

Cochlear Implants and Auditory Brainstem Implants

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Developed By: Medical Necessity Criteria Committee

I. Description

A cochlear implant is an electronic prosthesis that stimulates cells of the auditory spiral ganglion to provide a sense of sound to persons with hearing impairment. The device is made up of external and internal components. The external components include a microphone that picks up sounds from the environment, an external speech processor that arranges the sound transmitted by the microphone and an external transmitter. The internal components are surgically implanted. They include an internal receiver that is implanted in the temporal bone and receives signals from the external transmitter. The receiver converts the signals into electrical impulses. The impulses are collected by an electrode array that extends from the receiver into the cochlea. Cochlear implant devices are available in single-channel and multi-channel models. The cochlea is the part of the internal ear that is responsible for hearing. Audiologic criteria for children follow guidelines similar to those for adults. For adult and children able to respond reliably, standard pure-tone and speech audiometry tests are used to screen potential candidates.

Auditory brainstem implants (ABI) are another electronic prosthesis used in patients who have had surgical removal of auditory nerve tumors and as a result have total hearing loss. Like a cochlear implant, ABI's have several components including a microphone, a speech processor, a transmitter coil worn behind the ear, and an implant which is embedded in the skull. The implant relays signals to an electrode placed on the brainstem near the severed auditory nerve. After implantation, the ABI is programmed and tested and the individual must undergo training to recognize sounds and facilitate communication with the device.

Hearing loss is rated on a scale based on the threshold of hearing. Severe hearing loss is defined as a bilateral hearing threshold of 70-90 decibels (dB) and profound hearing loss is defined as a hearing threshold of 90 dB and above.

II. Criteria: CWQI HCS-0018B

* **Note:** Moda Health considers medically necessary cochlear implants covered under the medical benefit.

Moda Health considers bone-anchored hearing aids (BAHA) and temporal conduction implants covered under the hearing aid benefit. *(Please see Member Handbook for benefits)*

*For Auditory Brainstem Implants: Please refer to MCG A-410

A. Moda Health covers **1 or more** of the following:

- a. Moda Health will provide coverage for unilateral or bilateral cochlear implantation for children (*age 12 months to 17 years*) when it is determined to be medically necessary and **All** of the following criteria are met:
 - i. Child is 12 months to 17 years of age;
 - ii. Bilateral sensorineural hearing loss with unaided pure tone average thresholds of 90 dB or greater
 - iii. Child has family support and motivation to participate in post implant rehabilitation;
 - iv. Minimal speech perception 30% or less or child has a lack of developmentally appropriate auditory milestones measured using parent report scales;
 - v. Three-month to six-month trial of binaural hearing aids documents lack of or minimal improvement in auditory development;
 - vi. No evidence of central auditory dysfunction (*e.g., cortical deafness*);
 - vii. No CT or MRI evidence of cochleovestibular anomaly that would preclude *implant* (*e.g., cochlear aplasia, complete labyrinthine aplasia, lack of cochlear nerve*), or acoustic neuroma excision planned and cochlear nerve preservation thought possible;
 - viii. Child meets the FDA age indication for the specific device;
 - ix. Child has had an assessment by an audiologist and otolaryngologist experienced with cochlear implants;
 - x. The child must be enrolled in an educational program supportive of listening and speaking with aided hearing;
 - xi. Cochlear device is FDA approved for a child.
 - xii. The child does NOT have **All** of the following:
 1. Deafness due to lesions of the acoustic nerve or central auditory pathway
 2. Otitis media or other active, unresolved ear problems
 3. Radiographic evidence of absent cochlear development
 4. Inability or lack of willingness to participate in post-implantation aural rehabilitation
- b. Moda Health will provide coverage for unilateral or bilateral cochlear implantation for adults (*age 18 and older*) when it is determined to be medically necessary when **1 or more** of the following criteria are met:
 - i. Adults (*age 18 and older*) as indicated by **1 or more** of the following:
 1. **Patient is a candidate for an initial unilateral cochlear implant** when **ALL** the following are met:
 - a. Deafness (postlingual) Intact cochlea confirmed by CT or MRI
 - b. Intact cochlear nerve confirmed by CT or MRI, or acoustic neuroma excision planned and cochlear nerve preservation thought possible
 - c. **Need for implant**, as indicated by **1 or more** of the following:
 - i. Bilateral sensorineural hearing loss of greater than 70 dB

- ii. 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
 - d. Zero or marginal speech perception benefit from hearing aids
 - e. No lesions of acoustic nerve or central auditory pathway causing deafness
 - f. No organic brain syndrome
 - g. Patient has had an assessment by an audiologist and otolaryngologist experienced with cochlear implants
 - h. The patient must have cognitive ability to use auditory clues and is enrolled in an educational program supportive of listening and speaking with aided hearing
 - i. Cochlear implant is FDA approved and patient meets FDA indications for that device
 - j. The patient does NOT have **ALL** of the following:
 - i. Deafness due to lesions of the acoustic nerve or central auditory pathway
 - ii. Otitis media or other active, unresolved ear problems
 - iii. Radiographic evidence of absent cochlear development
 - iv. Inability or lack of willingness to participate in post-implantation aural rehabilitation
2. **Sequential (second) cochlear implant**, as indicated by **ALL** of the following:
- a. Functioning unilateral cochlear implant
 - b. Intact cochlear nerve in non-implant ear confirmed by CT or MRI
 - c. Zero or marginal speech perception benefit from hearing aid in non-implant ear

