

Clinical Policy: Bone-Anchored Hearing Aid

Reference Number: PA.CP.MP.93

Plan Effective Date: 12/2018

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[Coding Implications](#)

[Revision Log](#)

Description

Bone-anchored hearing aids (BAHAs) are an alternative to conventional hearing aids when physical or medical complications prevent adequate functional improvement in hearing. Sound quality of BAHAs is superior to traditional air-conduction hearing aids, and pain/discomfort is largely diminished with BAHAs.¹

Policy/Criteria

- I. It is the policy of PA Health and Wellness[®] (PHW) that bone-anchored hearing aids (BAHAs) are **medically necessary** for members/enrollees with all of the following indications:
 - A. *Implantable device* for age \geq five years; or *head band device* for age $<$ five years or medically unable to have an implant;⁸
 - B. Unilateral or bilateral conductive and/or mixed hearing loss (i.e., conductive and sensorineural hearing loss) or unilateral sensorineural hearing loss (i.e., sensorineural deafness in one ear and normal hearing in the other ear);⁸
 - C. Pure tone average bone conduction threshold (measured at 0.5, 1, 2, and 3kHz) is consistent with the FDA indications for the requested device and an unaided speech discrimination score \geq 60%;⁸
 - D. For bilateral BAHA, there is a mean maximum difference $<$ 10 dB (decibels) between the right bone conduction threshold and left bone conduction threshold;⁸
 - E. For unilateral deafness, the hearing ear should have a bone conduction threshold of \leq 20dB;⁸
 - F. One of the following indications:
 1. Congenital or surgically induced malformations of the ear canal such that it does not exist or cannot accommodate a standard air-conduction hearing aid (provided that the nerve is functional);⁶
 2. Chronic infection or dermatitis of the middle or outer ear that is exacerbated by a standard air-conduction hearing aid;⁶
 3. Allergic reactions to standard air-conduction hearing aids;⁶
 4. Unilateral deafness occurred after removal of an acoustic neuroma, from trauma, from a viral or vascular insult, or from idiopathic causes;⁶
 5. Tumors of the external canal and/or tympanic cavity;
 6. Air-conduction hearing aid ineffective due to large conductive hearing loss (inadequate gain, uncomfortable occlusion, and feedback effects).
- II. It is the policy of PHW that **replacement** of bone-anchored hearing aids (BAHAs) and/or external components (external sound processor) is considered **medically necessary** when meeting any of the following:
 - A. The existing device(s) is no longer functional and cannot be repaired;
 - B. A change in condition makes the existing unit(s) inadequate for the hearing-related activities of daily living, and improvement is expected with replacement unit(s);

CLINICAL POLICY

Bone-Anchored Hearing Aid



C. The current sound processor is at least five years old.

III. It is the policy of PHW that **replacement or upgrade** of an existing, properly functioning bone-anchored hearing aid (BAHA) and/or its external components (external sound processor) is considered **not medically necessary** when requested only for convenience or to simply upgrade to a newer technology before the timeframe noted in section II.

Background

There are an estimated 48 million adults and 1.7 million school-aged children in the United States with some type of hearing loss. Hearing loss can be classified as sensorineural (inner ear), conductive (external and middle ear), or mixed, and may be present in one or both ears.⁹

Physical and medical complications such as chronic ear infections and canal deformities can make it difficult to impossible for some to wear hearing aids. Poorly fitting ear molds can lead to bothersome feedback and inadequate functional gain. Implantable hearing devices can improve reliability and functional gain over the standard air-conduction hearing aids when some of these issues exist.

Compared to bone conduction hearing aids held against the skull with a headband, implantable bone conduction hearing aids have advantages such as better tolerability and improved sound quality.⁷ The bone-anchored hearing aid (BAHA) is the most widely used implantable bone-anchored prosthetic hearing aid device.⁷ BAHAs are indicated for people with conductive hearing loss, mixed hearing loss, or single sided profound sensorineural hearing loss to achieve improved auditory acuity by transmitting the sound directly through the bone into the inner ear. The appropriate device is selected based upon the patient's hearing level.

