Sentara Health Plans

Medicare

Computer Assisted Navigation, Surgical 233

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Effective Date	4/1/1992
Next Review Date	6/2025
Coverage Policy	Surgical 233
Version	2

Member-specific benefits take precedence over medical policy and benefits may vary across plans. Refer to the individual's benefit plan for details*.

Purpose:

This policy addresses the use of Computer-assisted navigation during various surgical procedures.

Description & Definitions:

Computer-assisted navigation (CAN) is the use of computer enabled tracking systems to facilitate alignment in a variety of surgical procedures. The goal of CAN is to increase surgical accuracy. CAN devices may be image-based or non-image based. Image-based devices use preoperative computed tomography (CT) scans and operative fluoroscopy to direct implant positioning. Non-image-based devices use probes and signaling transducers to transmit signals from anatomic positions to a dedicated computer. Computer-assisted navigation involves three steps: data acquisition, registration, and tracking. The data can be acquired from fluoroscopy, computed tomography (CT) scans or magnetic resonance imaging (MRI) scans, or imageless systems. Registration is relating the images to the anatomical position of the surgical area using "fiduciary markers". Tracking is the feedback from the measurement devices regarding the orientation and relative position of tools to bone anatomy.

Criteria:

Computer assisted navigation is considered medically necessary for **1 or more** of the following:

- When used in conjunction with most intracerebral procedures, excluding routine shunt procedures.
- When used for the **1 or more** of the following extracranial head and neck procedures:
  - Revision endoscopic sinus surgery
  - Frontal or sphenoid sinus surgery when there is documented loss of or altered anatomic and marks, congenital deformities or severe trauma
  - Significantly distorted sinus anatomy of developmental, postoperative or traumatic origin
  - Extensive sino-nasal polyposis of sufficient severity to create a need for the precision localization and navigation assistance
  - Pathology involving the frontal, posterior ethmoid or sphenoid sinuses
  - Disease abutting the skull base, orbit, optic nerve or carotid artery
  - Lateral skull base surgery where navigational planning and assistance is required
  - CSF rhinorrhea or conditions where there is a skull base defect
  - Transsphenoidal surgery
  - Benign and malignant sino-nasal neoplasms of sufficient size or high-risk location.

Computer assisted navigation is considered **not medically necessary** for any use other than those indicated in clinical criteria, to include but not limited to:

- Computer-assisted surgical navigation for musculoskeletal procedures is not medically necessary due to lack of proven clinical utility.
- Computer-assisted surgical navigation for spinal procedures is not medically necessary due to lack of proven clinical utility

Coding:

Medically necessary with criteria:

Coding	Description
61781	Stereotactic computer-assisted (navigational) procedure; cranial, intradural (list separately in addition to code for primary procedure) 61782 Stereotactic computer-assisted (navigational) procedure; cranial, extradural (list separately in addition to code for primary procedure)
61783	Stereotactic computer-assisted (navigational) procedure; spinal (list separately in addition to code for primary procedure)

Considered Not Medically Necessary:

Coding	Description
0054T	Computer-assisted musculoskeletal surgical navigational orthopedic procedure, with image guidance based on fluoroscopic images (list separately in addition to code for primary procedure)
0055T	Computer-assisted musculoskeletal surgical navigational orthopedic procedure, with image guidance based on CT/MRI images (list separately in addition to code for primary procedure)
20985	Computer-assisted surgical navigational procedure for musculoskeletal procedures, image-less (list separately in addition to code for primary procedure)

U.S. Food and Drug Administration (FDA) - approved only products only.

Document History:

Revised Dates:

- 2023: October

Reviewed Dates:

- 2024: June – no changes

Effective Date:

- April 1, 2024

References:

Specialty Association Guidelines; Government Regulations; Winifred S. Hayes, Inc; UpToDate; Literature Review; Specialty Advisors; National Coverage Determination (NCD); Local Coverage Determination (LCD).

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Special Notes: *

This medical policy expresses Sentara Health Plan's determination of medically necessity of services, and they are based upon a review of currently available clinical information. Medical policies are not a substitute for clinical judgment or for any prior authorization requirements of the health plan. These policies are not an explanation of benefits.

Medical policies can be highly technical and complex and are provided here for informational purposes. These medical policies are intended for use by health care professionals. The medical policies do not constitute medical advice or medical care. Treating health care professionals are solely responsible for diagnosis, treatment and medical advice. Sentara Health Plan members should discuss the information in the medical policies with their treating health care professionals. Medical technology is constantly evolving and these medical policies are subject to change without notice, although Sentara Health Plan will notify providers as required in advance of changes that could have a negative impact on benefits.

Keywords:

Computer-Assisted Surgical Systems, CAN, Surgical navigation systems, computed tomography computer-aided navigation (CT-CAN), Stereotactic computer-assisted (navigational) procedure, Robotically-assisted surgical (RAS) devices, RAS, Computer-Aided Navigation, Computer-assisted tumor surgery (CATS)