (< 14,137 $mm^3$) at baseline, new or growing; OR<br>• ≥30 mm (≥ 14,137 $mm^3$) stable or slowly growing (see note 7) | |
| | | **Airway nodule,** subsegmental - at baseline, new, or stable (see note 11) | |

| | | | |
|---|---|---|---|
| | | • Category 3 lesion that is stable or decreased in size at 6-month follow-up CT; OR<br>• Category 4B lesion proven to be benign in etiology following appropriate diagnostic workup | |
| **3** | **Probably Benign**<br><br>Based on imaging features or behavior<br><br>Estimated Population Prevalence: 9% | **Solid Nodule**<br>• ≥ 6 mm to < 8 mm (≥ 113 to < 268 $mm^3$) at baseline; OR<br>• New 4 mm to <6 mm (34 to < 113 $mm^3$) | 6-month LDCT |
| | | **Part Solid Nodule**<br>• ≥ 6 mm (≥ 113 $mm^3$) total mean diameter with solid component < 6 mm (< 113 $mm^3$) at baseline<br>• New < 6 mm (< 113 $mm^3$) total mean diameter | |
| | | **Non-Solid Nodule (GGN)**<br>• ≥ 30 mm (≥ 14,137 $mm^3$) at baseline or new | |
| | | **Atypical Pulmonary Cyst** (see note 12)<br>• Growing cystic component (mean diameter) of a thick-walled cyst | |
| | | Category 4A lesion that is stable or decreased in size at 3-month follow-up CT (excluding airway nodules) | |
| **4A** | **Suspicious**<br>Estimated Population Prevalence: 4% | **Solid Nodule**<br>• ≥ 8 mm to < 15 mm (≥ 268 to < 1767 $mm^3$) at baseline; OR<br>• Growing < 8 mm (< 268 $mm^3$)<br>• New 6 to < 8 mm (113 to < 268 $mm^3$) | 3-month LDCT;<br><br>PET/CT may be considered if there is a ≥ 8 mm (≥ 268 $mm^3$) solid nodule or solid component |
| | | **Part Solid Nodule**<br>• ≥ 6 mm (≥ 113 $mm^3$) total mean diameter with solid component ≥ 6 mm to < 8 mm (≥ 113 to < 268 $mm^3$) at baseline; OR<br>• New or growing <4 mm (< 34 $mm^3$) solid component | |
| | | **Airway Nodule,** segmental or more proximal - at baseline (see note 11) | |
| | | **Atypical Pulmonary Cyst** (see note 12)<br>• Thick-walled cyst; OR<br>• Multilocular cyst at baseline; OR<br>• Thin- or thick-walled cyst that becomes multilocular | |

<table>
<tr><td rowspan="4">4B</td><td rowspan="4">Very Suspicious<br>Estimated Population Prevalence: 2%</td><td>Airway Nodule, segmental or more proximal - stable or growing (see note 11)</td><td>Referral for further clinical evaluation</td></tr>
<tr><td>Solid Nodule<br>● ≥ 15 mm (≥ 1767 $mm^3$) at baseline; OR<br>● New or growing ≥ 8 mm (≥ 268 $mm^3$)</td><td rowspan="4">Diagnostic chest CT with or without contrast;<br><br>PET/CT may be considered if there is a ≥ 8 mm (≥ 268 $mm^3$) solid nodules or solid component;<br><br>Tissue sampling;<br><br>and/or referral for further clinical evaluation;<br><br>Management depends on clinical evaluation, patient preference, and the probability of malignancy (see note 13)</td></tr>
<tr><td>Part Solid Nodule<br>● Solid component ≥ 8 mm (≥ 268 $mm^3$) at baseline; OR<br>● New or growing ≥ 4 mm (≥ 34 $mm^3$) solid component</td></tr>
<tr><td>Atypical Pulmonary Cyst (see note 12)<br>● Thick-walled cyst with growing wall thickness/nodularity; OR<br>● Growing multilocular cyst (mean diameter); OR<br>● Multilocular cyst with increased loculation or new/increased opacity (nodular, ground glass, or consolidation)</td></tr>
<tr><td>Slow-growing solid or part-solid nodule that demonstrates growth over multiple screening exams (see note 8)</td></tr>
<tr><td>4X</td><td>Estimated Population Prevalence: <1%</td><td>Category 3 or 4 nodules with additional features or imaging findings that increase suspicion for lung cancer (see note 14)</td></tr>
<tr><td>S</td><td>Significant or Potentially Significant<br><br>Estimated Population Prevalence: 10%</td><td>Modifier: May add to category 0-4 for clinically significant or potentially clinically significant findings unrelated to lung cancer (see note 15)</td><td>As appropriate to the specific finding</td></tr>
</table>

