

# Medical Policy

## Cochlear Implant

**Policy Number:** 1064

Policy History			
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Preauthorization	
All Plans	Benefit plans vary in coverage and some plans may not provide coverage for certain service(s) listed in this policy. Decisions for authorization are subject to all terms and conditions of the applicable benefit plan, including specific exclusions and limitations as well as applicable state and/or federal laws. Please review the benefit plan descriptions for details.

### Policy

#### Indications of Coverage

- I. Children under the age of 18:
  - A. WEA Trust follows the Wisconsin State Mandates: <https://oci.wi.gov/Documents/Consumers/PI-019.pdf> **Cochlear Implants** - Coverage is required for hearing aids, cochlear implants, and related treatment for infants and children. This applies to group and individual disability policies and to self-insured health plans of the state or of a county, city, town, village, or school district newly issued or renewed on or after January 1, 2010. The following coverage is provided:
    - i. The cost of hearing aids and cochlear implants that are prescribed by a physician or by a licensed audiologist for a child covered under the policy or plan who is under 18 years of age and who is certified as deaf or hearing impaired by a physician or a licensed audiologist.
    - ii. The cost of treatment related to hearing aids and cochlear implants, including procedures for the implantation of cochlear devices, for a child as described above.
    - iii. The cost of hearing aids is not required to exceed the cost of one hearing aid per ear per child more than once every three years.
  - B. Criteria for approval of Cochlear Implant – either uniaural (unilateral) or binaural (bilateral)
    - i. Child has a profound, bilateral sensorineural hearing loss determined by a pure tone average of 90 dB or greater at 500, 1000, 2000 Hz AND
    - ii. Child has limited benefit from appropriately fitted binaural hearing aids.
      - 1. For children four years of age or younger, limited benefit is defined as failure to reach developmentally appropriate auditory milestones measured using the Infant-Toddler Meaningful Auditory Integrational Scale, the Meaningful Auditory Integration Scale, or the early Speech Perception test, or less than 20% correct on open-set word recognition test in conjunction with appropriate amplification and participation in intensive aural habilitation over a three to six months period.
      - 2. For children greater than four years of age, limited benefit is defined as less than 12% correct on the Phonetically Balanced-Kindergarten test, or less than 30% correct on the Hearing in Noise Test for children, the open-set Multi-syllabic Lexical Neighborhood Test (MLNT) or Lexical Neighborhood Test (LNT) depending on the child’s cognitive ability and linguistic skills AND

