



MASSACHUSETTS

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Medical Policy

Screening for Lung Cancer Using CT Scanning

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Policy Number: 619

BCBSA Reference Number: 6.01.30

Related Policies

- Whole Body Computed Tomography Scan as a Screening Test, #[447](#)
- High Speed CT for Heart Disease, #[355](#)

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Annual screening for lung cancer with low-dose computed tomography (CT) may be **MEDICALLY NECESSARY** in individuals who meet ALL of the following criteria*:

- Between 55 and 80 years of age, AND
- History of cigarette smoking of at least 30 pack-years, AND
- If former smoker, quit within the previous 15 years.

* Patient selection criteria are based on the National Lung Screening Trial (NLST).

Low-dose CT scanning is **INVESTIGATIONAL** as a screening technique for lung cancer in all other situations.

The use of chest radiography as a screening technique for lung cancer is **INVESTIGATIONAL** as a screening technique for lung cancer.

Prior Authorization Information

Pre-service approval is required for all inpatient services for all products.

See below for situations where prior authorization may be required or may not be required.

Yes indicates that prior authorization is required.

No indicates that prior authorization is not required.

Outpatient

Commercial Managed Care (HMO and POS)	No
Commercial PPO and Indemnity	No
Medicare HMO BlueSM	No
Medicare PPO BlueSM	No

CPT Codes / HCPCS Codes / ICD-9 Codes

The following codes are included below for informational purposes. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member. A draft of future ICD-10 Coding related to this document, as it might look today, is included below for your reference.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

CPT Codes

CPT codes:	Code Description
71250	Computed tomography, thorax; without contrast material

HCPCS Codes

HCPCS codes:	Code Description
S8032	Low-dose Computed Tomography For Lung Cancer Using CT Scanning

ICD-9 Diagnosis Codes

ICD-9-CM diagnosis codes:	Code Description
305.1	Tobacco use disorder
V15.82	Personal history of tobacco use
V76.0	Special screening for malignant neoplasms of respiratory organs

ICD-10 Diagnosis Codes

ICD-10-CM Diagnosis codes:	Code Description
F17.200	Nicotine dependence, unspecified, uncomplicated
F17.201	Nicotine dependence, unspecified, in remission
F17.210	Nicotine dependence, cigarettes, uncomplicated
F17.211	Nicotine dependence, cigarettes, in remission
Z12.2	Encounter for screening for malignant neoplasm of respiratory organs
Z87.891	Personal history of nicotine dependence

Description

There is interest in screening and early identification of lung cancer because the disease, when identified clinically, tends to have a poor prognosis. Two proposed screening methods are chest radiographs and low-dose computed tomography (CT) scans. Due to biases inherent in screening studies, randomized trials that evaluate reduction in lung cancer morbidity and mortality are required to demonstrate the efficacy of screening.

Background

Given the poor prognosis of lung cancer, there has been longstanding research interest in developing screening techniques for those at high risk. Previous studies of serial sputum samples or chest radiographs failed to demonstrate that screening improved health outcomes. More recently, there has been interest in low-dose CT scanning as a screening technique, using either spiral (also referred to as helical) or electron beam (also referred to as ultrafast) CT scanning. Compared with conventional CT scans, these scans allow for the continuous acquisition of images, thus shortening the scan time and radiation exposure. A complete CT scan can be obtained within 10 to 20 seconds, or during 1 breath hold in most patients. The radiation exposure for this examination is greater than for that of a chest radiograph but less than for a conventional CT scan.

There are also growing applications of computer-aided *detection* or *diagnosis* (CAD) technologies that may have an impact on the use of CT scanning or chest radiographs for lung cancer screening. Computer-aided *detection* points out possible findings to the radiologist who then decides if the finding is abnormal. Computer-aided detection uses a computer algorithm to analyze features of a lesion to determine the level of suspicion and is intended to enhance the reader's diagnostic performance. Both of these technologies may be expected to offer more benefit when used by relatively inexperienced readers and may help to standardize diagnostic performance.

Summary

The evidence on CT screening for lung cancer includes numerous randomized clinical trials (RCTs) that report on yield and stage of screening and one RCT that reports on clinical outcomes. The largest RCT, the National Lung Screening Trial was a multicenter trial published in 2011. This was a high-quality trial that reported a decrease in both lung cancer mortality and overall mortality in a high-risk population screened with 3 annual low-dose CT scans compared to chest radiographs. Thus, screening for lung cancer with low-dose CT may be considered medically necessary for high-risk patients who meet the major eligibility criteria of the NLST and investigational otherwise.

Findings from RCTs conducted in the 1970s and 1980s suggest that chest radiographs are ineffective as a method of lung cancer screening; however, an additional large RCT is underway (PLCO) using modern methods. There are no randomized or observational trials evaluating chest radiographs with CAD for lung cancer screening. Therefore, screening for lung cancer with chest radiographs, with or without CAD, is considered investigational.

Policy History

Date	Action
10/2014	Clarified coding information
7/2014	Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.
5/2014	Clarified coding information
4/2014	New references from BCBSA National medical policy.
1/2014	Language on annual screening for lung cancer with low-dose computed tomography was clarified.
2/2013	BCBSA National medical policy review. No changes to policy statements.
11/2011- 4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
11/2012	BCBSA National medical policy review. Changes to policy statements.
4/2011	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.
4/2010	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.

1/2010	BCBSA National medical policy review. No changes to policy statements.
4/2009	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.
5/2008	BCBSA National medical policy review. No changes to policy statements.
4/2008	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.
4/2007	Reviewed - Medical Policy Group - Cardiology and Pulmonology. No changes to policy statements.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

References

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