## Level of Care Criteria

Inpatient or Outpatient

## Procedure Codes (CPT/HCPCS)

| CPT/HCPCS Code | Code Description |
|---|---|
| 71250 | Computed tomography (CT), thorax; without contrast material |
| 71260 | Computed tomography (CT), thorax; with contrast material(s) |
| 71270 | Computed tomography (CT), thorax; without contrast material, followed by contrast material(s) and further sections |
| 76380 | Computed tomography, limited or localized follow-up study |

**Disclaimer:** S Codes are non-covered per CMS guidelines due to their experimental or investigational nature.

## Evaluation of Clinical Harms and Benefits

Clinical determinations for Medicare Advantage beneficiaries are made in accordance with 42 CFR 422.101 guidance outlining CMS's required approach to decision hierarchy in the setting of NCDs/LCDs identified as being "not fully established". When clinical coverage criteria are "not fully established" Medicare Advantage organizations are instructed to create publicly accessible clinical coverage criteria based on widely-accepted clinical guidelines and/or scientific studies backed by a robust clinical evidence base. Clinical coverage criteria provided by Cohere Health in this manner include coverage rationale and risk/benefit analysis.

The potential clinical harms of using these criteria for computed tomography (CT) of the chest may include:

- Inherent risks of the procedure: There are inherent risks associated with imaging, including cumulative radiation exposure, contrast reactions, allergies, nephrotoxicity, and contrast extravasation into surrounding tissues.[1,2,6]
- Potential danger to pregnancy: CT imaging completed during pregnancy confers a dose of ionizing radiation to the fetus and is generally only utilized when the potential benefits of this specific imaging modality outweigh the risks to the pregnancy. Fetal risk includes fetal demise, intrauterine growth restriction, microcephaly, delayed intellectual development, risk of childhood cancer, and fetal thyroid injury.[15]
- Compared to adults, children are more sensitive to radiation. CT exposure among children may increase their risk of leukemia and brain cancer.[13]
- Increased healthcare costs and complications from the inappropriate use of additional interventions.[14]

The clinical benefits of using these criteria for CT of the chest include:

- Low-dose CT scans are essential for screening survivors of head and neck cancer, a population at high-risk for secondary cancers, including lung cancer.[16]
- CT can provide a timely diagnosis of early-stage lung cancer and reduce lung cancer-related mortality among high-risk individuals.[16]

- When examining for penetrating injuries in the thoraco-abdominal region, multidetector computed tomography (MDCT) is a less invasive alternative to procedures such as diagnostic laparoscopy.[17]
- MCDT can provide scans of the chest within an interval of breath, thereby reducing imaging time and minimizing artifacts caused by respiratory movement.[18]
- Computed tomography is effective in diagnosing diaphragmatic injuries caused by penetrating trauma, particularly in patients with good blood circulation and stable heart rates.[18]
- Enhanced overall patient satisfaction and healthcare experience.
- Appropriate allocation of healthcare resources at the individual beneficiary and population levels.