*Note: For adults and children, a post-cochlear implant rehabilitation program is necessary to achieve benefits from the cochlear implant. The rehabilitation program consists of six to ten sessions that last approximately two and a half hours each, and may include long term speech therapy. (Note: Moda Health does not provide coverage for therapy that exceeds the limits of the plan benefit)

- c. **Upgrades for the cochlear implant** are **NOT** covered for **1 or more** of the following:
 - i. If an original implant is working, a replacement or upgrade to another device would not be a covered benefit.
 - ii. Upgrades of an existing, functioning 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 model are considered not medically necessary.
- d. **Moda Health will cover replacement parts**, such as batteries and microphones, for Cochlear Implants for **1 or more** of the following:
 - i. The part is no longer functional and not repairable and **ALL** of the following:
 - 1. The requested part is no longer under warranty.
 - 2. The member has a benefit for a cochlear implant

3. Member is no longer able to adequately and /or safely perform his or her age-appropriate activities of daily living with the component currently in use.
- ii. Usual medically necessary frequency of replacement of cochlear implant parts as indicated in chart below for **1 or more** of the following:

Replacement Parts	Life Expectancy
Battery charger kit	1 per 3 years
Cochlear auxiliary cable adapter	1 per 3 years
Cochlear belt clip	1 per 3 years
Cochlear harness extension adapter	1 per 3 years
Cochlear signal checker	1 per 3 years
Disposable batteries for ear-level processors	72 per 6 months
Headset (3-piece component)	1 per 3 years
Headset cochlear coil (individual component)	1 per year
Headset cochlear magnet (individual component)	1 per year
Headset microphone (individual component)	1 per year
Headset cable or cord	4 per 6 months
Microphone cover	1 per year
Pouch	1 per year

Rechargeable batteries (per set of 2)	1 per year
Transmitter cable or cord	4 per 6 months

*Adapted from Wisconsin Department of Health and Family Services, 2005

III. Information Submitted with the Prior Authorization Request:

1. Medical records from the requesting specialist
2. Assessment by an audiologist or otolaryngologist
3. Appropriate hearing and speech test results

IV. CPT or HCPC codes covered:

Codes	Description
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
69717	Replacement (including removal of existing device), osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; without mastoidectomy
69718	Replacement (including removal of existing device), osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; with mastoidectomy
69930	Cochlear device implantation, with or without mastoidectomy
92507	Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual
92508	Treatment of speech, language, voice, communication, and/or auditory processing disorder; group, 2 or more individuals
92601	Diagnostic analysis of cochlear implant, patient younger than 7 years of age; with programming
92602	Diagnostic analysis of cochlear implant, patient younger than 7 years of age; subsequent reprogramming
92603	Diagnostic analysis of cochlear implant, age 7 years or older; with programming
92604	Diagnostic analysis of cochlear implant, age 7 years or older; subsequent reprogramming
92640	Diagnostic analysis with programming of auditory brainstem implant, per hour
L8614	Cochlear device, includes all internal and external components
L8615	Headset/headpiece for use with cochlear implant device, replacement

L8616	Microphone for use with cochlear implant device, replacement
L8617	Transmitting coil for use with cochlear implant device, replacement
L8618	Transmitter cable for use with cochlear implant device, replacement
L8619	Cochlear implant, external speech processor and controller, integrated system, replacement
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 device speech processor, ear level, replacement, each
L8627	Cochlear implant, external speech processor, component, replacement
L8628	Cochlear implant, external controller component, replacement
L8629	Transmitting coil and cable, integrated, for use with cochlear implant device, replacement

V. CPT or HCPC codes NOT covered:

Codes	Description
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
69717	Replacement (including removal of existing device), osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; without mastoidectomy
69718	Replacement (including removal of existing device), osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; with mastoidectomy

V. Annual Review History

Review Date	Revisions	Effective Date
03/2013	Annual Review: Added table with review date, revisions, and effective date.	04/03/2013
04/2014	Annual Review: Changed ODS to Moda Health, added listening to criterion III. E.	04/30/2014
08/2015	Annual Review- added CMS reference, added ICD-0 and ICD-10 codes	08/26/2015
08/2016	Annual Review: removed ICD9 diagnosis codes, identified code related to BAHA as not included in this policy	08/31/2016

08/2017	Annual Review- align Cochlear Implant criteria with CWQI- archive Brainstem Implant- refer to MCG: A-0410	8/23/17
05/2018	Annual Review: Minor wording changes	5/23/2018
11/2018	Annual Review: include CT in acceptable evidence	11/28/2018

VI. References

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33. Physician Advisors

Appendix 1 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD) and Local Coverage Determinations (LCDs) may exist and compliance with these policies is required where applicable. They can be found at: <http://www.cms.gov/medicare-coverage-database/search/advanced-search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD):

Jurisdiction(s): 5, 8	NCD/LCD Document (s):
National Coverage Determinations (NCD) Cochlear Implantation (50.3)	
	https://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=245&ncdver=2&DocID=50.3&kq=true&bc=gAAAABAAAA&

NCD/LCD Document (s):
National Coverage Analysis (NCA) Original consideration for Cochlear Implantation (CAG-00107N)
https://www.cms.gov/medicare-coverage-database/details/nca-details.aspx?NCAId=134&NCDId=245&ncdver=2&DocID=50.3&kq=true&IsPopup=y&

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC