 <b>JOHNS HOPKINS</b> MEDICINE <small>JOHNS HOPKINS HEALTHCARE</small>	Johns Hopkins HealthCare LLC	<i>Policy Number</i>	CMS03.10
	<b>Medical Policy</b>	<i>Effective Date</i>	10/01/2018
	<b>Medical Policy</b>	<i>Review Date</i>	08/21/2018
	<i>Subject</i>	<i>Revision Date</i>	08/21/2018
	<b>Implanted Devices for Hearing Loss</b>	<i>Page</i>	1 of 12

This document applies to the following Participating Organizations:

EHP                                  Johns Hopkins Advantage MD                          Priority Partners                          US Family Health Plan

**Keywords:** BAHA, cochlear implant, Osseointegrated

<b>Table of Contents</b>	<b>Page Number</b>
<b>I. <a href="#">ACTION</a></b>	<b>1</b>
<b>II. <a href="#">POLICY DISCLAIMER</a></b>	<b>1</b>
<b>III. <a href="#">POLICY</a></b>	<b>2</b>
<b>IV. <a href="#">POLICY CRITERIA</a></b>	<b>2</b>
<b>A. Cochlear Implants</b>	<b>2</b>
<b>B. Auditory Brainstem Implants</b>	<b>4</b>
<b>C. Bone Anchored Hearing Devices</b>	<b>4</b>
<b>D. Other Devices for Hearing Loss</b>	<b>4</b>
<b>E. Replacement Devices, Parts, and Components</b>	<b>5</b>
<b>F. Exclusions</b>	<b>5</b>
<b>V. <a href="#">DEFINITIONS</a></b>	<b>5</b>
<b>VI. <a href="#">BACKGROUND</a></b>	<b>6</b>
<b>VII. <a href="#">CODING DISCLAIMER</a></b>	<b>7</b>
<b>VIII. <a href="#">CODING INFORMATION</a></b>	<b>7</b>
<b>IX. <a href="#">REFERENCE STATEMENT</a></b>	<b>10</b>
<b>X. <a href="#">REFERENCES</a></b>	<b>10</b>
<b>XI. <a href="#">APPROVALS</a></b>	<b>12</b>


## **I. ACTION**

	New Policy	
x	Revising Policy Number	CMS03.10
	Superseding Policy Number	
	Archiving Policy Number	
	Retiring Policy Number	

## **II. POLICY DISCLAIMER**

Johns Hopkins HealthCare LLC (JHHC) provides a full spectrum of health care products and services for Employer Health Programs, Priority Partners, Advantage MD and US Family Health Plan. Each line of business possesses its own unique contract and guidelines which, for benefit and payment purposes, should be consulted to know what benefits are available for reimbursement.

Specific contract benefits, guidelines or policies supersede the information outlined in this policy.

 <p>JOHNS HOPKINS MEDICINE JOHNS HOPKINS HEALTHCARE</p>	Johns Hopkins HealthCare LLC	<i>Policy Number</i>	CMS03.10
	<b>Medical Policy</b>	<i>Effective Date</i>	10/01/2018
	<b>Medical Policy</b>	<i>Review Date</i>	08/21/2018
	<i>Subject</i>	<i>Revision Date</i>	08/21/2018
	<b>Implanted Devices for Hearing Loss</b>	<i>Page</i>	2 of 12

### III. POLICY

This policy presents criteria for medically necessary cochlear implants, auditory brainstem implants, and bone anchored hearing devices. This policy does not address air conduction hearing aids.

For US Family Health Plan see TRICARE Policy Manual 6010.57-M, February 1, 2008, Cochlear Implantation: Chapter 4, Section 22.2 and Prosthetic Hearing Devices Chapter 7, Section 8.3 and Hearing Aids and Hearing Aid Services: Chapter 7, Section 8.2.

For Advantage MD, see [Medicare Coverage Database](#):

Local Coverage Determination (LCD) Vestibular and Audiologic Function Studies (L35007)

National Coverage Determination (NCD) for Cochlear Implantation (50.3)

For Priority Partners:

In addition to following requirements of this policy, see Maryland Department of Health (MDH)- Code of Maryland Regulations (COMAR) 10.09.51.01-10.09.51.07, 10.09.67.20, 10.09.67.26-4, 10.09.67.27, and 10.09.70.03 - Coverage of Audiology Services, Hearing Aids, Cochlear Implants and Auditory Osseointegrated Devices at the following transmittals:


[COMAR](#) and <https://mmcp.health.maryland.gov/Documents/Audiology,%20Physical%20Therapy,%20and%20EPSDT%20Provider%20Manual.pdf> (pp 21-32). Effective July 1, 2018

**Note** ~ For PPMCO there is initial coverage of the following: Unilateral cochlear implants for participant's 21 years of age and older. Bilateral cochlear implants for participant's younger than 21 years old. Unilateral auditory osseointegrated devices for participants 21 years old or older. Bilateral auditory osseointegrated devices for participants younger than 21 years of age.


