02-69000-06

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Subject: Implantable Bone-Conduction and Bone-Anchored Hearing Aids

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

DESCRIPTION:

Conventional external hearing aids can be generally subdivided into air conduction hearing aids and bone conduction hearing aids. Air conduction hearing aids require the use of ear molds, which may be problematic in patients with chronic middle ear and ear canal infections, atresia of the external canal, or an ear canal that cannot accommodate an ear mold. In these patients, bone conduction hearing aids may be an alternative. External bone conduction hearing aids function by transmitting sound waves through the bone to the ossicles of the middle ear. The external devices must be closely applied to the temporal bone, with either a steel spring over the top of the head or with the use of a spring-loaded arm on a pair of spectacles. These devices may be associated with either pressure headaches or soreness.

Bone-anchored hearing aids (BAHAs) are surgically implanted hearing devices that transmit sound directly to the inner ear through bone, bypassing the external auditory canal and middle ear. The BAHA system is composed of three main components: 1.) An internal titanium fixture that is surgically anchored to the skull in an area behind the ear; 2.) An external abutment that is connected to the implant at the time of surgery; and 3.) An external sound processor that is snapped on to the abutment. The sound processor vibrates the implant, which in turn vibrates the temporal bone. That vibration is then transmitted through other bones to the cochlea of the opposite ear, where it creates the sensation of sound. BAHAs are intended for use by patients who have conductive or mixed hearing loss.

Several implantable bone-conduction hearing systems have been approved by the U.S. Food and Drug Administration (e.g., Baha Divino®, OBC Bone-Anchored Hearing Aid System,Ponto Bone-Anchored Hearing System).

POSITION STATEMENT:

A FDA approved unilateral or bilateral fully or partially implantable bone-conduction (bone-anchored) hearing aid **meets the definition of medical necessity** as a prosthetic device in members with conductive or mixed hearing loss who meet at least one of the following conditions and the audiologic criteria below:

- Congenital or surgically induced malformations (e.g., atresia) of the external ear canal or middle ear; **OR**
- Chronic external otitis or otitis media; **OR**
- Tumors of the external canal and/or tympanic cavity; **OR**
- Dermatitis of the external canal.

Audiologic criteria:

A pure-tone average bone-conduction threshold measured at 0.5, 1, 2, and 3 kHz or better than or equal to 45 dB (OBC and BP100 bone-anchored hearing aid devices), 55 dB (Intenso bone-anchored hearing aid device), or 65 dB (Cordele II bone-anchored hearing aid device).

Note: For bilateral implantation, members should meet the above audiologic criteria and have symmetrically conductive or mixed hearing loss as defined by a difference between left- and right-side bone-conduction threshold of less than 10 dB on average measured at 0.5, 1, 2, and 3 kHz (4 kHz for OBC and Ponto Pro bone-anchored hearing aid device), or less than 15 dB at individual frequencies.

An implantable bone-conduction (bone-anchored) hearing aid **meets the definition of medical necessity** as an alternative to an air-conduction contralateral routing of signal (CROS) hearing aid in members with single-sided sensorineural deafness and normal hearing in the other ear. The pure-tone average air-conduction threshold of the normal ear should be better than 20 dB measured at 0.5, 1, 2, and 3 kHz.

An implantable bone-conduction (bone-anchored) hearing aid is considered **experimental or investigational** for all other indications when the criteria are not met, including, but not limited to use in patients with bilateral sensorineural hearing loss. There is insufficient clinical evidence to support other uses of an implantable bone-conduction (bone-anchored) hearing aid, including use in patients with bilateral sensorineural hearing loss.

BILLING/CODING INFORMATION:

CPT Coding:

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 Coding:

L8618	Transmitter cable for use with cochlear implant device or auditory osseointegrated device, replacement
L8624	Lithium ion battery for use with cochlear implant or auditory osseointegrated device speech processor, ear level, replacement, each
L8625	External recharging system for battery for use with cochlear implant or auditory osseointegrated device, replacement only, each
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 Diagnosis Codes That Support Medical Necessity:

H60.60 – H60.63	Unspecified chronic otitis externa
H60.8x1 – H60.8x9	Other otitis externa
H60.90 – H60.93	Unspecified otitis externa
H61.391 – H61.399	Other acquired stenosis of external ear canal
H62.8x1 – H62.8x9	Other disorders of right external ear in diseases classified elsewhere
H64.491 – H64.499	Other chronic nonsuppurative otitis media
H65.20 – H65.23	Chronic serous otitis media
H65.30 – H65.33	Chronic mucoid otitis media
H65.411 – H65.419	Chronic allergic otitis media
H65.491 – H65.499	Other chronic nonsuppurative otitis media, unspecified ear
H65.90 – H65.93	Unspecified nonsuppurative otitis media
H66.001 – H66.009	Acute suppurative otitis media
H90.0	Conductive hearing loss, bilateral
H90.11 – H90.12	Conductive hearing loss, unilateral
H90.2	Conductive hearing loss, unspecified
H90.3	Sensorineural hearing loss, bilateral
H90.41 – H90.42	Sensorineural hearing loss, unilateral with unrestricted hearing on the contralateral side
H90.5	Unspecified sensorineural hearing loss
H90.6	Mixed conductive and sensorineural hearing loss, bilateral
H90.71 – H90.72	Mixed conductive and sensorineural hearing loss, unilateral with unrestricted

	hearing on the contralateral side
H90.8	Mixed conductive and sensorineural hearing loss, unspecified
Q16.1, Q16.3, Q16.4	Congenital malformations of ear causing impairment of hearing

REIMBURSEMENT INFORMATION:

Refer to section entitled **POSITION STATEMENT**.

