COCHLEAR IMPLANTS AND AURAL REHABILITATION
Corporate Medical Policy

File name: Cochlear Implants and Aural Rehabilitation
File code: UM.REHAB.06
Origination: New Policy (including some coding and language formerly found in BCBSVT Evaluation of Hearing Medical Policy)
Last Review: 11/2012
Next Review: 10/2013
Effective Date: 2/01/2012

Document Precedence

BCBSVT Medical Policies are developed to provide guidance for members and providers regarding coverage in accordance with all terms, conditions and limitations of the subscriber contract. Benefit determinations are based in all cases on the applicable contract language. To the extent that there may be any conflict between Medical Policy and contract language, the contract language takes precedence.

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 provides direct electrical stimulation to the auditory nerve, bypassing the usual transducer cells that are absent or nonfunctional in deaf cochlea. The basic components of a cochlear implant include both external and internal components. The external components include a microphone, an external sound processor, and an external transmitter. The internal components are implanted surgically and include an internal receiver implanted within the temporal bone and an electrode array that extends from the receiver into the cochlea through a surgically created opening in the round window of the middle ear.

Sounds that are picked up by the microphone are carried to the external sound processor, which transforms sound into coded signals that are then transmitted transcutaneously to the implanted internal receiver. The receiver converts the incoming signals to electrical impulses that are then conveyed to the electrode array, ultimately resulting in stimulation of the auditory nerve.

Regulatory Status

Several cochlear implants are commercially available in the U.S. and are manufactured by Cochlear Corporation, Advanced Bionics, and the Med El Corporation. Over the years, subsequent generations of the various components of the devices have been approved by the U.S. Food and Drug Administration (FDA), focusing on improved electrode design and speech-processing capabilities. Furthermore, smaller devices and the accumulating experience in children have
resulted in broadening of the selection criteria to include children as young as 12 months. The labeled indications from the FDA for currently marketed implant devices are summarized below.

### FDA Approved Cochlear Implant Systems

<table>
<thead>
<tr>
<th>Clarion HiFocus*</th>
<th>Nucleus 24</th>
<th>Nucleus 24 Contour</th>
<th>Med El Combi 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Older children: 2-17 yr; severe to profound loss</td>
<td>Older children: severe to profound loss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adults: postlingual profound hearing loss</td>
<td>Adults: severe to profound loss pre- and postlingually</td>
<td>Adults: severe to profound loss pre- and postlingually</td>
<td>Adults: bilateral severe to profound hearing loss</td>
</tr>
</tbody>
</table>

* The Clarion CII Bionic Ear System is composed of a Clarion HiFocus electrode in conjunction with a next generation internal transmitter

Based on a review of scientific literature:

While cochlear implants have typically been used unilaterally, in recent years, interest in bilateral cochlear implantation has arisen. The proposed benefits of bilateral cochlear implants are to improve understanding of speech in noise and localization of sounds. Improvements in speech intelligibility may occur with bilateral cochlear implants through binaural summation; i.e., signal processing of sound input from 2 sides may provide a better representation of sound and allow one to separate out noise from speech. Speech intelligibility and localization of sound or spatial hearing may also be improved with head shadow and squelch effects, i.e., the ear that is closest to the noise will be received at a different frequency and with different intensity, allowing one to sort out noise from speech. Bilateral cochlear implantation may be performed independently with separate implants and speech processors in each ear or with a single processor. However, no single processor for bilateral cochlear implantation has been approved by the FDA for use in the U.S. In addition, single processors do not provide binaural benefit and may impair sound localization and increase the signal-to-noise ratio received by the cochlear implant.

Aural rehabilitation is associated with and required for the proper functioning of a cochlear implant. During the course of this therapy, the patient is taught to speak, to adjust to a cochlear implant, and to look to a speaker's mouth and face to better comprehend what is being said. The parent (if the recipient of the implant is a child) or other caregiver is taught to treat the patient normally, to talk to the
patient, and interact with him/her as though there were no impairment. The rehabilitation program also includes development of skills in understanding running speech, recognition of consonants and vowels, and tests of speech perception ability. This aural rehabilitation program generally starts soon after placement of a cochlear implant.