### IV. POLICY CRITERIA

#### A. Cochlear Implants:

1. The following medical necessity criteria must be met for uniaural (monaural) or binaural (bilateral) cochlear implantation in adults and children:
  - a. Member must have had an assessment by an audiologist and from an otolaryngologist experienced in this procedure indicating the likelihood of success with the device, **AND**;
  - b. Member is current on age appropriate pneumococcal vaccination (two or more weeks before surgery when possible) in accordance with Center for Disease Control (CDC) Advisory Committee on Immunization Practices (ACIP).
  - c. Member must be able to follow or participate in a program of aural rehabilitation as speech therapy for members with hearing impairments and after placement of a cochlear implant.
2. When benefits are provided under the member's contract, JHHC considers monaural or bilateral cochlear implants medically necessary for individuals  $\geq$  18 years of age with bilateral, pre-or-post-linguistic, sensorineural, moderately severe- to- profound hearing impairment when ALL of the following criteria are met:
  - a. Diagnosis of bilateral moderately severe to profound sensorineural hearing loss, defined as a pure-tone average hearing threshold of  $\geq$  56 decibels (dB) at 1000, and 2000 Hertz (Hz), **AND**;
  - b. Limited benefit from appropriately fitted binaural hearing aids. The limited benefit from amplification is defined by test scores of 50% correct or less in best-aided listening condition on open-set

 <p><b>JOHNS HOPKINS</b> MEDICINE JOHNS HOPKINS HEALTHCARE</p>	Johns Hopkins HealthCare LLC	<i>Policy Number</i>	CMS03.10
	<b>Medical Policy</b>	<i>Effective Date</i>	10/01/2018
	<b>Medical Policy</b>	<i>Review Date</i>	08/21/2018
	<i>Subject</i>	<i>Revision Date</i>	08/21/2018
	<b>Implanted Devices for Hearing Loss</b>	<i>Page</i>	3 of 12

- sentence recognition(e.g., AzBio sentence test, Hearing in Noise Test sentences(HINT), Central Institute for the Deaf (CID) sentences, or consonant-nucleus-consonant (CNC) test, **AND**;
- c. Cochlear patency by CT or MRI, **AND**;
  - d. Documentation of member's ability and willingness to participate in a rehabilitation program consisting of at least 6 sessions during which speech recognition, understanding, and perception are developed and tested, **AND**;
  - e. Cochlear implants must be used according to FDA-approved indications, **AND**;
  - f. No evidence of the following contraindications:
    - i. Active or chronic middle ear infection, **OR**;
    - ii. Hearing loss predominantly due to lesions of the acoustic nerve or central auditory pathway, **OR**;
    - iii. Absent cochlear development, cochlear ossification, or inaccessible cochlear lumen, **OR**;
    - iv. Contraindication(s) to surgery
3. When benefits are provided under the member's contract, JHHC considers monaural or bilateral cochlear implants medically necessary for children aged 12 months through 17 years 11 months, with profound, bilateral sensorineural hearing impairment when ALL of the following criteria are met:
- a. Child has severe-to- profound, bilateral sensorineural hearing loss determined by a pure tone average of 70dB or greater at 500 Hz, and 90dB or greater at 1000 and 2000 Hz, **AND**;
  - b. Child has limited benefit from appropriately fitted binaural hearing aids for :
    - i. Children (4 years of age or younger); : Lack of benefit is defined as a failure to reach developmentally appropriate milestones (such as spontaneous response to name in quiet or to environmental sounds) measured using the Infant-Toddler Meaningful Auditory Integration Scale, the Meaningful Auditory Integration Scale, or the Early Speech Perception Test, or less than 20% correct on open-set word recognition test (Multisyllabic Lexical Neighborhood Test in conjunction with appropriate amplification and participation in intensive aural rehabilitation over a 3 to 6 month period.
    - ii. Children (older than 4 years of age): Lack of hearing aid benefit is defined as scoring <50-60% correct on a difficult open-set word recognition test (Phonetically Balanced- Kindergarten Test) or <50-60% correct on an open-set sentence test (Hearing in Noise Test for Children, the open-set Multi-syllabic Lexical Neighborhood Test (MLNT) or Lexical Neighborhood Test (LNT), depending on the child's cognitive ability and linguistic skills, **AND**;
    - iii. Cochlear patency by CT or MRI, **AND**;
    - iv. Documentation of child or caregiver capable of participating in postoperative aural rehabilitation consisting of at least 6 sessions during which speech recognition, understanding, and perception are developed and tested, **AND**;
    - v. No evidence of the following contraindications:
      - Active or chronic middle ear infection, **AND**;
      - Hearing loss predominantly due to lesions of the acoustic nerve or central auditory pathway, **OR**;
      - Absent cochlear development, cochlear ossification, or inaccessible cochlear lumen, **OR**;
      - Contraindication(s) to surgery, **AND**;
    - vi. Cochlear implants must be used according to FDA-approved indications, **AND**;
    - vii. A 3 to 6 month hearing aid trial has been undertaken by a child without previous experience with hearing aids.
    - viii. Note ~ When there is radiological evidence of cochlear ossification, the 3 to 6 month hearing aid trial requirement may be waived at JHHC's discretion

