

Medical Coverage Policy | Implantable Bone Anchored and Bone Conduction Hearing Aids – Effective 6/1/2017



EFFECTIVE DATE: 06|01|2017
POLICY LAST UPDATED: 12|20|2017

OVERVIEW

Sensorineural, conductive, and mixed hearing loss may be treated with various devices, including conventional air-conduction (AC) or bone-conduction external hearing aids. AC hearing aids may not be suitable for patients with chronic middle ear and ear canal infections, atresia of the external canal, or an ear canal that cannot accommodate an ear mold. Bone-conduction hearing aids function by transmitting sound waves through the bone to the ossicles of the middle ear and may be useful for individuals with conductive hearing loss, or (if used with contralateral routing of signal), for unilateral sensorineural hearing loss. Implantable, bone-anchored hearing aids (BAHAs) that use a percutaneous or transcutaneous connection to a sound processor have been investigated as alternatives to conventional bone-conduction hearing aids for patients with conductive or mixed hearing loss or for patients with unilateral single-sided sensorineural hearing loss.

This policy does not apply to Medicare products as Medicare does not cover hearing aids.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

Commercial Products

Unilateral or bilateral fully or partially implantable bone-conduction (bone-anchored) hearing aid(s) may be considered medically necessary as an alternative to an air-conduction hearing aid in patients 5 years of age and older with a conductive or mixed hearing loss with the following indications:

- Congenital or surgically induced malformations (eg, 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

An implantable bone-conduction (bone-anchored) hearing aid may be considered medically necessary as an alternative to an air-conduction contralateral routing of signal (CROS) hearing aid in patients 5 years of age and older with single-sided sensorineural deafness and normal hearing in the other ear.

Other uses of implantable bone-conduction (bone-anchored) hearing aids, including use in patients with bilateral sensorineural hearing loss, are considered not medically necessary due to limited available peer-reviewed scientific literature proving the efficacy of the device.

In situations where the insertion of the device is not medically necessary, re-insertion of the device after removal is also considered not medically necessary.

COVERAGE

Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for applicable surgery benefits/coverage and limitations of benefits/coverage when services are not medically necessary.

BACKGROUND

Hearing loss is described as conductive, sensorineural, or mixed and can be unilateral or bilateral. Normal hearing detects sound at or below 20 dB (decibel). The American Speech-Language-Hearing Association has defined the degree of hearing loss based on pure-tone average (PTA) detection thresholds as mild (20-40 dB), moderate (40-60 dB), severe (60-80 dB), and profound (≥ 80 dB). PTA is calculated by averaging the hearing sensitivities (ie, the minimum volume that the patient hears) at multiple frequencies (perceived as pitch), typically within the range of 0.25 to 8 kHz.

Sound amplification using an AC hearing aid can provide benefit to patients with sensorineural or mixed hearing loss. Contralateral routing of signal (CROS) is a system in which a microphone on the affected side transmits a signal to an AC hearing aid on the normal or less affected side.

Bone-Conduction Hearing Devices

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 a spring-loaded arm on a pair of spectacles. These devices may be associated with either pressure headaches or soreness.

A bone-anchored implant system combines a vibrational transducer coupled directly to the skull via a percutaneous abutment that permanently protrudes through the skin from a small titanium implant anchored in the temporal bone. The system is based on the process of osseointegration through which living tissue integrates with titanium in the implant over a period of 3 to 6 months, conducting amplified and processed sound to be conducted via the skull bone directly to the cochlea. The lack of intervening skin permits the transmission of vibrations at a lower energy level than required for external bone-conduction hearing aids. Implantable bone-conduction hearing systems are primarily indicated for people with conductive or mixed sensorineural/conductive hearing loss. They may also be used with CROS as an alternative to an AC hearing aid for individuals with unilateral sensorineural hearing loss.

Partially implantable magnetic bone-conduction hearing systems, also referred to as transcutaneous bone-anchored systems, are an alternative to bone-conduction hearing systems connected to bone percutaneously via an abutment. With this magnetic technique, acoustic transmission occurs transcutaneously via magnetic coupling of the external sound processor and the internally implanted device components. The bone-conduction hearing processor contains magnets that adhere externally to magnets implanted in shallow bone beds with the bone-conduction hearing implant. Because the processor adheres magnetically to the implant, there is no need for a percutaneous abutment to physically connect the external and internal components. To facilitate greater transmission of acoustics between magnets, skin thickness may be reduced to 4 to 5 mm over the implant when it is surgically placed.

For individuals who have conductive or mixed hearing loss who receive an implantable bone-anchored hearing device with a percutaneous abutment or a partially implantable bone-anchored hearing device with transcutaneous coupling to the sound processor, the evidence is sufficient to determine qualitatively that the technology results in a meaningful improvement in the net health outcome.

For patients with single-sided sensorineural deafness, a binaural hearing benefit may be provided by way of contralateral routing of signals to the hearing ear. There is evidence that bilateral hearing assistance devices improve hearing to a greater degree than unilateral devices. BAHAs may be considered an alternative to external devices in patients who are not candidates for external devices. By extension, use of an implantable bone-conduction device with contralateral routing of signal may be considered medically necessary in patients with unilateral sensorineural deafness.

For individuals who have unilateral sensorineural hearing loss who receive a fully or partially implantable bone-anchored hearing device with contralateral routing of signal, the evidence is insufficient to determine the effects of the technology on health outcomes. Therefore, the device is considered not medically necessary.

CODING

Commercial Products

The following codes are medically necessary when filed with the ICD-10 diagnosis codes listed below. Any other diagnosis codes are not medically necessary.

69710 Implantation or replacement 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

L8690 Auditory osseointegrated device, includes all internal and external components

L8691 Auditory osseointegrated device, external sound processor, replacement

L8693 Auditory osseointegrated device abutment, any length, replacement only

ICD-10 Diagnosis Codes

H60.00 - H60.93

H61.30 - H61.399

H65.20 - H65.4999

H66.10 - H66.3x9

H90.0 - H90.8

Q16.0 - Q16.9

RELATED POLICIES

Cochlear Implants

Hearing Aid Mandate

Preauthorization via Web-Based Tool for Procedures

Semi-Implantable and Fully Implantable Middle Ear Hearing Aids

PUBLISHED

Provider Update, April 2017

Provider Update, August 2015

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