Reimbursement for replacement of an implantable bone-conduction (bone-anchored) hearing aid(s) and its external components may be covered for any one of the following:

- When the existing device cannot be repaired; **OR**
- When replacement is required because a change in the patient's condition makes the present device non-functional and improvement is expected with a replacement device.

PROGRAM EXCEPTIONS:

Federal Employee Program (FEP): Follow FEP guidelines.

State Account Organization (SAO): Follow SAO guidelines.

Medicare Advantage products:

No National Coverage Determination (NCD) and/or Local Coverage Determination (LCD) were found at the time of the last guideline reviewed date.

DEFINITIONS:

Atresia: congenital absence or closure of a normal body orifice or tubular organ; the absence of closure of the external auditory meatus (ear canal).

Bilateral: pertaining to both sides (both ears).

Bone Anchored Hearing Aid (BAHA): A hearing device that is implanted in the bone of the skull and directly stimulates the cochlea.

Bone conduction: the conduction of sound to the inner ear through the bones of the skull.

Chronic: persisting over a long period of time.

Conductive hearing loss: a hearing loss that occurs when sound waves cannot transmit through the outer or middle ear or both.

Congenital: existing at, and usually before, birth; referring to conditions that are present at birth.

dB: decibel; unit for expressing the loudness of sound.

Dermatitis: inflammation of the skin.

Mixed hearing loss: a combination of sensorineural and conductive hearing loss.

Sensorineural hearing loss: a hearing loss that usually develops due to damage to the small sensory cells in the inner ear (hair cells).

Unilateral: affecting but one side (one ear).

RELATED GUIDELINES:

Semi-Implantable Middle Ear Hearing Aids, 02-69000-05
Prosthetics, 09-L0000-05

OTHER:

Other names used to report implantable bone conduction hearing aids:

Note: The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another, and is not intended to represent a complete listing of all products available.

Audiant Bone Conductor
Auditory osseointegrated implant system
Bone Anchored Hearing Aids (BAHA)
Electromagnetic bone conduction hearing device (e.g., Xomed)
Osseointegrated implant

The Audiant™ bone conductor is a type of electromagnetic bone conduction hearing device. While this device is no longer actively marketed, patients with existing Audiant devices may require replacement, removal, or repair.

REFERENCES:

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3. Blue Cross Blue Shield Association Evidence Positioning System®. 7.01.03 Implantable Bone-Conduction and Bone-Anchored Hearing Aids , .
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5. Bradran K, Bunstone D, Arya AK et al. Patient satisfaction with the bone-anchored hearing aid: a 14-year experience. Otology & Neurotology 2006; 27(5): 659-666.
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8. Lin LM, Bowditch S, Anderson MJ et al. Amplification in the rehabilitation of unilateral deafness: speech in noise and directional hearing effects with bone-anchored hearing and contralateral routing of signal amplification. Otology & Neurotology 2006; 27(2): 172-182.
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10. National Institute on Deafness and Other Communication Disorders-Hearing Aids, 05/16.
11. Priwin C, Stenfelt S, Granstrom G et al. Bilateral bone-anchored hearing aids (BAHAs): an audiometric evaluation. Laryngoscope 2004; 114(1): 77-84.
12. U.S. Food and Drug Administration-Hearing Aids, 2018.

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the BCBSF Medical Policy & Coverage Committee on 04/23/20.

GUIDELINE UPDATE INFORMATION:

08/15/03	Annual review/new Medical Coverage Guideline. Implanted Devices for Hearing Loss and Aural Rehabilitation 02-69000-02, Archived.
12/15/05	Revised description section; description clarified to include Medtronic, Xomed, and BAHA. Revised ICD-9-CM diagnoses code description (380.15, 380.23), and updated references.
11/15/06	Added 69717 and 69718 to billing and coding information section. Added code descriptor for 382.1 – 382.9. Updated references.
01/01/07	Annual HCPCS coding update: Added L8690 and L8691.
05/15/07	MCG Archived.
01/01/08	Reinstated MCG. Added “Bone-Anchored” to guideline name. Reformatted guideline. Updated guideline, and updated references.
01/01/09	Scheduled review. No change in position statement, and updated references.
12/15/09	Annual review; no change in position statement, and updated references.
01/01/10	Annual HCPCS coding update: added code L8692.
04/15/10	Added ICD-9 diagnoses: 389.10, 389.11, 389.12, 389.13, 389.15, 389.17, 389.18, 389.20 – 389.22, 744.02, and 744.04. Revised definitions and updated references.
01/01/11	Annual HCPCS coding update: added L8693.
01/15/11	Revision; related ICD-10 codes added.
09/15/11	Revised position statement; deleted wording: “as an alternative” and ”to an air conduction hearing aid”. Deleted “anchoring” from MCG subject. Added “anchored “to MCG subject.
12/01/11	Update; deleted ICD-9 code 774.02, added ICD-9 code 744.02, revised descriptor for ICD-9 code 381.4 and 381.9 and added related ICD-10 codes.
05/11/14	Revision: Program Exceptions section updated.
10/01/15	Revision; updated ICD9 and ICD10 coding sections.
11/01/15	Revision: ICD-9 Codes deleted.
11/15/16	Revision; revised position statement and audiologic criteria. Updated references.
01/01/18	Annual HCPCS code update. Added L8618, L8624, L8625 and L8694. Revised L8691 code descriptor.
10/15/18	Review; no change to position statement. Updated references.
05/15/20	Review; no change to poition statement. Updated description and references.