# Medical Evidence

Hassankhani et al. (2023) conducted a systematic review and meta-analysis of the diagnostic utility of multidetector computed tomography (MDCT) scans in penetrating diaphragmatic injuries. The study investigates the diagnostic efficacy of MDCT in detecting diaphragmatic injuries caused by penetrating trauma, with a focus on the potential risks of missed injuries and complications in cases managed nonoperatively despite the recognized value of CT scans for stable patients. The progression of CT technology, notably with the emergence of MDCT, has significantly improved the capacity to identify and assess diaphragmatic injuries caused by penetrating trauma. Although CT has solidified its role in evaluating blunt abdominal trauma patients who are hemodynamically stable, becoming the preferred imaging method in this regard, utilization in cases of penetrating thoracoabdominal trauma remains an ongoing subject of investigation. The study underscores the efficacy of MDCT in identifying diaphragmatic injury resulting from penetrating trauma with moderate to high diagnostic accuracy.[18]

Cramer et al. (2021) provide a secondary analysis of a randomized control trial (RCT) on the incidence of second primary lung cancer after low-dose CT versus chest X-ray screening in head and neck cancer survivors. A total of 53,452 participants were enrolled in the study; 171 survivors of head and neck cancer were identified (82 had screening via low-dose CT of the chest and 89 via chest X-ray. The average age of participants was 61 years, with 132 being male (77%). The incidence of lung cancer was notably higher among head and neck cancer survivors compared to those without. In head and neck cancer survivors, the incidence of second primary lung cancer was 2610 cases per 100,000 person-years in the low-dose CT group versus 1594 cases per 100,000 person-years in the chest X-ray group. Overall survival in head and neck cancer survivors was 7.07 years with low-dose CT compared to 6.66 years with chest X-ray. The secondary analysis of the RCT indicates that head and neck cancer survivors face a heightened risk of developing second primary lung cancer. Low-dose CT screening is essential for such survivors, particularly individuals with a significant history of cigarette smoking who are deemed suitable for curative treatment.[16]

Oldroyd et al. (2021) performed a systematic review and meta-analysis to determine the clinical factors linked with cancer susceptibility in idiopathic inflammatory myopathies (IIMs) and conducted a comprehensive review of the available evidence concerning cancer screening within this context. The meta-analysis assessed the cancer risk linked with numerous clinical risk factors and myositis-specific autoantibodies (MSAs), providing insights for cancer screening strategies among IIM patients. The authors note that findings can collectively contribute to refining cancer screening guidelines, potentially facilitating earlier cancer detection and enhancing patient outcomes.[19]

# References


1. Centers for Medicare & Medicaid Services (CMS). National coverage determination. Computed tomography (220.1). Effective Date March 12, 2008. https://www.cms.gov/medicare-coverage-database/view/ncd.aspx?ncdid=176&ncdver=2&bc=0
2. Centers for Medicare & Medicaid Services (CMS). Local coverage determination. Computerized axial tomography (L33459). Revision Effective Date June 13, 2024. https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=33459&ver=43&bc=0
3. Centers for Medicare & Medicaid Services (CMS). Billing and coding: Computerized axial tomography (CT) (A56580). Revision Effective Date October 1, 2025. https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleid=56580&ver=30&bc=0
4. Centers for Medicare & Medicaid Services (CMS). Local coverage determination: Multiple imaging in oncology (L35391). Revision Effective Date November 14, 2019. https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=35391&ver=17&bc=0
5. Centers for Medicare & Medicaid Services (CMS). Billing and coding: Multiple imaging in oncology (A56848). Revision Effective Date January 1, 2025. https://www.cms.gov/medicare-coverage-database/search.aspx.
6. American College of Radiology (ACR), Society of Advanced Body Imaging (SABI), Society for Pediatric Radiology (SPR), Society of Thoracic Radiology (STR). ACR–SABI–SPR–STR practice parameter for the performance of thoracic computed tomography (CT) (resolution 17). Updated 2023. http://www.acr.org
7. Ackman JB, Chung JH, Walker CM, et al. Imaging of mediastinal masses. ACR appropriateness criteria [Internet] American College of Radiology (ACR). New 2020. http://www.acr.org