 <p>JOHNS HOPKINS MEDICINE JOHNS HOPKINS HEALTHCARE</p>	Johns Hopkins HealthCare LLC	<i>Policy Number</i>	CMS03.10
	<b>Medical Policy</b>	<i>Effective Date</i>	10/01/2018
	<b>Medical Policy</b>	<i>Review Date</i>	08/21/2018
	<i>Subject</i>	<i>Revision Date</i>	08/21/2018
	<b>Implanted Devices for Hearing Loss</b>	<i>Page</i>	4 of 12

**B. Auditory Brainstem Implants:**

1. When benefits are provided under the member's contract, JHHC considers auditory brainstem implants medically necessary for individuals  $\geq 12$  years of age when the following criteria are met:
  - a. Deafness due to bilateral resection of tumors of the internal auditory canals and/or cerebellopontine angles, **AND**;
  - b. Diagnosis of neurofibromatosis type II.


**C. Bone Anchored Hearing Devices:**

When benefits are provided under the member's contract, JHHC considers bone anchored hearing devices (also referred to as osseointegrated implants or BAHA) medically necessary for individuals  $> 5$  years of age when the following criteria are met:

1. For unilateral or bilateral conductive or mixed hearing loss:
  - a. An inability for air conduction hearing aids to effectively restore hearing due to the presence of at least one of the following conditions:
    - i. Congenital or surgical malformation of the external ear canal or middle ear, **OR**;
    - ii. Chronic external otitis or otitis media that cannot be overcome by other means, **OR**;
    - iii. Hearing loss requiring amplification but severe dermatitis of the external ear that preclude use of a hearing aid, **OR**;
    - iv. Tumor of the external ear canal or tympanic cavity, **OR**;
    - v. Hearing loss secondary to otosclerosis in individuals who are not stapedectomy candidates, **OR**;
    - vi. Other condition in which an air-conduction hearing aid is contraindicated or inappropriate, **AND**;
  - b. A pure-tone average bone conduction threshold of  $\leq 65$  dB at 500, 1000, 2000, and 3000 Hz in the affected ear(s), **AND**;
  - c. A speech discrimination score of  $\geq 60\%$  in the ear intended to be the recipient of stimulation from the device.
2. For unilateral sensorineural hearing loss:
  - a. A pure-tone average hearing threshold of  $\geq 70$  dB at 500, 1000, and 2000 Hz, **AND**;
  - b. Normal bone-conduction threshold for hearing (a pure-tone average hearing threshold of  $< 20$  dB) in the other ear, **AND**;
  - c. A failed trial of nonsurgical augmentation (such as a contralateral routing of signals aid) unless contraindicated or inappropriate.
3. Bilateral implantation may be considered medically necessary if the above criteria are met and conductive or mixed hearing loss is bilateral and symmetric (defined as an average difference in bone conduction threshold of  $< 10$  dB between the right and left at 500, 1000, 2000, and 4000 Hz or  $< 15$  dB at individual frequencies).
4. Bone anchored hearing devices must be used according to FDA-approved indications.

**D. Other Devices for Hearing Loss**

1. Unless specific benefits are provided under the member's contract, JHHC considers the following devices to be experimental and investigational for all other indications, as they do not meet Technology Evaluation Criteria (TEC) #2-5. [Refer to CMS01.00 Medical Policy Introduction Technology Evaluation Criteria \(TEC\) #2-5.](#)
  - a. Cochlear hybrid implants (such as Nucleus Hybrid<sup>®</sup>);
  - b. Semi-implantable electromagnetic hearing aids (such as Vibrant Soundbridge<sup>®</sup>);
  - c. Totally implanted hearing systems (such as Esteem<sup>®</sup>);
  - d. Magnetically coupled partially implantable bone conduction hearing systems (such as Otomag<sup>®</sup> Alpha 1);
  - e. Intra-oral bone conduction hearing aids (such as SoundBite<sup>®</sup>)

 <p>JOHNS HOPKINS MEDICINE JOHNS HOPKINS HEALTHCARE</p>	Johns Hopkins HealthCare LLC	<i>Policy Number</i>	CMS03.10
	<b>Medical Policy</b>	<i>Effective Date</i>	10/01/2018
	<b>Medical Policy</b>	<i>Review Date</i>	08/21/2018
	<i>Subject</i>	<i>Revision Date</i>	08/21/2018
	<b>Implanted Devices for Hearing Loss</b>	<i>Page</i>	5 of 12

f. Hearing devices and accessories utilizing Bluetooth® technology

**E. Replacement Devices, Parts, and Components**

1. Replacement of the above devices and components is generally considered medically necessary only when the existing device or component is defective or malfunctioning. Replacements are not considered medically necessary when the current device or component is functional or when requested for convenience, aesthetics, or to upgrade to newer technology.

