



Bone Anchored Hearing Aids

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Definitions

Bone anchored hearing aid — an implanted hearing loss device that works through direct bone conduction. The device, which fuses with the bone (a process known as osseointegration) consists of three parts: a titanium implant, an external abutment and a sound processor. The device utilizes bone as a conduction pathway for sound to travel to the functioning inner ear. The device is used for mixed or conductive hearing loss affecting the outer and/or middle ear, as well as for unilateral sensorineural hearing loss.

Hearing Loss Classifications

Conductive	<p>Occurs when sound is not conducted efficiently through the outer ear canal to the eardrum and the tiny bones, or ossicles, of the middle ear. Hearing loss usually involves a reduction in sound level or the ability to hear faint sounds.</p> <p>Conditions that may cause conductive loss include but are not limited to conditions associated with middle ear pathology (e.g., fluid in the middle ear from colds, allergies [serous otitis media], poor eustachian tube function, ear infection [otitis media], perforated eardrum, benign tumors, impacted earwax [cerumen], infection in the ear canal [external otitis], foreign body presence, absence or malformation of the outer ear, ear canal, or middle ear).</p> <p>This type of hearing loss can often be medically or surgically corrected.</p>
Sensorineural	<p>Occurs when there is damage to the inner ear (cochlea) or to the nerve pathways from the inner ear (retrocochlear) to the brain. It not only involves a reduction in sound level, or ability to hear faint sounds, but also affects speech understanding or ability to hear clearly.</p> <p>Sensorineural hearing loss can be caused by diseases, birth injury, ototoxic drugs and genetic syndromes. It may also occur as a result of noise exposure, viruses, head trauma, aging and tumors.</p> <p>Sensorineural hearing loss can only be corrected when specific clinical and audiometric criteria are met.</p>
Mixed	<p>Hearing loss that consists of both conductive and sensorineural hearing elements.</p>

Unilateral hearing loss (UHL)

Hearing loss in one ear that can range from mild to very severe. Approximately one out of 1000 children is born with UHL, which can occur in both adults and children. UHL may also be referred to as single-sided deafness (SSD).

Conditions that may cause UHL include but are not limited to genetics, outer, middle or inner ear abnormality, specific syndromes, illnesses or infections (e.g., acoustic neuromas, ototoxic drugs and Ménière's disease), skull (temporal bone) fractures, excessive or extreme noise exposure and traumatic brain injury.

Guideline

(For bilateral sensorineural hearing loss, see [Cochlear Implants](#) on EmblemHealth's Medical Technologies Database)

1. Members who are ≥ 5 years of age are eligible for coverage of a unilateral or bilateral BAHA prosthetic device(s), as appropriate, when the following criteria are met:
 - a. Presence of conductive, mixed type or unilateral sensorineural (SSD) hearing loss, when either unilateral or bilateral hearing cannot be effectively restored by hearing aids (including CROS-contralateral routing signal aids) because they are a medically inappropriate or unsuitable intervention.

AND

 - b. Any of the following conditions are applicable:
 - c. External ear canal or middle ear malformations that are congenital or surgically induced (e.g., aural atresia).
 - d. Tumors of the external ear, tympanic cavity or tympanic nerve (e.g., acoustic neuroma).
 - e. Severe chronic external otitis or otitis media.
 - f. Hearing loss secondary to otosclerosis in persons who cannot undergo stapedectomy.
 - g. External ear dermatitis including hypersensitivity reactions to ear moulds used in air conduction hearing aids.
 - h. Other conditions in which an air-conduction hearing aid is contraindicated (e.g. ossicular disease or chronically draining ear that precludes hearing aid usage).
 - i. External ear canal dermatitis.
2. For conductive, mixed or unilateral sensorineural type loss, the following audiologic parameters must be met:
 - a. Unilateral implant — Conductive or mixed type hearing loss with pure tone average bone conduction threshold (measured at 0.5, 1, 2, and 3 kHz) \leq 45 dB HL (BAHA Divino), 55 dB HL (BAHA Intenso) or 65 dB HL (BAHA Cordelle II).
 - b. Bilateral implants — Moderate to severe bilateral symmetric conductive or mixed type hearing loss that meets the bone conduction thresholds listed above in both ears.
 - c. (Symmetric bone conduction threshold is defined as < 10 dB average measured at 0.5, 1, 2 and 4 kHz or < 15 dB at individual frequencies [BAHA Divino]; or a 10 dB average difference between ears measured at 0.5, 1, 2 and 3 kHz, or a < 15 dB difference at individual frequencies [BAHA Cordelle II, BAHA Intenso]).
 - d. Unilateral sensorineural loss (SSD) — severe to profound unilateral hearing loss ≥ 70 db.

Limitations/Exclusions

The use of intra-oral bone conduction hearing aids (e.g., the SoundBite hearing system) is not considered medically necessary for the treatment of hearing loss due to insufficient evidence of therapeutic value.

Revision History

3/10/2017 — communicated that intra-oral bone conduction hearing aids are investigational.

Applicable Procedure Codes

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
L8690	Auditory osseointegrated device, includes all internal and external components
L8691	Auditory osseointegrated device, external sound processor, replacement
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

Applicable ICD-10 Diagnosis Codes

H90.0	Conductive hearing loss, bilateral
H90.11	Conductive hearing loss, unilateral, right ear, with unrestricted hearing on the contralateral side
H90.12	Conductive hearing loss, unilateral, left ear, with unrestricted hearing on the contralateral side
H90.2	Conductive hearing loss, unspecified
H90.3	Sensorineural hearing loss, bilateral
H90.41	Sensorineural hearing loss, unilateral, right ear, with unrestricted hearing on the contralateral side
H90.42	Sensorineural hearing loss, unilateral, left ear, with unrestricted hearing on the contralateral side
H90.5	Unspecified sensorineural hearing loss
H90.6	Mixed conductive and sensorineural hearing loss, bilateral
H90.71	Mixed conductive and sensorineural hearing loss, unilateral, right ear, with unrestricted hearing on the contralateral side
H90.72	Mixed conductive and sensorineural hearing loss, unilateral, left ear, with unrestricted hearing on the contralateral side
H90.8	Mixed conductive and sensorineural hearing loss, unspecified
H90.A11	Conductive hearing loss, unilateral, right ear with restricted hearing on the contralateral side (New Code 10/01/2016)
H90.A12	Conductive hearing loss, unilateral, left ear with restricted hearing on the contralateral side (New Code 10/01/2016)
H90.A21	Sensorineural hearing loss, unilateral, right ear, with restricted hearing on the contralateral side (New Code 10/01/2016)

H90.A22	Sensorineural hearing loss, unilateral, left ear, with restricted hearing on the contralateral side (New Code 10/01/2016)
H90.A31	Mixed conductive and sensorineural hearing loss, unilateral, right ear with restricted hearing on the contralateral side (New Code 10/01/2016)
H90.A32	Mixed conductive and sensorineural hearing loss, unilateral, left ear with restricted hearing on the contralateral side (New Code 10/01/2016)

Limitations/Exclusions

BAHA is not considered medically necessary for bilateral sensorineural hearing loss, as there is insufficient evidence of effectiveness for this indication.

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