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## Subject: Computer Assisted Surgical Navigation

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.

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### **DESCRIPTION:**

**NOTE:** This Medical Coverage Guideline addresses computer assisted surgical navigational procedures that do not have a specific Medical Coverage Guideline.

Computer assisted surgical navigation combines imaging with navigational computer software for displaying images, localizing surgical targets, facilitating view of non-visualized anatomy and aiding physicians in guiding endoscopic tools. Computer assisted surgical navigation use computer technology, which facilitate pre-surgical planning and for guiding and performing surgical procedures.

Computer assisted surgical navigational may be performed in addition to a primary procedure (e.g., biopsy, endoscopy, surgery). The U.S. Food and Drug Administration (FDA) have cleared through the 510(k) process several devices (e.g., superDimension/Bronchus, LungPoint™ Virtual Bronchoscopic Navigation (VBN) Software, ig4™ System) for displaying images, placement of markers and for guiding endoscopic tools or catheters in the pulmonary tract.

Electromagnetic navigation bronchoscopy (ENB) combines simultaneous computed tomography (CT) virtual bronchoscopy with real-time fiberoptic bronchoscopy. ENB is intended to enhance standard bronchoscopy by providing a three-dimensional roadmap of the lungs and real-time information about the position of the steerable probe during bronchoscopy. Electromagnetic navigation bronchoscopy during flexible bronchoscopy has been proposed as a method to further increase the diagnostic yield of bronchoscopy in the diagnosis of peripheral and mediastinal lung lesions and insertion of endoscopic tools (needle, brush, forceps) for lesion sampling, fiducial and dye marker placement prior to treatment.

For Computer assisted surgical navigational procedure for orthopedic procedures, please refer to MCG [02-20000-30, Computer Assisted Musculoskeletal Surgical Navigational Orthopedic Procedure Medical Coverage Guideline](#).

## POSITION STATEMENT:

Electromagnetic navigation bronchoscopy meets the definition of medical necessity for any of the following:

- Member with a suspicious solitary pulmonary nodule that is inaccessible by standard bronchoscopy or endobronchial ultrasound (EBUS) and there is a low probability of diagnostic yield; OR
- Member with a suspicious solitary pulmonary nodule where an invasive procedure (e.g., percutaneous lung biopsy) pose a risk to the member because of conditions (e.g., bullous lung disease, diffuse emphysema); OR
- Member with an identified lung lesion(s) and a co-existing cancer in whom further determination of the lung lesion(s) will impact staging and treatment of the primary tumor; OR
- Placement of fiducial markers in member who is not a candidate for surgical intervention and who have elected to undergo radiation therapy.

Electromagnetic navigation bronchoscopy is considered experimental or investigational for all other indications. There is insufficient clinical evidence published in the peer-reviewed literature on the effects of electromagnetic navigation bronchoscopy on health outcomes.

Exclusions:

Electromagnetic navigation for bronchoscopy does not meet the definition of medical necessity when any of the following conditions exist:

- The member has a solitary pulmonary nodule that is stable on imaging tests for at least two years.
- The member has a solitary pulmonary nodule that is calcified in a clearly benign pattern.
- The member has a low pretest probability of malignancy (<30 to 40%) and an indeterminant solitary pulmonary nodule that measures at least 8 to 10 mm in diameter, and the lesion is not hypermetabolic by FDG-PET imaging, or does not enhance .15 HU on dynamic contrast CT.
- CT scan indicates the lesion is accessible by a standard flexible bronchoscopy.

Computer assisted surgical navigational (e.g., maxillofacial, eye, auditory, cardiovascular, thoracic, abdominal, urinary, genital (male/female), spine) is considered not the generally accepted standard of medical practice and is considered **experimental or investigational** for all applications. Clinical evidence in the peer-reviewed medical literature is insufficient to support the use of computer-assisted surgical navigational for these applications.

## BILLING/CODING INFORMATION:

There is no specific code for computer assisted surgical navigation. Computer assisted surgical navigation may be reported with an unlisted or unspecified procedure code.

### **CPT Coding:**

31627	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed; with computer-assisted, image-guided navigation (List separately in addition to code for primary procedure[s])
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## REIMBURSEMENT INFORMATION:

The use of device(s) (e.g., surgical, software, other [specified and unspecified]) in conjunction with or without computer assisted surgical navigational procedures is considered an integral part of the primary surgical procedure and is not separately reimbursable.

### **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 electromagnetic navigation bronchoscopy.

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
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

## PROGRAM EXCEPTIONS:

**Federal Employee Program (FEP):** Follow FEP guidelines.

**State Account Organization (SAO):** Follow SAO guidelines.

**Medicare Advantage Products:**

No National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) were found at the time of the last guideline revised date.

## **DEFINITIONS:**

No guideline specific definitions apply.

## **RELATED GUIDELINES:**

**[Computer Assisted Musculoskeletal Surgical Navigational Orthopedic Procedure, 02-20000-30](#)**

## **OTHER:**

Other names used to report computer assisted surgical navigational procedures:

**Note:** The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another, and is not intended to represent a complete listing of all products available.

Computer aided surgery  
Computer assisted intervention  
Computer assisted surgery  
Electromagnetic navigation (EMN)  
Electromagnetic navigation bronchoscopy (ENB)  
Image guided surgery  
Surgical navigation

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### **COMMITTEE APPROVAL:**

This Medical Coverage Guideline (MCG) was approved by the BCBSF Medical Policy & Coverage Committee on 07/25/19.

### **GUIDELINE UPDATE INFORMATION:**

03/15/09	New Medical Coverage Guideline.
01/01/10	Annual HCPCS coding update: added 31627, and updated references.
03/15/10	Scheduled review. No change in position statement (experimental or investigational), and updated references.
01/01/11	Annual HCPCS coding update: added 61781, 61782 and 61783.
01/15/11	Deleted codes 61781, 61782 and 61783.
03/15/11	Annual review: position statements maintained, updated description; added FDA information regarding superDimension/Bronchus System and LungPoint™ Virtual Bronchoscopic Navigation (VBN) Software, added "and placement of fiducial markers" to position statement, revised reimbursement information; added software and wording "or without", added Medicare Advantage program exception, and updated references.
02/15/13	Updated Medicare Advantage products program exception.
05/11/14	Revision: Program Exceptions section updated.
09/15/16	Review; no change to position statement. Removed "procedures and devices" from subject. Updated references.
10/15/17	Review; no change in position statement. Updated references.
09/15/18	Review; position statement added for solitary pulmonary nodule, lung lesion and fiducial markers. Revised computer assisted surgical navigation position statement. Updated references.
08/15/19	Review; no change in position statement. Updated references.

