MEDICAL MUTUAL®

Medical Policy

Policy:	**200401**	**Initial Effective Date:**	**02/09/2004**
SUBJECT:	**Bone-Anchored Hearing Aids**	**Annual Review Date:**	**12/15/2023**
		Last Revised Date:	**12/15/2023**

Prior approval is required for some or all procedure codes listed in this Corporate Medical Policy.

Definition: Bone-anchored hearing aids (BAHAs) are implantable hearing devices that allow conduction of sound directly to the inner ear through a titanium implant anchored into the bone. They may be indicated for conductive or mixed hearing loss when a chronic condition precludes the use of a conventional air-conduction hearing aid. BAHAs (also known as osseointegrated hearing aids) generally consist of three components: a titanium fixture, an exposed abutment, and a sound processor. The titanium fixture and abutment are implanted surgically into the temporal bone and provide permanent anchorage for the external sound processor. The external sound processor converts sound waves into vibrations and transmits them through the abutment to the titanium implant, which then transfers the vibrations through the skull to the inner ear and functioning cochlea. Newer, semi-implantable devices are available that use a hidden subcutaneous magnetic plate in place of the exposed abutment.

Currently approved BAHA systems can compensate for unilateral or bilateral conductive hearing loss and mixed hearing loss with up to a 65-decibel hearing level (dB HL) (measured at 0.5, 1, 2 and 3 kilohertz [kHz]). BAHAs may also be indicated for patients with single-sided deafness (SSD) as an alternative to an air-conduction contralateral routing of signals hearing aid. The BAHA transmits sound from the deaf side through the bones in the skull to the normal functioning cochlea, improving speech recognition. Children less than 5 years of age may benefit from a sound processor held in place with a softband or headband instead of a surgically implanted titanium fixture.

Medical Necessity: The Company considers BAHAs **(CPT Codes 69710, 69714, 69716, 69717, 69719, 69729, 69730, HCPCS Codes L8690, L8691, L8692, L8693, L8694, and applicable ICD-10-PCS Procedure Codes) medically necessary** and eligible for reimbursement providing that ***all*** of the following medical criteria are met:

- Patient is age 5 years or older†; and
- Use of a conventional air-conduction hearing aid is precluded by a chronic condition (e.g., otitis media), congenital or acquired malformation of the external or middle ear (e.g., aural atresia, otosclerosis), or is otherwise contraindicated; and
- The request is for a U.S. Food and Drug Administration (FDA)-approved percutaneous device, transcutaneous device, or semi-implantable device with magnetic coupling, and the device will be used according to the FDA-labeled indications; and
- Pure-tone average (PTA) (measured at 0.5, 1, 2, and 3 kHz) bone-conduction hearing threshold of less than or equal to 65 dB in the affected ear, or a threshold consistent with the FDA-approved manufacturer recommendation; and

This document is subject to the disclaimer found at https://www.medmutual.com/For-Providers/Policies-and-Standards/CorporateMedicalDisclaimer.aspx. If printed, this document is subject to change. Always verify with the most current version of the official document at https://www.medmutual.com/For-Providers/Policies-and-Standards/CorporateMedicalDisclaimer.aspx.

© 2023 Medical Mutual of Ohio

- ***At least one*** of the following:

    a. Unilateral conductive or mixed hearing loss; or
    b. Bilateral symmetric conduction or mixed hearing loss with average between ear PTA bone conduction threshold difference of less than 10 dB (or less than 15 dB at individual frequencies); or
    c. Unilateral sensorineural deafness with normal hearing[††] in the contralateral ear and ***at least one*** of the following clinical conditions is present:

        - Congenital or surgically induced malformation of the external or middle ear canal; or
        - Dermatitis of the external ear; or
        - Severe chronic external otitis or otitis media; or
        - Tumors of the external ear canal or tympanic cavity; or
        - Other conditions that contraindicate the use of an air conduction hearing aid, or
        - Sensorineural hearing loss, unilateral, with unrestricted hearing on the contralateral side.

NOTE: Replacement or upgrade of an existing BAHA or its components is considered **medically necessary** and eligible for reimbursement when the existing device or its components malfunction, cannot be repaired, and are not under warranty, or when changes in the individual's condition render the current device nonfunctional. Replacement or upgrade of an existing BAHA or its components when the device or its components remain functional is considered **not medically necessary** and **not** eligible for reimbursement.

The Company considers the following **not medically necessary** and **not** eligible for reimbursement:

- Bone-anchored hearing aids for bilateral sensorineural hearing loss
- Intraoral bone-conduction hearing aids.