**F. Exclusions**

Unless specific benefits are provided under the member's contract, JHHC considers all other forms of implanted devices for hearing loss experimental and investigational for all other indications, as they do not meet Technology Evaluation Criteria (TEC) #2-5. [Refer to CMS01.00 Medical Policy Introduction Technology Evaluation Criteria \(TEC\) #2-5.](#)

**V. DEFINITIONS**

**Aural rehabilitation**- The process of identifying and diagnosing a hearing loss, providing different types of therapies to clients who are hard of hearing, and implementing different amplification devices to aid the client's hearing abilities. Audiologic, or hearing rehabilitation helps people with hearing loss. Rehabilitation, or rehab for short, helps people relearn skills that they have lost (ASHA, 2018a).


**Central Institute for the Deaf (CID) sentences**- These consists-of 10 lists with 10 sentences per list. Each sentence consists of 2 to 12 words. The child is asked to repeat as much of the sentence as possible. The test is used in age group 6+ (Craddock, 2016).

**Consonant-nucleus-consonant (CNC) test**- These open-set word lists were based on the original consonant-nucleus-consonant (CNC) word tests developed by (Peterson & Lehiste, 1962). Although different words are used, the CNC structure of each word is maintained. Each list contains the same number of words (50 words per list) and has the same the frequency of occurrence of these phonemes in real life. The CNC Words are presented in isolation and are commonly used to test adults with hearing impairment. There are three test batches, each containing 10 lists of CNC words, spoken by Australian female speaker (Bierer, 2016).

**Conductive Hearing Loss**- It occurs when sound is not conducted efficiently through the outer ear canal to the eardrum and the tiny bones (ossicles) of the middle ear. Conductive hearing loss usually involves a reduction in sound level or the ability to hear faint sounds. This type of hearing loss can often be corrected medically or surgically. Some possible causes of conductive hearing loss: fluid in the middle ear from colds, ear infection(otitis media), allergies (serous otitis media), perforated eardrum, and poor eustachian tube function (ASHA, 2018c).

**Early Speech Perception Test (ESP)**- Available in a standard or low-verbal version. Pattern perception, spondee( words that have two syllables with equal stress on each syllable, for example: cowboy, toothbrush,railroad, ice cream) identification and monosyllable identification are assessed with response format of pictured vocabulary or toy manipulatives. The test is used in age group 3+ (Craddock, 2016).

**Hearing in Noise Test (HINT)**- Measures a person's ability to hear speech in quiet and in noise. In this test,the patient is required to repeat sentences both in a quiet environment and with competing noise being presented from different directions. Consists of multiple lists of 10 sentences each;sentences include 4-7 key words. The child repeats the sentences back to the examiner. The test is used in age group 6-12 (Craddock, 2016).

 <p>JOHNS HOPKINS MEDICINE JOHNS HOPKINS HEALTHCARE</p>	Johns Hopkins HealthCare LLC <b>Medical Policy</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS03.10	
		<i>Effective Date</i>	10/01/2018	
		<i>Review Date</i>	08/21/2018	
	<i>Subject</i>	<b>Implanted Devices for Hearing Loss</b>	<i>Revision Date</i>	08/21/2018
			<i>Page</i>	6 of 12

**Infant-Toddler Meaningful Auditory Integration Scale**- The Infant-Toddler Meaningful Auditory Integration Scale (IT-MAIS) (Zimmerman-Phillips 2000) is a modification of the Meaningful Auditory Integration Scale (MAIS)(Robbins et al., 1991). It is a structured interview schedule designed to assess the child's spontaneous responses to sound in his/her everyday environment. The assessment is based upon information provided by the child's parent(s) in response to 10 probes. These 10 probes assess three main areas: 1)vocalization behavior; 2) alerting to sounds; and 3) deriving meaning from sound. Specific scoring criteria have been developed for each of the 10 probes (Zimmerman-Phillips, 2013).

**Lexical Neighborhood Test (LNT) and Multisyllabic Lexical Neighborhood Test (MLNT)**- These are open-set tests of word understanding which include vocabulary familiar to children ages 3-5. The Lexical Neighborhood Test uses single-syllable words while the Multisyllabic version uses 2-3 syllable words. The test is used in age group 3-5 (Craddock, 2016).

**Mixed Hearing Loss**- This happens when conductive hearing loss occurs in combination with a sensorineural hearing loss (SNHL). In other words, there may be damage in the outer or middle ear and in the inner ear (cochlea) or auditory nerve. When this happens, the hearing loss is referred to as a mixed hearing loss (ASHA, 2018c).