Policy

Cochlear implantation of a U.S. Food and Drug Administration (FDA)-approved cochlear implant device may be considered medically necessary in patients age 12 months and older with bilateral severe-to-profound pre-or postlingual (sensorineural) hearing loss defined as a hearing threshold of pure-tone average of 70 dB (decibels) hearing loss or greater at 500 HZ (hertz), 100 HZ, and 2000 HZ, and have shown limited or no benefit from hearing aids (see definition). In certain situations, implantation may be considered before 12 months of age and is based on individual consideration of medical necessity.

Bilateral cochlear implantation is considered medically necessary only when it has been determined that the alternative of unilateral cochlear implant plus hearing aid in the contralateral ear will not result in a binaural benefit; i.e., in those patients with hearing loss of a magnitude where a hearing aid will not produce the required amplification.

Cochlear implantation may be contraindicated in circumstances where the following conditions exist (not all inclusive):

- Deafness due to lesions of the eighth cranial (acoustic) nerve,
- Deafness due to central auditory pathway or brain stem lesions,
- Active or chronic infections of the external or middle ear and mastoid cavity,
- Tympanic membrane perforation,
- Cochlear ossification (i.e. post meningitis) to an extent which may prevent electrode insertion,
- Absence of cochlear development as demonstrated on computed tomography scans remains an absolute contraindication.

A post-cochlear implant rehabilitation program is medically necessary to achieve benefit from the cochlear implant. The rehabilitation program following implantation of a cochlear implant usually consists of 6 to 10 sessions that last approximately 2.5 hours each.

Upgrades of an existing, functioning external system to achieve aesthetic improvement, such as smaller profile components or a switch from a body-worn, external sound processor to a behind-the-ear (BTE) model, are considered not medically necessary.

A multi-channel model should be used, if possible. An upgrade from single to multi-channel electrodes or the newer processor is not medically necessary. If an existing implant is functioning, an upgrade or replacement of electrodes to another processor should not be made.

DEFINITIONS (from the American Speech-Language-Hearing Association):
Hearing loss is rated on a scale based on the threshold of hearing. **Severe** hearing loss is defined as a bilateral hearing threshold of 70–90 dB, and **profound** hearing loss is defined as a bilateral hearing threshold of 90 dB and above.

In adults, limited benefit from hearing aids is defined as scores 50% correct or less in the ear to be implanted on tape-recorded sets of open-set sentence recognition. In children, limited benefit is defined as failure to develop basic auditory skills, and in older children, ≤30% correct on open-set tests.

**Administrative and Contractual Guidance**

**Benefit Determination Guidance**

Benefits are subject to all terms, limitations and conditions of the subscriber contract.

For New England Health Plan (NEHP) members an approved referral authorization is required.

Federal Employee Program (FEP) members may have different benefits that apply. For further information please contact FEP customer service or refer to the FEP Service Plan Brochure.

Prior approval is required subject to all terms, limitations and conditions of the subscriber contract. (See coding table in Attachment I for specific codes requiring prior approval)

Aural rehabilitation services reported using Current Procedural Terminology (CPT) codes 92626, 92627, 92630, and 92633 are not considered speech therapy and, therefore, are not applied to an individual's speech therapy benefit.

**Billing and Physician Documentation Information**

BCBSVT may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

**Eligible Providers**

Medical Doctor (MD)
Doctor of Osteopathy (DO)
Speech Therapist (for Aural Rehabilitation)
Audiologists (MS or AuD)

**Related Policies**

Evaluation of Hearing Impairment
Audit Information

BCBSVT reserves the right to conduct audits on any provider and/or facility to ensure compliance with the guidelines stated in the medical policy. If an audit identifies instances of non-compliance with this medical policy, BCBSVT reserves the right to recoup all non-compliant payments.

Policy Implementation/Update information

New Policy 8/2011 (incorporates some language and coding from Evaluation of Hearing Medical Policy) Coding is appropriate per Medical/Clinical Coder SAR 10/19/2011 11/2012- Font and format changes. Added Audiologists back into the policy. Added “Audit Information” section. Coding table reformatted. RLJ

Scientific Background and Reference Resources

Blue Cross and Blue Shield Association medical policy 7.01.05 Cochlear Implant, Issue 6:2011


Long CJ, Eddington DK, Colburn HS, Rabinowitz WM. Binaural sensitivity as a function of interaural electrode position with a bilateral cochlear implant user. *J Acoust Soc*


Sharma A, Dorman MF. Central auditory development in children with cochlear


Approved by BCBSVT Medical Directors         Date Approved

Spencer Borden MD
Chair, Medical Policy Committee

Robert Wheeler MD
Chief Medical Officer
The following codes will be considered as medically necessary when applicable criteria have been met.

