Clinical Policy: Bone-Anchored Hearing Aid

Reference Number: PA.CP.MP.93
Effective Date: 12/18
Date of Last Revision: 10/31/2021

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, and pain/discomfort is largely diminished, when compared to traditional air-conduction hearing aids.

Policy/Criteria

I. It is the policy of Pennsylvania Health and Wellness® (PHW) that BAHAs are **medically necessary** for member/enrollee with all of the following indications:

A. *Implantable device* for age ≥ 5 years; or *head band device* for age < 5 years or for member/enrollee medically unable to have an implant;
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);
C. Pure tone average bone conduction threshold (measured at 0.5, 1, 2, and 3kHz) ≤ 70 dBHL (decibels hearing level) and an unaided speech discrimination score not worse than 60%;
D. For bilateral BAHA, there is a mean maximum difference <10 dB between the right bone conduction threshold and left bone conduction threshold;
E. For single sided BAHA, the hearing ear should have a bone conduction threshold of < 20dB.;
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,
    2. Chronic infection or dermatitis of the middle or outer ear that is exacerbated by a standard air-conduction hearing aid,
    3. Allergic reactions to standard air-conduction hearing aids,
    4. Unilateral deafness occurred after removal of an acoustic neuroma, from trauma, from a viral or vascular insult, or from idiopathic causes;
    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. BAHAs for any other indication are considered **not medically necessary** because effectiveness has not been established.

III. It is the policy of PHW that ***replacement*** of a BAHA(s) and/or its external components (external sound processor) is considered **medically necessary** when any one of the following is present:

A. The existing device(s) is no longer functional and cannot be repaired; or
B. A change in the member's/enrollee 's condition makes the existing unit(s) inadequate for the hearing-related activities of daily living and improvement is expected with a

replacement unit(s);

C. A sound processor replacement if the current processor is at least five years old.

IV. It is the policy of PHW that ***replacement or upgrade*** of an existing, properly functioning 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 III.

Background

Hearing loss affects up to 20 percent of the population in the United States (Lin, Niparko, and Ferrucci, 2011). According to Blanchfield, et al., as many as 738,000 people in the U.S. experience severe to profound hearing loss, with 8% of these under age 18 (2001). Although the reliability and effectiveness of hearing aids have improved over time, there are still limitations to conventional air-conduction hearing aids.

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.

Bone-anchored hearing aids 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. There are three devices currently available for use and 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. Children are typically about six years of age before an implantable BAHA is feasible because 3 to 4 mm of bone is needed to ensure osseointegration. 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

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2020, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

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, 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

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

ICD-10-CM Diagnosis Codes

ICD-10-CM Code	Description
H60.00-H62.8X9	Diseases of external ear
H65.20- H65.23	Chronic serous otitis media
H65.30- H65.33	Chronic mucoid otitis media
H65.411- H65.499	Other chronic non-suppurative otitis media
H71.00- H71.93	Cholesteatoma of middle ear
H80.00- H80.93	Otosclerosis
H90.0-H90.8	Conductive and sensorineural hearing loss
H91.01- H91.93	Other and unspecified hearing loss
Q16.0- Q16.9	Congenital malformation of ear causing impairment of hearing

Reviews, Revisions, and Approvals	Revision Date	Approval Date
Policy Developed	12/18	

Reviews, Revisions, and Approvals	Revision Date	Approval Date
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	11/19/2021

References

1. Blanchfield BB, Feldman JJ, Dunbar JL, Gardner EN. The severely to profoundly hearing-impaired population in the United States: Prevalence estimates and demographics. *J Am Acad Audiol*. 2001;12(4):183-189.
2. Christensen L, Smith-Olinde L, Kimberlain J, Richter GT, Dornhoffer JL. Comparison of traditional bone-conduction hearing aids with the BAHA system. *J Am Acad Audiol.* 2010 April;21(4):267-273. doi:10.3766/jaaa.21.4.5
3. Cass SP. Surgical Placement of Bone-anchored hearing systems. *Medscape*. Oct 29, 2019. http://emedicine.medscape.com/article/1989565-overview
4. Hagr A. BAHA: Bone-anchored hearing aid. *Int J Health* Sci (Qassim), 2007;1(2): 265-276.
5. Hol MK, Cremers CW, Coppens-Schellekens W, Snik A. The BAHA Softband. A new treatment for young children with bilateral congenital aural atresia. *Int J Pediatr Otor hinolaryngol.* 2005;69(7):973-980. doi:10.1016/j.ijporl.2005.02.010
6. Lin FR, Niparko JK, Ferrucci L. Hearing loss prevalence in the United States. *Arch Intern Med.*2011;171(20): 1851–1852. doi: 10.1001/archinternmed.2011.506
7. Smith RJH, Gooi A. Hearing impairment in children: Treatment. UpToDate. www.uptodate.com. Published November 21, 2019. Accessed July 16, 2021.
8. Weber PC. Hearing amplification in adults. UpToDate. www.uptodate.com. Published June 29, 2021. Accessed June 16, 2021.
9. Roman S, Nicollas R, Triglia JM. Practice guidelines for bone-anchored hearing aids in children. *Eur Ann Otorhinolaryngol Head Neck Dis*. 2011 Nov;128(5):253-258. doi: 10.1016/j.anorl.2011.04.005