- iii. A three to six month hearing aid trial has been undertaken by the child without a previous experience with hearing aids (this will be waived if there is radiological evidence of cochlear ossification).
- II. Adults over the age of 18
- A. Member has bilateral severe to profound sensorineural hearing loss determined by a pure tone average of 70 DB or greater @ 500 Hz, 1000 Hz and 2000 Hz AND
  - B. Member has a limited benefit from appropriately fitted binaural hearing aids. Limited benefit is defined by test scores of 40% correct or less in best-aided listening condition on open-set sentence cognition (e.g., Centraol Institute for the Deaf sentences, Hearing in Noise Test sentences and consonant-nucleus-consonant test).
- III. The additional medical necessity criteria must also be met for uniaural and binaural cochlear implants for both children and adults:
- A. The member must have had an assessment by an audiologist and from an otolaryngologist experienced in this procedure indicating the likelihood of success with this device AND
  - B. The member must have no medical contraindications to cochlear implant (e.g. dysfunctional acoustic nerve or cochlear aplasia (lack of development), active middle ear infection) AND
  - C. Member and family have realistic expectations and member is motivated and willing to undergo extensive post-operative rehabilitation AND
  - D. The member must be enrolled in an educational program that supports listening and speaking with aided hearing AND
  - E. The member must have arrangements for appropriate follow-up care including the long term speech therapy required to take full advantage of this device.
  - F. Member is current on age appropriate pneumococcal vaccination (two or more weeks before surgery when possible) in accordance with the Center for Disease Control Advisory Committee on Immunization Practices.
- IV. Hybrid Cochlear Implants (Nucleus Hybrid L24 Cochlear Implant System) are medically necessary for individuals 18 years of age and older with severe profound sensori-neural hearing loss of high-frequency sounds in both ears, but who can still hear low-frequency sounds in both ears with or without a hearing aid and the following criteria are met:
- A. Normal to moderate hearing loss in the low frequencies (thresholds no poorer than 60 dB) up to and including 500 HZ AND
  - B. Severe to profound mid to high frequency hearing loss (threshold average of 2000, 3000, and 4000 Hz greater than or equal to 75 dB HL) in the ear to be implanted AND
  - C. Moderate severe to profound mid to high frequency hearing loss (threshold average of 200, 3000, and 4000 Hz greater than or equal to 75 dB HL) in the contralateral ear AND
  - D. Speech Perception
    - i. Consonant-Nucleus-Consonant (CNC) word recognition scores between 0% and 60% inclusive in the ear to be implanted AND
    - ii. CNC word recognition score in the contralateral ear equal to or better than, in the ear to be implanted but not more than 80% in the best-aided condition AND
  - E. Lack of benefit from a minimum of 30 day hearing aid trial with appropriately fit binaural hear aids worn on a full-time basis (eight hours per day) AND
  - F. Member has patent cochlea and normal cochlear anatomy, and no ossification of any other cochlear anomaly that might prevent complete insertion of the electrode array AND
  - G. The following additional medical necessity criteria must also be met
    - i. The member must have had an assessment by an audiologist and from an otolaryngologist experienced in this procedure indicating the likelihood of success with this success with this device AND
    - ii. The member must have no medical contraindications to cochlear implantation (e.g., dysfunctional acoustic nerve or cochlear aplasia [lack of development], active middle ear infection) AND

- iii. Member and family have realistic expectations and member is well motivated and willing to undergo extensive post-operative rehabilitation AND
- iv. The member must be enrolled in an educational program that supports listening and speaking with aided hearing AND
- v. The member must have arrangements for appropriate follow-up care including the long term speech therapy required to take full advantage of this device.
- vi. Member is current on age appropriate pneumococcal vaccination (two or more weeks before surgery when possible) in accordance with the Center for Disease Control Advisory Committee on Immunization Practices.

- V. WEA Trust considers cochlear implantation experimental and investigational for any of the following conditions as efficacy has not been established in peer reviewed literature.
- A. Auditory dyssynchrony
  - B. Single-sided deafness
  - C. Tinnitus
  - D. All other indications

NOTES: Persons with a unilateral cochlear implant may qualify for subsequent bilateral implantation without having to be retested if medical records document that they had met criteria at the time of the initial (first) cochlear implantation.

A cochlear implant includes external components (i.e., a speech processor, a microphone headset and an audio input selector). Replacement of a cochlear implant and/or its external components is considered medically necessary when the existing device cannot be repaired or when replacement is required because a change in the member's condition makes the present unit non-functional and improvement is expected with a replacement unit. Separate assessment will be performed of the medical necessity of recommended accessories and upgrades for a cochlear implant. The member's current condition, the member's capabilities with his/her current cochlear implant, and the member's capabilities of the upgrade or accessory will be considered in determining whether the upgrade or accessory offers clinically significant benefits to the member.

Upgrade to or replacement of an existing external speech processor, controller or speech processor and controller (integrated system) is considered medically necessary for an individual whose response to existing components is inadequate to the point of interfering with the activities of daily living or when components are no longer functional and cannot be repaired. Upgrade to or replacement of an existing external speech processor, controller or speech processor and controller (integrated system) is considered not medically necessary when such request is for convenience or aesthetics when the current components remain functional.

## Background

The cochlear implant is an electronic prosthesis that stimulates cells of the auditory spiral ganglion to provide a sense of sound to persons with hearing impairment. The patient selection criteria for cochlear implants described above were adapted from the Food and Drug Administration (FDA) approved indications for cochlear implants.

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