<table>
<thead>
<tr>
<th>Code Type</th>
<th>Number</th>
<th>Brief Description</th>
<th>Policy Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPT</td>
<td>69930</td>
<td>Cochlear device implantation, with or without mastoidectomy</td>
<td>Prior Approval Required</td>
</tr>
<tr>
<td>CPT</td>
<td>92507</td>
<td>Treatment of speech, language, voice, communication, and/or auditory processing disorder; individual</td>
<td></td>
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<tr>
<td>CPT</td>
<td>92601</td>
<td>Diagnostic analysis of cochlear implant, patient younger than 7 years of age; with programming</td>
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</tr>
<tr>
<td>CPT</td>
<td>92602</td>
<td>Diagnostic analysis of cochlear implant, patient younger than 7 years of age; subsequent programming</td>
<td></td>
</tr>
<tr>
<td>CPT</td>
<td>92603</td>
<td>Diagnostic analysis of cochlear implant, age 7 years or older; with programming</td>
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</tr>
<tr>
<td>CPT</td>
<td>92604</td>
<td>Diagnostic analysis of cochlear implant, age 7 years or older; subsequent reprogramming</td>
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</tr>
<tr>
<td>CPT</td>
<td>92626</td>
<td>Evaluation of auditory rehabilitation status, first hour</td>
<td></td>
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<tr>
<td>CPT</td>
<td>92627</td>
<td>Evaluation of auditory rehabilitation status, each additional 15 minutes (Use in conjunction with 92626)</td>
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<tr>
<td>CPT</td>
<td>Description</td>
<td>Code</td>
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<tr>
<td>92630</td>
<td>Auditory rehabilitation, prelingual hearing loss</td>
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<tr>
<td>92633</td>
<td>Auditory rehabilitation, postlingual hearing loss</td>
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<tr>
<td>L8614</td>
<td>Cochlear device; includes all internal and external components</td>
<td>Prior Approval Required</td>
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<tr>
<td>L8615</td>
<td>Headset/headpiece for use with cochlear implant device, replacement</td>
<td>Prior Approval Required</td>
<td></td>
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<tr>
<td>L8616</td>
<td>Microphone for use with cochlear implant device, replacement</td>
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<tr>
<td>L8617</td>
<td>Transmitting coil for use with cochlear implant device, replacement</td>
<td>Prior Approval Required</td>
<td></td>
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<tr>
<td>L8618</td>
<td>Transmitter cable for use with cochlear implant device, replacement</td>
<td>Prior Approval Required</td>
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<tr>
<td>L8619</td>
<td>Cochlear implant, external speech processor and controller, integrated system, replacement</td>
<td>Prior Approval Required</td>
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<tr>
<td>L8621</td>
<td>Zinc air battery for use with cochlear implant device, replacement</td>
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<tr>
<td>L8622</td>
<td>Alkaline battery for use with cochlear implant device, any size, replacement, each</td>
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<tr>
<td>L8623</td>
<td>Lithium ion battery for use with cochlear implant device speech processor, other than ear level, replacement, each</td>
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<tr>
<td>L8624</td>
<td>Lithium ion battery for use with cochlear implant device speech processor, ear level, replacement, each</td>
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<tr>
<td>L8627</td>
<td>Cochlear implant, external speech processor, component, replacement</td>
<td>Prior Approval Required</td>
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<tr>
<td>HCPCS</td>
<td>L8628</td>
<td>Cochlear implant, external controller component, replacement</td>
<td>Prior Approval Required</td>
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<tr>
<td>HCPCS</td>
<td>L8629</td>
<td>Transmitting coil and cable, integrated, for use with cochlear implant device, replacement</td>
<td>Prior Approval Required</td>
</tr>
</tbody>
</table>

The following codes will be denied as Non-Covered

<table>
<thead>
<tr>
<th>HCPCS</th>
<th>V5273</th>
<th>Assistive listening device, for use with cochlear implant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Service</td>
<td>Medicine, Surgery and Durable Medical Equipment</td>
<td></td>
</tr>
<tr>
<td>Place of Service</td>
<td>Inpatient or Outpatient</td>
<td></td>
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</tbody>
</table>