**Phonetically Balanced Kindergarten (PBK) Test**- Consists of 50 word lists composed of kindergarten vocabulary presented in an open-set format. The tester presents words verbally and the child is asked to repeat the word. The test is used in age group 5-7 (Craddock, 2016).

**Sensorineural Hearing Loss (SNHL)**- Sensorineural hearing loss occurs when there is damage to the inner ear (cochlea), or to the nerve pathways from the inner ear to the brain. This is the most common type of permanent hearing loss. SNHL reduces the ability to hear faint sounds. Even when speech is loud enough to hear, it may still be unclear or sound muffled. Some possible causes of SNHL: illnesses, drugs that are toxic to hearing, aging, head trauma, hearing loss that runs in the family (genetic or hereditary), malformation of the inner ear and exposure to loud noise (ASHA, 2018c).


## **VI. BACKGROUND**

According to the National Institutes of Health, approximately 37.5 million individuals in the United States reported having some degree of hearing loss. The advancements made in technology have led many individuals to seek implanted hearing devices. Implanted devices for hearing loss refer to various forms of cochlear implants, hearing aids, and other assistive listening devices. Numerous studies have demonstrated the effectiveness of hearing aids and cochlear implants, particularly in the presence of visual cues (Craddock, et. al., 2016).

Degree of hearing loss can be classified as mild (26-40 dB), moderate (41-55 dB), moderately severe (56-70 dB), severe (71-90 dB) or profound(91 dB or more). It is based on how loud sounds need to be for you to hear them. Decibels, or dB, describe loudness. The term dB HL describes your hearing loss in decibels (ASHA, 2018b).

### **Statement on bilingual education and early language acquisition:**

Several studies have highlighted the benefits of bilingualism in deaf children. Bilingualism refers to the development and use of *both* sign language and English at home and in educational settings. Early exposure to both English and sign language can improve a child's cognitive and language development (Morford, et. al., 2012). As such, it is heavily encouraged that parents of deaf children should learn and practice sign language with their children.

	Johns Hopkins HealthCare LLC <b>Medical Policy</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS03.10	
		<i>Effective Date</i>	10/01/2018	
		<i>Review Date</i>	08/21/2018	
	<i>Subject</i>	<b>Implanted Devices for Hearing Loss</b>	<i>Revision Date</i>	08/21/2018
			<i>Page</i>	7 of 12

## VII. CODING DISCLAIMER

CPT Copyright 2018 American Medical Association. All rights reserved. CPT is a registered trademark of the American Medical Association.


Note: The following CPT/HCPCS codes are included below for informational purposes. Inclusion or exclusion of a CPT/HCPCS code(s) below does not signify or imply member coverage or provider reimbursement. The member's specific benefit plan determines coverage and referral requirements. All inpatient admissions require preauthorization.

<i>Compliance with the provision in this policy may be monitored and addressed through post payment data analysis and/or medical review audits</i>			
Employer Health Programs (EHP) refer to specific Summary Plan Description (SPD). If there is no criteria in the SPD, apply the Medical Policy criteria.	Priority Partners (PPMCO) refer to COMAR guidelines and PPMCO SPD then apply the Medical Policy criteria.	US Family Health Plan (USFHP), TRICARE Medical Policy supersedes JHHC Medical Policy. If there is no Policy in TRICARE, apply the Medical Policy Criteria.	Advantage MD, LCD and NCD Medical Policy supersedes JHHC Medical Policy. If there is no LCD or NCD, apply the Medical Policy Criteria.

## VIII. CODING INFORMATION

### PRE-AUTHORIZATION REQUIRED

CPT ® CODES	DESCRIPTION
<b>69710</b>	Implantation or replacement of electromagnetic bone conduction hearing device in temporal bone
<b>69714</b>	Implantation, osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; without mastoidectomy
<b>69715</b>	Implantation, osseointegrated implant, temporal bone, with percutaneous attachment to external speech processor/cochlear stimulator; with mastoidectomy
<b>69717</b>	Replacement (including removal of existing device), osseointegrated implant, temporal bone, with percutaneous attachment of external speech processor cochlear stimulator; without mastoidectomy
<b>69718</b>	Replacement (including removal of existing device), osseointegrated implant, temporal bone, with percutaneous attachment of external speech processor cochlear stimulator; with mastoidectomy
<b>69930</b>	Cochlear device implantation, with or without mastoidectomy
HCPCS CODE	DESCRIPTION
<b>L8614</b>	Cochlear device, includes all internal and external components
<b>L8619</b>	Cochlear implant external speech processor, replacement


 <p><b>JOHNS HOPKINS</b> MEDICINE JOHNS HOPKINS HEALTHCARE</p>	Johns Hopkins HealthCare LLC <b>Medical Policy</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS03.10	
		<i>Effective Date</i>	10/01/2018	
		<i>Review Date</i>	08/21/2018	
	<i>Subject</i>	<b>Implanted Devices for Hearing Loss</b>	<i>Revision Date</i>	08/21/2018
			<i>Page</i>	8 of 12

