Sentara Health Plans

Medicaid

Cochlear Implants, Bone Attached Hearing Aid Implants, Auditory Brain Stem Implants

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Effective Date	4/1992
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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 Cochlear Implants, Bone Attached Hearing Aid Implants, Auditory Brain Stem Implants.

Description & Definitions:

Auditory brainstem implants – (ABI) Osseointegrated Implants are surgically implanted electrodes connected directly to the brainstem with a decoding chip placed under the skin that transmits from a sound processer/ microphone placed behind the ear.

Bone-anchored hearing aid – (BAHAs) bone-anchored auditory implants, bone-conducted hearing device - The device is anchored to the mastoid bone, embedded behind the ear with a titanium bone implant to a removable external sound processor/ microphone that attaches to a small piece that sticks out of the skin.

- **Percutaneous bone conduction** - skin-penetrating implant, unilateral or bilateral attachment to external speech processor
- **Transcutaneous bone-conduction** - (tBAHAs) Partially implantable device, unilateral or bilateral magnetic attachment to external speech processor, outside of the mastoid which is removable

Cochlear implant – uniaural (monaural) or binaural (bilateral) - electronic device with electrodes implanted inside the cochlea to amplify sound to an external receiver implanted under the skin behind the ear.

Hybrid cochlear implant devices – internal cochlear implanted device with an external sound processor/microphone

Replacement batteries – disposable or rechargeable batteries

Unilateral Sensorineural Hearing Loss, a traditional cochlear implant – air conduction hearing aids (ACHA)

Criteria:

Hearing Implants are considered medically necessary for **1 or more** of the following:

- Auditory brainstem implants may be indicated when ALL of the following are present:
  - Auditory implant needed, as indicated by **1 or more of** the following:
    - Adult with **ALL of the** following:
      - Bilateral sensorineural hearing loss of greater than 70 dB
      - Postlingually deafened
      - Zero or marginal speech perception benefit from hearing aid
      - No organic brain syndrome
    - Child with **ALL of the** following:
      - Age 12 months or older
      - Bilateral sensorineural hearing loss of greater than 70 dB, with minimal speech perception or severe delay in verbal language acquisition
      - Failure of all appropriate amplification and auditory training attempts
      - Family support and motivation to participate in rehabilitation
  - Brainstem implant needed instead of cochlear implant, as indicated by **1 or more** of the following:
    - Agenesis of middle ear confirmed by MRI
    - Aplasia or hypoplasia of cochlear nerve confirmed by MRI
    - Cochlear nerve avulsion
    - Cochlear ossification confirmed by CT or MRI
    - Failure of cochlear implant in patient with intact cochlear nerve
    - Neurofibromatosis type 2, and acoustic neuroma resection planned in the setting of **1 or more** of the following:
      - Contralateral acoustic neuroma present and **1 or more** of the following:
        - Cochlear nerve able to be preserved in ipsilateral ear, but poor intraoperative electrically evoked auditory brainstem response and electrically evoked compound action potential
        - Cochlear nerve not able to be preserved in ipsilateral ear
      - Contralateral acoustic neuroma previously excised and **1 or more** of the following:
        - Contralateral cochlear implant or auditory brain implant providing poor hearing rehabilitation
        - Contralateral hearing absent
    - Otosclerosis with gross cochlear destruction confirmed by CT or MRI
    - Schwannoma
    - Severe acoustic neuropathy
    - Significant malformation of labyrinth or cochlea confirmed by CT or MRI (eg, common cavity or rudimentary otocyst)
    - Unmanageable facial nerve stimulation caused by cochlear implant
- Bone-anchored hearing aid is indicated for **ALL of the** following:
  - Age 5 years or older
  - Bilateral or unilateral conductive or mixed (both conductive and sensorineural) hearing loss of greater than 20 dB
  - Cortical bone thickness of 3 mm or more
  - Middle or external ear pathology not amenable to surgical reconstruction
  - Pure-tone average bone conduction hearing threshold (measured at 0.5, 1, 2, and 3 kHz) less than or equal to level appropriate for model to be implanted
  - Speech discrimination score greater than or equal to 60% in affected ear
  - Trial of air conduction hearing aid failed or not appropriate, as indicated by **1 or more of** the following:
    - Anatomy will not allow for proper fitting.
    - Lack of substantial audiologic improvement with air conduction hearing aid
    - Individual develops significant otitis externa, suppurative otitis media, or recurrent ear canal infections, which preclude long-term use.
- Cochlear implant may be indicated for **1 or more** of the following:
  - Adult with **all of the** following:

