



Electromagnetic Navigation Bronchoscopy

State(s):

☒ Idaho ☒ Montana ☒ Oregon ☒ Washington ☐ Other:

LOB(s):

☒ Commercial ☒ Medicare ☒ Medicaid

Enterprise Policy

Clinical Guidelines are written when necessary to provide guidance to providers and members in order to outline and clarify coverage criteria in accordance with the terms of the Member's policy. This Clinical Guideline only applies to PacificSource Health Plans, PacificSource Community Health Plans, and PacificSource Community Solutions in Idaho, Montana, Oregon, and Washington. Because of the changing nature of medicine, this list is subject to revision and update without notice. This document is designed for informational purposes only and is not an authorization or contract. Coverage determination are made on a case-by-case basis and subject to the terms, conditions, limitations, and exclusions of the Member's policy. Member policies differ in benefits and to the extent a conflict exists between the Clinical Guideline and the Member's policy, the Member's policy language shall control. Clinical Guidelines do not constitute medical advice nor guarantee coverage.

Background

Pulmonary nodules can often be identified on x-ray or computed tomography (CT) scans of the chest. Although most of these nodules are benign, some are cancerous, and early diagnosis of lung cancer is desirable due to poor prognosis when cancer is diagnosed later in the disease course. The method used to diagnose lung cancer depends on a number of factors, including lesion size and location, as well as the clinical history and status of the member. There is generally greater diagnostic success with centrally located and larger lesions. Peripheral lung lesions and solitary pulmonary nodules are more difficult to evaluate than larger, centrally located lesions. For these cases, the use of Electromagnetic Navigation Bronchoscopy (ENB) may be indicated.

Electromagnetic Navigation Bronchoscopy (ENB) enhances standard bronchoscopy by providing a 3-dimensional view of the lungs. ENB devices are used in conjunction with standard bronchoscopy and are not FDA approved as stand-alone surgical devices/procedures. The purpose of ENB is to allow navigation to distal regions of the lungs, providing information to position the probe during bronchoscopy, so that suspicious lesions can be biopsied and to allow markers to be placed.

This procedure is conducted in three phases:

1. Planning phase: A chest CT scan is performed and the images are loaded onto a computer to construct a three-dimensional image of the patient's lungs, identifying anatomical landmarks. The file containing this information is transferred to a computer for use during the procedure.
2. Registration phase: A steerable navigation catheter is placed through the standard bronchoscope. The anatomical landmarks identified in the planning phase are viewed on the three-dimensional image from phase 1, and these virtual images are correlated with the actual image from the video bronchoscope.

3. Navigation phase: The steerable navigation catheter is moved toward the target, and the real-time location of the catheter's tip is displayed on the CT images. When the navigation catheter reaches the target, it is locked in place. Once this occurs, endoscopic tools are inserted through the channel in the catheter including forceps to biopsy the lesion. A large sample size is preferred to increase the validity of the diagnosis. In addition to biopsy, the guide catheter can be used to place fiducial markers. Markers are loaded in the proximal end with a guide wire inserted through the catheter.

Criteria

Commercial

Prior authorization is required.

I. PacificSource may consider Electromagnetic Navigation Bronchoscopy (ENB) to be medically necessary when flexible bronchoscopy alone, or with endobronchial ultrasound are inadequate to sample the pulmonary lesion(s), for **ANY** of the following indications:

- A. To establish a diagnosis of suspicious pulmonary lesion that is deemed inaccessible by standard methods (e.g., peripheral nodule) or when the standard methods have failed;
- B. To aid diagnosis in members with a suspicious pulmonary nodule who pose an unacceptable risk for a more invasive diagnostic procedure (e.g., bullous lung disease, emphysema);
- C. For members with an identified lung lesion(s) and a co-existing cancer that may impact the treatment plan in staging of the primary tumor; or
- D. Placement of fiducial markers within lung tumor(s) in members who are not surgical candidates and who have chosen radiation treatment.

Medicaid

PacificSource Community Solutions follows Guideline Note 173 of the OHP Prioritized List of Health Services and considers Electromagnetic Navigation Bronchoscopy insufficient evidence of effectiveness.

Medicare

PacificSource Medicare follows CMS guidelines and criteria. In the absence of internal policy guidelines, CMS criteria, and evidence-based criteria, requests are reviewed on an individual basis for determination of coverage and medical necessity.

Experimental/Investigational/Unproven

PacificSource considers Electromagnetic navigation bronchoscopy to be experimental, investigational and/or unproven for use with flexible bronchoscopy for the diagnosis of all other lymph nodes as well as all other uses not covered above.

Coding Information

The following list of codes are for informational purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

31627 Bronchoscopy, Rigid/Flexible; with computer-assisted, image-guided navigation

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HCPCS® codes, descriptions and materials are copyrighted by Centers for Medicare and Medicaid Services (CMS).

References

Bowling MR, Folch EE, Khandhar SJ, et al. Fiducial marker placement with electromagnetic navigation bronchoscopy: a subgroup analysis of the prospective, multicenter NAVIGATE study. Ther Adv Respir Dis. Jan-Dec 2019; 13:1753466619841234

Folch EE, Pritchett MA, Nead MA, et al. Electromagnetic Navigation Bronchoscopy for Peripheral Pulmonary Lesions: One-Year Results of the Prospective, Multicenter NAVIGATE Study. J Thorac Oncol. Mar 2019; 14(3):445-458.

Minnich DJ, Bryant AS, Wei B, et al. Retention rate of electromagnetic navigation bronchoscopic placed fiducial markers for lung radiosurgery. Ann Thorac Surg. Oct 2015; 100(4):1163-1165

National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Non-small cell lung cancer. Version 5.2020. Available at <https://www.nccn.org>

Steinfort DP, Bonney A, See K, et al. Sequential multimodality bronchoscopic investigation of peripheral pulmonary lesions. Eur Respir J. Feb 2016

Zhang W, Chen S, Dong X, et al. Meta-analysis of the diagnostic yield and safety of electromagnetic navigation bronchoscopy for lung nodules. J Thorac Dis. May 2015; 7(5):799-809.

Appendix

Policy Number: [Policy Number]

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Policy type: Enterprise

Author(s):

Depts: Health Services

Applicable regulation(s): [Applicable Regulation(s)]

Commercial Ops: 6/2022

Government Ops: 6/2022