8. de Groot PM, Chung JH, Ackman JB, et al. Noninvasive clinical staging of primary lung cancer. ACR appropriateness criteria [Internet] American College of Radiology (ACR). Updated 2018. http://www.acr.org
9. Raptis CA, Goldstein A, Henry TS, et al. Staging and follow-up of esophageal cancer. ACR appropriateness criteria [Internet] American College of Radiology (ACR). Updated 2022. http://www.acr.org
10. Wasser EJ, Prevedello LM, Sodickson A, Mar W, Khorasani R. Impact of a real-time computerized duplicate alert system on the utilization of computed tomography. *JAMA Intern Med*. 2013;173(11):1024-1026. doi:10.1001/jamainternmed.2013.543
11. The Image Gently Alliance. Procedures - Image Gently and CT scans. Updated 2025. https://www.imagegently.org/Procedures/Computed-Tomography
12. National Cancer Institute. Radiation risks and pediatric computed tomography (CT): A guide for health care. Updated September 4, 2018. https://www.cancer.gov/about-cancer/causes-prevention/risk/radiation/pediatric-ct-scans
13. MacMahon H, Naidich DP, Goo JM, et al. Guidelines for management of incidental pulmonary nodules detected on CT images: From the Fleischner Society. *Radiology*. 2017 Jul;284(1):228-243. doi:10.1148/radiol.2017161659
14. American College of Radiology (ACR). Lung-RADS v. 2022. Updated November 2022. https://edge.sitecorecloud.io/americancoldf5f-acrorgf92a-productioncb02-3650/media/ACR/Files/RADS/Lung-RADS/Lung-RADS-2022.pdf
15. Smith-Bindman R, Chu P, Wang Y, et al. Comparison of the effectiveness of single-component and multicomponent interventions for reducing radiation doses in patients undergoing computed tomography: A randomized clinical trial. JAMA Intern Med. 2020 May;180(5):666-75.doi:10.1001/jamainternmed.2020.0064
16. Cramer JD, Grauer J, Sukari A, et al. Incidence of second primary lung cancer after low-dose computed tomography vs chest radiography screening in survivors of head and neck cancer: A secondary analysis of a randomized clinical trial. *JAMA Otolaryngol Head Neck Surg*. 2021 Dec 1;147(12):1071-1078. doi:10.1001/jamaoto.2021.2776

17. Sands J, Tammemägi MC, Couraud S, et al. Lung screening benefits and challenges: a review of the data and outline for implementation. *J Thorac Oncol*. 2021 Jan 1;16(1):37-53. doi:10.1016/j.jtho.2020.10.127
18. Hassankhani A, Amoukhteh M, Valizadeh P, et al. Diagnostic utility of multidetector CT scan in penetrating diaphragmatic injuries: A systematic review and meta-analysis. *Emerg Radiol*. 2023 Dec;30(6):765-776. doi:10.1007/s10140-023-02174-1
19. Oldroyd AGS, Allard AB, Callen JP, et al. A systematic review and meta-analysis to inform cancer screening guidelines in idiopathic inflammatory myopathies. *Rheumatology (Oxford).* 2021 Jun 18;60(6):2615-2628. doi:10.1093/rheumatology/keab166

# Policy Revision History/Information

| Original Date: October 29, 2024 | | |
|---|---|---|
| **Review History** | | |
| Version 2 | 10/16/2025 | Annual review.<br><br>Rearranged bullets for improved usability and organization.<br><br>Added sub-indication for neoplastic conditions for evaluating response to treatment/change in therapy.<br><br>Updated the indication for assessment of injury or complications to include "invasive procedure such as pacemaker placement, chest tube placement, or mechanical ventilation."<br><br>Added indication for "CT-guided biopsies and drainage procedures when fluoroscopy is inadequate."<br><br>Clarified indications for repeat imaging to improve usability and organization.<br><br>Removed duplicative language for aortic dissection.<br><br>Added non-indication for "advanced imaging of the same body part and for the same indication within 3 months without undergoing treatment or developing new or worsening symptoms."<br><br>Removed note for contrast anaphylaxis allergy. |