        - Deafness (postlingual)
        - Intact cochlear nerves confirmed by CT or MRI, or acoustic neuroma excision planned and cochlear nerve preservation thought possible
        - Need for implant, as indicated by 1 or more of the following:
            - Bilateral sensorineural hearing loss of greater than 70 dB
            - Less than 50% score on standardized open-set sentence recognition test in ear to be implanted and less than 60% in contralateral ear when using appropriately fitted hearing aids
        - Zero or marginal (eg, phoneme score of less than 50% on speech perception test presented at 70 dB) speech perception benefit from hearing aids
        - No lesions of acoustic nerve or central auditory pathway causing deafness
        - No organic brain syndrome
    - Child with **all of the** following:
        - Age 12 months or older
        - Bilateral sensorineural hearing loss with unaided pure-tone average thresholds of 70 dB or greater
        - Family support and motivation to participate in postimplant rehabilitation
        - Minimal speech perception 30% or less or lack of developmentally appropriate auditory milestones measured using parent report scales
        - Three-month to six-month trial of binaural hearing aids documents lack of or minimal improvement (ie, less than appropriate based on age, developmental stage, or cognitive ability) in auditory development.
        - No evidence of central auditory dysfunction (eg, cortical deafness)
        - No evidence of cochleovestibular anomaly by CT or MRI that would preclude implant (eg, cochlear aplasia, complete labyrinthine aplasia, lack of cochlear nerve), or acoustic neuroma excision planned and cochlear nerve preservation thought possible
- Replacement batteries for cochlear implants are considered medically necessary with 1 or more of the following:
    - Individual may receive disposable replacement batteries per the brand's usual medically necessary frequency
    - Individual using rechargeable batteries may receive two batteries per device one a year
    - Individual using rechargeable batteries may receive a replacement charger every 3 years

Cochlear Implants, Bone Attached Hearing Aid Implants and Auditory Brain Stem Implants are considered **not medically necessary** for any use other than those indicated in clinical criteria, to include but not limited to:

- Cochlear Implant for tinnitus
- Cochlear implants which have not been approved by the FDA
- Upgrades to an existing, functional external system to achieve aesthetic improvement, such as smaller profile components, or a switch from a body-worn, external sound processor to a behind-the-ear (BTE) model
- Fully implantable middle ear hearing aid (e.g., Esteem)
- Tinnitus Masking Devices including the Neuromonics Oasis Tinnitus TX System for all indications

Coding:

Medically necessary with criteria:

Coding	Description
69710	Implantation or replacement of electromagnetic bone conduction hearing device in temporal bone
69711	Removal or repair of electromagnetic bone conduction hearing device in temporal bone
69714	Implantation, osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; without mastoidectomy

69715	Implantation, osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; with mastoidectomy
69716	Implantation, osseointegrated implant, skull; with magnetic transcutaneous attachment to external speech processor, within the mastoid and/or resulting in removal of less than 100 sq mm surface area of bone deep to the outer cranial cortex
69717	Replacement (including removal of existing device), osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; without mastoidectomy
69729	Implantation, osseointegrated implant, skull; with magnetic transcutaneous attachment to external speech processor, outside of the mastoid and resulting in removal of greater than or equal to 100 sq mm surface area of bone deep to the outer cranial cortex
69930	Cochlear device implantation, with or without mastoidectomy
92630	Auditory rehabilitation; prelingual hearing loss
92633	Auditory rehabilitation; postlingual hearing loss
92640	Diagnostic analysis with programming of auditory brainstem implant, per hour
L8621	Zinc air battery for use with cochlear implant device and auditory osseointegrated sound processors, replacement, each
L8622	Alkaline battery for use with cochlear implant device, any size, replacement, each
L8623	Lithium ion battery for use with cochlear implant device speech processor, other than ear level, replacement, each
L8624	Lithium ion battery for use with cochlear implant or auditory osseointegrated device speech processor, ear level, replacement, each

Considered Not Medically Necessary:

Coding	Description
	None

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

Document History:

Revised Dates:

- 2023: May
- 2022: February, May
- 2021: May, December
- 2020: April (unarchived), June
- 2019: November (archived)

- 2016: February, April
- 2015: July
- 2014: April, October
- 2013: March, November
- 2012: March, August
- 2011: March, July
- 2010: April
- 2009: March
- 2008: March
- 2007: October
- 2002: March
- 2000: November
- 1998: December
- 1996: July

Reviewed Dates:

- 2018: July
- 2017: November
- 2015: June
- 2010: March
- 2005: September
- 2004: September, October
- 2003: March, October
- 2001: November
- 1999: December
- 1994: February

Effective Date:

- April 1992

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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The Audiologist's Guide to Hearing Aids, Personal Sound Amplification Products, Hearables, and Over-the-Counter Devices. (2023, Mar). Retrieved Apr 21, 2023, from AMERICAN ACADEMY OF AUDIOLOGY (AAA) Guidelines and Standards: https://www.audiology.org/practice-guideline/the-audiologists-guide-to-hearing-aids-personal-sound-amplification-products-hearables-and-over-the-counter-devices/

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 by 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:

Cochlear Implants, Bone Attached Hearing Aid Implants, Auditory Brain Stem Implants, SHP Surgical 20, Cochlear Implant, Deafness, sensorineural hearing loss, hearing loss, Hearing Aids, Bone Anchored, Bone Conduction, Auditory Brainstem Implants, Auditory implant, Brainstem implant, cochlear nerve, Otosclerosis, acoustic neuropathy, Schwannoma, Middle Ear Implantable, Semi-Implantable Electromagnetic Hearing Aids, SEHA, Hybrid cochlear implant devices, Bone-anchored hearing aid, BAHA, BAHS, MED-EL