A BAHA consists of a titanium implant surgically inserted into the skull attached to an abutment of which a small portion protrudes through the skin and forms a snap attachment point for a removable bone conduction hearing aid or processor.⁷ The BAHA is implanted unilaterally or bilaterally, and children are usually around six years old before an implantable BAHA is feasible due to the need for three to four mm of bone to ensure osseointegration.⁶ The processor is adjusted to the patient's level of hearing, much like in a traditional hearing aid fitting. When complications occur, the majority of them are related to skin issues around the implant. Proper skin care and hygiene at the surgical and abutment sites are essential to maintain good skin integrity.

Coding Implications

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CLINICAL POLICY
Bone-Anchored Hearing Aid



CPT®* Codes	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, skull; with percutaneous attachment to external speech processor
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, skull; with percutaneous attachment to external speech processor
69719	Replacement (including removal of existing device), osseointegrated implant, skull; with magnetic transcutaneous attachment to external speech processor, within the mastoid and/or involving a bony defect less than 100 sq mm surface area of bone deep to the outer cranial cortex
69726	Removal, entire osseointegrated implant, skull; with percutaneous attachment to external speech processor
69727	Removal, entire osseointegrated implant, skull; with magnetic transcutaneous attachment to external speech processor, within the mastoid and/or involving a bony defect less than 100 sq mm surface area of bone deep to the outer cranial cortex
69728	Removal, entire osseointegrated implant, skull; with magnetic transcutaneous attachment to external speech processor, outside the mastoid and involving a bony defect greater than or equal to 100 sq mm surface area of bone deep to the outer cranial cortex
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
69730	Replacement (including removal of existing device), osseointegrated implant, skull; with magnetic transcutaneous attachment to external speech processor, outside the mastoid and involving a bony defect greater than or equal to 100 sq mm surface area of bone deep to the outer cranial cortex

HCPCS Codes	Description
L8690	Auditory osseointegrated device, includes all internal and external components
L8691	Auditory osseointegrated device, external sound processor, excludes transducer/actuator, replacement only, each
L8692	Auditory osseointegrated device, external sound processor, used without osseointegration, body worn, includes headband or other means of external attachment
L8693	Auditory osseointegrated device abutment, any length, replacement only
L8694	Auditory osseointegrated device, transducer/actuator, replacement only, each

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Policy Developed	12/18	
Annual review. Coding checked. Diagnosis code H90.0 added. Changed “unilateral” to “single sided” throughout the policy. References reviewed and updated. Specialty review completed.	12/2020	1/28/2021
Annual review. References reviewed, updated and reformatted. Reviewed by specialist. Removed HCPCS code L8613, added L8692. Added ICD-10 code H61.111-H61.119. Reworded I.B. with no clinical significance. Revised I.E from “threshold of 20dB” to “threshold of < 20dB.” In I.F.4., added idiopathic causes to the list of causes of unilateral deafness. Revised description of HCPCS L8691 and added L8694. Changed “review date” in the header to “date of last revision” and “date” in the revision log header to “revision date.” Replaced “member” with “member/enrollee.”	10/2021	
Annual Review. Description updated with no impact on criteria. Criteria I. updated to include abbreviation of BAHA. Criteria III.C. wording updated for clarity. Background updated with no impact on criteria. References reviewed and updated. Removed deleted codes 69715 and 69718. Added new codes 69716, 69719, 69726, and 69727.	02/23/2023	
Annual review. Removed Criteria II. stating "BAHAs for any other indication are considered not medically necessary." Updated background with no clinical significance. Added new CPT codes 69728, 69729, and 69730 and removed ICD-10 codes from policy. References reviewed and updated. Reviewed by external specialist.	06/2023	
Annual review. Updated criteria in I.C. to specify “is consistent with the FDA indications for the requested device”. Added “(provided that the nerve is functional)” to I.F.1. Minor updates made to I.F.4. and the policy statements in II. and III. Reference reviewed and updated.	06/2024	

References

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CLINICAL POLICY

Bone-Anchored Hearing Aid

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