

Computer Assisted Navigation

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All requests for authorization for the services described by this medical policy will be reviewed per Early and Periodic Screening, Diagnostic and Treatment (EPSDT) guidelines. These services may be authorized under individual consideration for Medicaid members under the age of 21-years if the services are judged to be medically necessary to correct or ameliorate the member's condition. Department of Medical Assistance Services (DMAS), Supplement B - EPSDT (Early and Periodic Screening, Diagnosis and Treatment) Manual.*.

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 "fiducial 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:

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- April 1, 2024

References:

Including but not limited to: 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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https://guidelines.carelonmedicalbenefitsmanagement.com/?s=computer+assisted&et_pb_searchform_submit=et_search_process&et_pb_search_cat=11%2C1%2C96&et_pb_include_posts=yes

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(2023). Retrieved Oct 2, 2023, from Centers for Medicare and Medicaid Services: <https://www.cms.gov/medicare-coverage-database/search-results.aspx?keyword=Computer+assisted+navigation&keywordType=starts&areald=s53&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F,P&contractOption=all>

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Computer-Assisted Surgical Systems. (2022, June 21). Retrieved Oct 2, 2023, from FDA: <https://www.fda.gov/medical-devices/surgery-devices/computer-assisted-surgical-systems>

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Special Notes: *

This medical policy express Sentara Health Plan's determination of medically necessity of services, and they are based upon a review of currently available clinical information. These policies are used when no specific guidelines for coverage are provided by the Department of Medical Assistance Services of Virginia (DMAS). Medical Policies may be superseded by state Medicaid Plan guidelines. 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.

The Early and Periodic Screening, Diagnostic and Treatment (EPSDT) covers services, products, or procedures for children, if those items are determined to be medically necessary to "correct or ameliorate" (make better) a defect, physical or mental illness, or condition (health problem) identified through routine medical screening or examination, regardless of whether coverage for the same service or support is an optional or limited service under the state plan. Children enrolled in the FAMIS Program are not eligible for all EPSDT treatment services. All requests for authorization for the services described by this medical policy will be reviewed per EPSDT guidelines. These services may be authorized under individual consideration for Medicaid members under the age of 21-years if the services are judged to be medically necessary to correct or ameliorate the member's condition. *Department of Medical Assistance Services (DMAS), Supplement B - EPSDT (Early and Periodic Screening, Diagnosis and Treatment) Manual.*

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)