[†]The Company considers the non-surgical application of a fully- or partially-implantable bone-anchored hearing aid utilizing a Softband **medically necessary** for individuals who meet the criteria above except for the age limitation of 5 years.

[††]Normal hearing is defined as a PTA air-conduction hearing threshold of ≤ 20 dB HL measured at 0.5, 1, 2, and 3 kHz.

NOTE: The bilateral microphones with contralateral routing of signal (BI-CROS) attachment to a bone anchored hearing aid should be used when **one** bone anchored hearing aid was previously implanted (i.e., *bilateral* bone anchored hearing aids were not implanted at time of *initial* implantation).

Prior approval is required for CPT Codes 69710, 69714, 69716, 69717, 69719, HCPCS Codes L8690, L8691, L8692, L8693, L8694 and applicable ICD-10-PCS Codes.

Hearing aids may be excluded by contract. Please refer to member's individual contract for details regarding plan coverage.

This document is subject to the disclaimer found at https://www.medmutual.com/For-Providers/Policies-and-Standards/CorporateMedicalDisclaimer.aspx. If printed, this document is subject to change. Always verify with the most current version of the official document at https://www.medmutual.com/For-Providers/Policies-and-Standards/CorporateMedicalDisclaimer.aspx.

© 2023 Medical Mutual of Ohio

Documentation Requirements:

The Company reserves the right to request additional documentation as part of its coverage determination process. The Company may deny reimbursement when it has determined that the services performed were not medically necessary, investigational or experimental, not within the scope of benefits afforded to the member, and/or a pattern of billing or other practice has been found to be either inappropriate or excessive. Additional documentation supporting medical necessity for the services provided must be made available upon request to the Company. Documentation requested may include patient records, test results, and/or credentials of the provider ordering or performing a service. The Company also reserves the right to modify, revise, change, apply, and interpret this policy at its sole discretion, and the exercise of this discretion shall be final and binding.

NOTE: After reviewing the relevant documentation, the Company reserves the right to apply this policy to the service, or procedure, supply, product, or accommodation performed or furnished regardless of how the service, or procedure, supply, product, or accommodation was coded by the Provider.

Approval or clearance by the U.S. Food and Drug Administration alone is not a basis for coverage.

Coverage may differ for Medicare Advantage plan members; please see any applicable national and/or local coverage determinations for details. This information may be available at the Centers for Medicare & Medicaid Services (CMS) website.

This document is subject to the disclaimer found at https://www.medmutual.com/For-Providers/Policies-and-Standards/CorporateMedicalDisclaimer.aspx. If printed, this document is subject to change. Always verify with the most current version of the official document at https://www.medmutual.com/For-Providers/Policies-and-Standards/CorporateMedicalDisclaimer.aspx.

© 2023 Medical Mutual of Ohio

Sources of Information:

- Amaral MSA do, Santos FRD, Danieli F, Massuda ET, Reis ACMB, Hyppolito MA. (2020). Surgical and audiological results of bone-anchored hearing aids: comparison of two surgical techniques. *Braz J Otorhinolaryngol*, *S1808-8694*(20):30133-30136.
- American Academy of Audiology. (2013). Clinical Practice Guidelines: Pediatric Amplification. Available at: https://www.audiology.org/wp-content/uploads/2021/05/PediatricAmplificationGuidelines.pdf. Accessed December 14, 2023.
- American Academy of Otolaryngology-Head and Neck Surgery. Position Station: Bone Conduction Hearing Devices. Updated April 21, 2021. Available at: https://www.entnet.org/content/position-statement-bone-conduction-hearing-devices. Accessed December 14, 2023.
- Bento RF, Kiesewetter A, Ikari LS, Brito R. (2012). Bone-anchored hearing aid (BAHA): indications, functional results, and comparison with reconstructive surgery of the ear. *Int Arch Otorhinolaryngol, 16*(3):400-405.
- Bezdjian A, Bruihnzeel H, Daniel SJ, Grolman W, Thomeer HGXM. (2017). Preliminary audiologic and peri-operative outcomes of the Sophono™ transcutaneous bone conduction device: A systematic review. *Int J Pediatr Otorhinolaryngol*, 101:196-203.
- Briggs R, Birman CS, Baulderstone N, Lewis AT, Ng IHY, Östblom A, … Cowan R. (2022). Clinical performance, safety, and patient-reported outcomes of an active osseointegrated steady-state implant system. *Otol Neurotol, 43*(7):827–834.
- Bruschini L, Canelli R, Morandi A, Cambi C, Fiacchini G, Berrettini S, Forli F. (2020). Bone Anchored Hearing Aids for the Treatment of Asymmetric Hearing Loss. *J Int Adv Otol, 16*(3):313–317.
- Colquitt JL, Jones J, Harris P, et al. (2011). Bone-anchored hearing aids (BAHAs) for people who are bilaterally deaf: a systematic review and economic evaluation. *Health Technol Assess, 15*(26):1-200.
- Davids T, Gordon KA, Clutton D, Papsin BC. (2007). Bone-anchored hearing aids in infants and children younger than 5 years. *Arch Otolaryngol Head Neck Surg, 133*(1):51-55.
- Ghossaini SN, Roehm PC. (2019). Osseointegrated Auditory Devices: Bone-Anchored Hearing Aid and PONTO. *Otolaryngol Clin North Am, 52*(2):243-251.
- Hayes, Inc., Dallas, TX.
    - Percutaneous Bone-Anchored Hearing Aids (2019, October 11). Annual review December 7, 2022.
    - Transcutaneous Bone–Anchored Hearing Aids (2019, November 12). Annual review December 29, 2022.
- Kanzara T, Walijee H, Sheikh R, Lau A, Temple R. (2019). Long-term soft tissue outcomes for hydroxyapatite-coated bone-anchored hearing implant surgery. Eur Arch *Otorhinolaryngol, 276*(11):3067-3072.
- Kara A, Guven M, Sinan Yilmaz M…İseri M. (2019). *Acta Otolaryngol, 139*(6):517-521.
- Kim G, Ju HM, Lee SH, Kim HS, Kwon JA, Seo YJ. (2017). Efficacy of bone-anchored hearing aids in single-sided deafness: a systematic review. *Otol Neurotol, 38*(4):473-483.
- Lagerkvist H, Carvalho K, Holmberg M, Petersson U, Cremers C, Hultcrantz M. (2020). Ten years of experience with the Ponto bone-anchored hearing system-A systematic literature review. *Clin Otolaryngol, 45*(5): 667-680.
- Nevoux J, Coudert C, Boulet M…Deveze A. (2018). Transcutaneous Baha Attract system: Long-term outcomes of the French multicenter study. Clin Otolaryngol, *43*(6):1553-1559.

This document is subject to the disclaimer found at https://www.medmutual.com/For-Providers/Policies-and-Standards/CorporateMedicalDisclaimer.aspx. If printed, this document is subject to change. Always verify with the most current version of the official document at https://www.medmutual.com/For-Providers/Policies-and-Standards/CorporateMedicalDisclaimer.aspx.

© 2023 Medical Mutual of Ohio

- Rauch A-K, Wesarg T, Aschendorff A, Speck I, Arndt S. (2022). Long-term data of the new transcutaneous partially implantable bone conduction hearing system Osia®. *Eur Arch Otorhinolaryngol*, *279*(9):4279–4288.
- Roman S, Nicollas R, Triglia JM. (2011). Practice guidelines for bone-anchored hearing aids in children. *Eur Ann Otorhinolaryngol Head Neck Dis*, *128*(5):253-258.
- Shokri T, Czarnecki B, Baker A, Isildak H. (2019). Hearing rehabilitation implementing a transcutaneous bone conduction device: single-center experience. *Ear Nose Throat J*, *100*(3_suppl):199S-203S.
- Smith RJH, Gooi A. (2023). Hearing amplification in children: Treatment. In: UpToDate, Isaacson GC (Ed), UpToDate, Waltham, MA.
- Weber, PC. (2022). Hearing amplification in adults. In: UpToDate, Deschler DG (Ed), UpToDate, Waltham, MA.

Applicable Code(s):	
CPT:	**69710, 69714, 69716, 69717, 69719, 69729, 69730**
HCPCS:	**L8690, L8691, L8692, L8693, L8694, L9900**
ICD10 Procedure Codes:	**09HD04Z, 09HD34Z, 09HD44Z, 09HE04Z, 09HE34Z, 09HE44Z, 0NH50SZ, 0NH53SZ, 0NH54SZ, 0NH60SZ, 0NH63SZ, 0NH64SZ**

This document is subject to the disclaimer found at https://www.medmutual.com/For-Providers/Policies-and-Standards/CorporateMedicalDisclaimer.aspx. If printed, this document is subject to change. Always verify with the most current version of the official document at https://www.medmutual.com/For-Providers/Policies-and-Standards/CorporateMedicalDisclaimer.aspx.

© 2023 Medical Mutual of Ohio