BlueCross BlueShield of Arizona
An Independent Licensee of the Blue Cross and Blue Shield Association

MEDICAL COVERAGE GUIDELINES
SECTION: SURGERY

ORIGINAL EFFECTIVE DATE: 04/16/13
LAST REVIEW DATE: 06/24/14
LAST CRITERIA REVISION DATE: 06/24/14
ARCHIVE DATE:

COCHLEAR IMPLANT

Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member's specific benefit plan. This Medical Coverage Guideline must be read in its entirety to determine coverage eligibility, if any.

The section identified as "Description" defines or describes a service, procedure, medical device or drug and is in no way intended as a statement of medical necessity and/or coverage.

The section identified as "Criteria" defines criteria to determine whether a service, procedure, medical device or drug is considered medically necessary or experimental or investigational.

State or federal mandates, e.g., FEP program, may dictate that any drug, device or biological product approved by the U.S. Food and Drug Administration (FDA) may not be considered experimental or investigational and thus the drug, device or biological product may be assessed only on the basis of medical necessity.

Medical Coverage Guidelines are subject to change as new information becomes available.

For purposes of this Medical Coverage Guideline, the terms "experimental" and "investigational" are considered to be interchangeable.

Description:

Cochlear implant is a device for individuals with severe-to-profound hearing loss who only receive limited benefit from amplification with hearing aids. A cochlear implant does not amplify sound, but is a prosthesis that provides direct electrical stimulation to the auditory nerve inside the cochlea, bypassing the usual transducer cells that are absent or nonfunctional in deaf cochlea. External components include microphone, sound processor and transmitter. Although it does not restore normal hearing, the additional input provided by the implant often improves sound detection and increases speech understanding.

A hybrid cochlear implant, also referred to as electrical acoustic stimulation (EAS), uses a shorter electrode inserted into the basal end of the cochlea to transmit sound information for frequencies above 1500 Hz. The Nucleus® Hybrid™ L24 Cochlear Implant System is a hybrid cochlear implant and hearing aid, with the hearing aid integrated into the external sound processor of the cochlear implant. While traditional cochlear implants result in the destruction of surviving hair cells and therefore the loss of any low frequency hearing, the shorter electrode hybrid cochlear implants have been investigated for individuals with extreme high frequency hearing loss and relatively good hearing in the lower frequencies.

COCHLEAR IMPLANT (cont.)

Definitions:

Types of Hearing Loss:

Conductive Hearing Loss:
Occurs when there is a mechanical problem in the external or middle ear and the auditory nerve remains intact Conductive hearing loss can often be medically or surgically corrected.

Sensorineural Hearing Loss:
Occurs when there is damage to the inner ear (cochlea) or to the auditory nerve. This type of hearing loss usually cannot be medically or surgically corrected.

Mixed Hearing Loss:
A combination of conductive and sensorineural hearing loss. Damage exists in the external or middle ear and also in the inner ear or auditory nerve.

Degrees of Hearing Loss:

Mild Hearing Loss:
Pure-tone average (PTA) detection threshold 20 to 40 dB

Moderate Hearing Loss:
PTA detection threshold 40 to 60 dB

Severe Hearing Loss:
PTA detection threshold 60 to 80 dB

Profound Hearing Loss:
PTA detection threshold equal to or greater than 80 dB

Auditory Rehabilitation:
Hearing rehabilitation assessment and intervention for children and adults. Previously referred to as aural rehabilitation.

Evaluation of Auditory Rehabilitation Status:
Fundamental auditory and listening instruction for children who were not able to hear before receiving a cochlear implant, for adults with hearing loss who did not wear hearing aids and for children and adults who lost hearing and regained auditory function either with hearing aids or cochlear implants.

Auditory Rehabilitation Pre-lingual Hearing Loss:
Services performed for individuals who have no prior experience with hearing and are learning to hear through the use of hearing aids or cochlear implants.

Auditory Rehabilitation Post-lingual Hearing Loss:
Rehabilitation of adults who received a cochlear implant after a long period of time without functional hearing to assist in achieving speech understanding and identification of sounds.

COCHLEAR IMPLANT (cont.)

Criteria:

For conventional and digital hearing aids, non-implanted bone conduction hearing aids and non-implanted Bone Anchored Hearing Aid (BAHA®), see BCBSAZ Medical Coverage Guideline, *"Conventional and Digital Hearing Aids".*

For semi-implantable and fully implantable middle ear hearing aids, see BCBSAZ Medical Coverage Guideline, *"Semi-Implantable and Fully Implantable Middle Ear Hearing Aids".*

For implantable bone-conduction and bone-anchored hearing aids, see BCBSAZ Medical Coverage Guideline, *"Implantable Bone-Conduction and Bone-Anchored Hearing Aids"*.

- Unilateral or bilateral cochlear implant and associated auditory rehabilitation is considered ***medically necessary*** for an individual 1 year of age and older with bilateral severe to profound pre-lingual or post-lingual hearing loss who has shown limited benefit from hearing aids.

- Replacement or upgrade of a cochlear implant and/or its external components to a next generation device is considered ***medically necessary*** with documentation of **ANY** of the following:

    1. The currently used component is no longer functional and cannot be repaired
    2. The currently used component is inadequate to the point of interfering with age-appropriate activities of daily living

- Replacement or upgrade of a functioning cochlear implant and/or its external components to a next generation device to achieve aesthetic improvement, such as smaller profile components or a switch from a body-worn, external sound processor to a behind-the-ear model, is considered ***not medically necessary***.

- Programming **or** reprogramming of a cochlear implant is considered ***medically necessary***.

- Hybrid cochlear implantation is considered ***experimental or investigational*** based upon:

    1. Insufficient scientific evidence to permit conclusions concerning the effect on health outcomes, and
    2. Insufficient evidence to support improvement of the net health outcome, and
    3. Insufficient evidence to support improvement of the net health outcome as much as, or more than, established alternatives, and
    4. Insufficient evidence to support improvement outside the investigational setting.

COCHLEAR IMPLANT (cont.)

Criteria: (cont.)

- Cochlear implantation for all other indications not previously listed or if above criteria not met is considered ***experimental or investigational*** based upon:

  1. Lack of final approval from the Food and Drug Administration, and
  2. Insufficient scientific evidence to permit conclusions concerning the effect on health outcomes, and
  3. Insufficient evidence to support improvement of the net health outcome, and
  4. Insufficient evidence to support improvement of the net health outcome as much as, or more than, established alternatives, and
  5. Insufficient evidence to support improvement outside the investigational setting.

  These indications include, *but are not limited to*:

  - Unilateral hearing loss with or without tinnitus

Resources:

Resources prior to 04/16/13 may be requested from the BCBSAZ Medical Policy and Technology Research Department.

1. 7.01.05 BCBS Association Medical Policy Reference Manual. Cochlear Implant. Re-issue date 05/22/2014, issue date 12/01/1995.