<b>L8627</b>	Cochlear implant, speech processor, component, replacement
<b>L8628</b>	Cochlear implant, external controller component, replacement
<b>L8690</b>	Auditory osseointegrated device, includes all internal and external components
<b>L8691</b>	Auditory osseointegrated device, external sound processor, replacement
<b>L8692</b>	Auditory osseointegrated device, external sound processor, used without osseointegration, body worn, includes headband or other means of external attachment
<b>L8693</b>	Auditory osseointegrated device abutment, any length, replacement only
<b>L8694</b>	Auditory osseointegrated device, transducer/actuator, replacement only, each
<b>S2235</b>	Implantation of auditory brain stem implant
<b>V5273</b>	Assistive listening device, for use with cochlear implant

**NO PRE-AUTHORIZATION REQUIRED**

<b>CPT ® CODES</b>	<b>DESCRIPTION</b>
<b>69711</b>	Removal or repair of electromagnetic bone conduction hearing device in temporal bone
<b>92601</b>	Diagnostic analysis of cochlear implant, patient younger than 7 years of age; with programming
<b>92602</b>	Diagnostic analysis of cochlear implant, patient younger than 7 years of age; subsequent reprogramming
<b>92603</b>	Diagnostic analysis of cochlear implant, age 7 years or older; with programming
<b>92604</b>	Diagnostic analysis of cochlear implant, age 7 years or older; subsequent reprogramming
<b>92640</b>	Diagnostic analysis with programming of auditory brainstem implant
<b>HCPCS CODE</b>	<b>DESCRIPTION</b>
<b>L8615</b>	Headset/headpiece for use with cochlear implant device, replacement
<b>L8616</b>	Microphone for use with cochlear implant device, replacement
<b>L8617</b>	Transmitting coil for use with cochlear implant device, replacement
<b>L8618</b>	Transmitter cable for use with cochlear implant device, replacement
<b>L8621</b>	Zinc air battery for use with cochlear implant device, replacement, each
<b>L8622</b>	Alkaline battery for use with cochlear implant device, any size, replacement, each
<b>L8623</b>	Lithium ion battery for use with cochlear implant device speech processor, other than ear level, replacement, each
<b>L8624</b>	Lithium ion battery for use with cochlear implant or auditory osseointegrated device speech processor, ear level, replacement, each




 <p><b>JOHNS HOPKINS</b> MEDICINE JOHNS HOPKINS HEALTHCARE</p>	Johns Hopkins HealthCare LLC <b>Medical Policy</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS03.10
		<i>Effective Date</i>	10/01/2018
		<i>Review Date</i>	08/21/2018
	<i>Subject</i> <b>Implanted Devices for Hearing Loss</b>	<i>Revision Date</i>	08/21/2018
		<i>Page</i>	9 of 12

<b>L8625</b>	External recharging system for battery for use with cochlear implant or auditory osseointegrated device, replacement only, each
<b>L8629</b>	Transmitting coil and cable, integrated, for use with cochlear implant device, replacement

**ICD10 AND REVENUE CODES ARE FOR INFORMATIONAL PURPOSES ONLY**

<b>ICD10 CODES</b>	<b>DESCRIPTION</b>
<b>C30.1</b>	Malignant neoplasm of middle ear
<b>C72.40-C72.42</b>	Malignant neoplasm of acoustic nerve
<b>C44.201-C44.299</b>	Other and unspecified malignant neoplasm of skin of ear and external auricular canal
<b>H65.20 - H65.499</b>	Chronic otitis media
<b>H66.20-H66.23</b>	Chronic atticoantral suppurative otitis media
<b>H66.3X1 - H66.3X9</b>	Other chronic suppurative otitis media
<b>H66.90 - H66.93</b>	Otitis media, unspecified
<b>H80.00 - H80.93</b>	Otosclerosis
<b>H90.0</b>	Conductive hearing loss, bilateral
<b>H90.11</b>	Conductive hearing loss, unilateral, right ear, with unrestricted hearing on the contralateral side
<b>H90.12</b>	Conductive hearing loss, unilateral, left ear, with unrestricted hearing on the contralateral side
<b>H90.2</b>	Conductive hearing loss, unspecified
<b>H90.3</b>	Sensorineural hearing loss, bilateral
<b>H90.41</b>	Sensorineural hearing loss, unilateral, right ear, with unrestricted hearing on the contralateral side
<b>H90.42</b>	Sensorineural hearing loss, unilateral, left ear, with unrestricted hearing on the contralateral side
<b>H90.6</b>	Mixed conductive and sensorineural hearing loss, bilateral
<b>H90.71</b>	Mixed conductive and sensorineural hearing loss, unilateral, right ear, with unrestricted hearing on the contralateral side
<b>H90.72</b>	Mixed conductive and sensorineural hearing loss, unilateral, left ear, with unrestricted hearing on the contralateral side
<b>H90.A11</b>	Conductive hearing loss, unilateral, right ear with restricted hearing on the contralateral side

 <p><b>JOHNS HOPKINS</b> MEDICINE JOHNS HOPKINS HEALTHCARE</p>	Johns Hopkins HealthCare LLC	<i>Policy Number</i>	CMS03.10
	<b>Medical Policy</b>	<i>Effective Date</i>	10/01/2018
	<b>Medical Policy</b>	<i>Review Date</i>	08/21/2018
	<i>Subject</i>	<i>Revision Date</i>	08/21/2018
	<b>Implanted Devices for Hearing Loss</b>	<i>Page</i>	10 of 12

<b>H90.A12</b>	Conductive hearing loss, unilateral, left ear, with restricted hearing on the contralateral side
<b>H90.A31</b>	Mixed conductive and sensorineural hearing loss, unilateral, right ear with restricted hearing on the contralateral side
<b>H90.A32</b>	Mixed conductive and sensorineural hearing loss, unilateral, left ear with restricted hearing on the contralateral side
<b>Q16.1</b>	Congenital absence, atresia and stricture of auditory canal (external)
<b>Q16.3</b>	Congenital malformation of ear ossicles
<b>Q16.4</b>	Other congenital malformations of middle ear
<b>Q17.9</b>	Congenital malformation of ear, unspecified
<b>Q85.02</b>	Neurofibromatosis, type 2

<b>Revenue Codes</b>	<b>DESCRIPTION</b>
<b>0274</b>	Medical/Surgical Supplies and Devices - Prosthetic/Orthotic Devices
<b>0360</b>	Operating Room Services-General; Hospital; outpatient

## **IX. REFERENCE STATEMENT**

Analyses of the scientific and clinical references cited below were conducted and utilized by the Johns Hopkins HealthCare LLC (JHHC) Medical Policy Team during the development and implementation of this medical policy. Per NCQA standards, the Medical Policy Team will continue to monitor and review any newly published clinical evidence and adjust the references below accordingly if deemed necessary.

## **X. REFERENCES**

Aetna, Clinical Policy Bulletin , (March 2018). Bone-Anchored Hearing Aid. Policy No. 0403. Retrieved: [http://www.aetna.com/cpb/medical/data/400\\_499/0403.html](http://www.aetna.com/cpb/medical/data/400_499/0403.html)


Aetna, Clinical Policy Bulletin, (February 2018). Cochlear Implants and Auditory Brainstem Implants.-Policy No. 0013. Retrieved: [http://www.aetna.com/cpb/medical/data/1\\_99/0013.html](http://www.aetna.com/cpb/medical/data/1_99/0013.html)

Aetna, . Clinical Policy Bulletin, (August 2017) Implantable Hearing Aids. Policy No. 0612. Retrieved: [http://www.aetna.com/cpb/medical/data/600\\_699/0612.html](http://www.aetna.com/cpb/medical/data/600_699/0612.html)

American Academy of Audiology, (2018). Cochlear Implant Fact Sheet. Retrieved : <https://www.audiology.org/publications-resources/consumer-information/fact-sheets>

American Speech-Language-Hearing Association (ASHA), (2018a). Aural Rehabilitation. Retrieved: <https://www.asha.org/publications/>

American Speech-Language-Hearing Association (ASHA), (2018b). Degree of Hearing Loss. Retrieved: <https://www.asha.org/public/hearing/Degree-of-Hearing-Loss/>

 <p><b>JOHNS HOPKINS</b> MEDICINE JOHNS HOPKINS HEALTHCARE</p>	Johns Hopkins HealthCare LLC <b>Medical Policy</b> <b>Medical Policy</b>	<i>Policy Number</i>	CMS03.10	
		<i>Effective Date</i>	10/01/2018	
		<i>Review Date</i>	08/21/2018	
	<i>Subject</i>	<b>Implanted Devices for Hearing Loss</b>	<i>Revision Date</i>	08/21/2018
			<i>Page</i>	11 of 12

American Speech-Language-Hearing Association (ASHA), (2018b). Types of Hearing Loss. Retrieved: <https://www.asha.org/public/hearing/Types-of-Hearing-Loss/>

Baker, S. (2011). Advantages of early visual language. Gallaudet University. Retrieved: <http://v12.gallaudet.edu/files/4613/9216/6279/research-brief-2-advantages-of-early-visual-language.pdf>

Bierer, J., Spindler, E., et al. (2016). An Examination of Sources of Variability Across the Consonant- Nucleus-Consonant Test in Cochlear Implant Listeners, Journal Trends in Hearing, National Institutes of Health. Retrieved: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4874060/#bibr15-2331216516646556>

Bond, M., Elston, J., Mealing, S., et al. (2010). Systematic reviews of the effectiveness and cost-effectiveness of multi-channel unilateral cochlear implants for adults, Journal of Clinical Otolaryngology, Vol. 35(2), p. 87-96.

Cigna,. Medical Coverage Policy, (July 2017). Cochlear and Auditory Brainstem Implants. Policy No. 0190. Retrieved: [https://cignaforhcp.cigna.com/public/content/pdf/coveragePolicies/medical/mm\\_0190\\_coveragepositioncriteria\\_cochlear\\_and\\_auditory\\_brainstem\\_implants.pdf](https://cignaforhcp.cigna.com/public/content/pdf/coveragePolicies/medical/mm_0190_coveragepositioncriteria_cochlear_and_auditory_brainstem_implants.pdf)

Cigna Medical Coverage Policy, (May 2018). Hearing Aids. Policy No. 0093. Retrieved: [https://cignaforhcp.cigna.com/public/content/pdf/coveragePolicies/medical/mm\\_0093\\_coveragepositioncriteria\\_hearing\\_aids.pdf](https://cignaforhcp.cigna.com/public/content/pdf/coveragePolicies/medical/mm_0093_coveragepositioncriteria_hearing_aids.pdf)

Craddock, L., Cooper, H., Riley, A., et al. (2016). Cochlear implants for pre-lingually profoundly deaf adults. Cochlear Implants International, Vol. 17, p. 26-30.

First Years Professional Development through Distance Education. Speech Perception Testing Methods,2012, <http://www.firstyears.org/tests/testslang.htm>. Accessed 25 June 2018.

Fish, S., Morford, J.P., (2012). The benefits of bilingualism: Impacts on language and cognitive development. Gallaudet University. Retrieved: <https://v12.educ.ualberta.ca/sites/v12.educ.ualberta.ca/files/%20%09Research%20Brief%207-%20The%20Benefits%20of%20Bilingualism.pdf>

Hayes, Inc. (June 2017). Medical Technology Directory. Bilateral Cochlear implantation in Adults. Retrieved: <https://www.hayesinc.com/subscribers/displayLogin.do>

Hayes, Inc. (June 2017) . Medical Technology Directory. Bilateral Cochlear implantation in Children. Retrieved: <https://www.hayesinc.com/subscribers/displayLogin.do>


HEAR works®. (2014). Speech Perception Tests. Retrieved: <https://hearworks.com.au/technology/audio-tests/>

National Association of the Deaf. (2016). Position Statement on ASL and English Bilingual Education. Retrieved: <https://nad.org/position-statement-asl-and-english-bilingual-education>

Raman, G., Lee, J., Chung, M., et al. (2011). Effectiveness of Cochlear Implants in Adults with Sensorineural Hearing Loss. Technology Assessment Report. <http://www.cms.gov/determinationprocess/downloads/id80TA.pdf>

Smith, Richard, Issacson, G., et al. (2018). Hearing Loss in Children: Treatment. Retrieved : <https://www.uptodate-com.ezp.w>

TRICARE. Policy Manual 6010.57-M, Cochlear Implantation: Chapter 4, Section 22.2 . Retrieved : <http://manuals.tricare.osd.mil>

 <p>JOHNS HOPKINS MEDICINE JOHNS HOPKINS HEALTHCARE</p>	Johns Hopkins HealthCare LLC	<i>Policy Number</i>	CMS03.10
	<b>Medical Policy</b>	<i>Effective Date</i>	10/01/2018
	<b>Medical Policy</b>	<i>Review Date</i>	08/21/2018
	<i>Subject</i>	<i>Revision Date</i>	08/21/2018
	<b>Implanted Devices for Hearing Loss</b>	<i>Page</i>	12 of 12

TRICARE Policy Manual 6010.57-M, Hearing Aids and Hearing Aid Services: Chapter 7, Section 8.2. Retrieved: <http://manuals.tricare.osd.mil/>

TRICARE Policy Manual 6010.57-M, Prosthetic Hearing Devices: Chapter 7, Section 8.3. Retrieved: <http://manuals.tricare.osd.mil/>

U.S. Food and Drug Administration. -(March 2018). Cochlear Implants information. Retrieved: <http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/ImplantsandProsthetics/CochlearImplants>

Volleth, N., Hast, A., et al. (2018). Subjective improvement of hearing through cochlear implantation. Pub Med.gov. Retrieved: <https://www.ncbi.nlm.nih.gov/pubmed/29934847>

Zimmerman-Phillips, S., Osberger, M.J., et al. (2013). IT-MAIS Infant-Toddler Meaningful Auditory Integration Scale. Retrieved: [https://advancedbionics.com/content/dam/advancedbionics/Documents/Regional/BR/AB\\_IT-MAIS\\_Resource.pdf](https://advancedbionics.com/content/dam/advancedbionics/Documents/Regional/BR/AB_IT-MAIS_Resource.pdf)

## **XI. APPROVALS**

**Historic Effective Dates:** 06/06/2014, 09/02/16