Audiology



# **Cochlear Implant Candidacy**





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Your child has been referred for a cochlear implant evaluation at Nationwide Children's Hospital. The cochlear implant team is here to answer your questions throughout the cochlear implant process. Our multidisciplinary team includes an ear, nose, and throat surgeon, audiologist, speech language pathologist, social worker, and psychologist. Our team works together with you to lead your child to reach their maximum hearing and communication potential.

#### • What is a cochlear implant?

ear and stimulates the hearing nerve directly.

#### • How does a cochlear implant work?

- 1. Sound is picked up by the microphones on the sound processor; the sound processor converts sound to an electrical signal, and sends the signal to the transmitting coil
- 2. The transmitting coil sends the electric signal to the surgically implanted device
- 3. The surgically implanted device sends the electric signal to an array of electrodes, which sends the signal to the brain by the hearing nerve

#### • Who is a traditional cochlear implant candidate?

- Children 12 months 17 years with:
  - Severe to profound hearing loss in both ears
  - Limited benefit from binaural amplification
- Highly motivated parents and/or patient with realistic expectations regarding benefit

## • Who is a non-traditional cochlear implant candidate?

- Your child may be a cochlear implant candidate if they have been diagnosed with:

- Auditory Neuropathy Spectrum Disorder (ANSD)
- Moderate to Severe sensorineural hearing loss
- Steeply sloping hearing loss
- Severe to profound hearing loss in only one ear
- The child is less than 12 months of age

### • What is the evaluation process for a cochlear implant?

- The audiologist will obtain a hearing test without amplification in each ear
- for their child
- Meet with the ENT physician to discuss cochlear implant surgery
- The speech pathologist will complete a speech evaluation prior to cochlear implant surgery

- A cochlear implant consists of two parts: an externally worn sound processor and an implant, which is placed during surgery. The sound processor is worn on the body or on the ear. The sound processor is worn during all waking hours. Depending on the model, the sound processor can be worn during water activities. The internal portion is placed during a surgery and bypasses the damaged potion of the inner

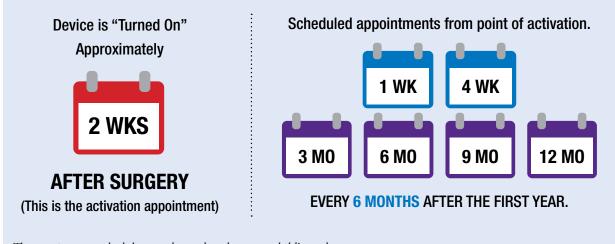


Illustration provided by MED-EL

• Lack of progress in the development of auditory skills and/or speech and language skills

- The audiologist will complete a hearing test in each ear with amplification to determine benefit - The audiologist will help guide the family to choose a cochlear implant manufacturer that is the best fit

- What paperwork or items should I bring to my child's audiology cochlear implant evaluation appointment?
  - Speech pathology reports from the school or any outside facility
  - School reports from your child's teacher or school audiologist
  - Hearing aids and earmolds
- Once my child has a cochlear implant, these are the audiology follow-up appointments I can expect: – Typical follow up appointments with audiology are as follows:



The appointment schedule may change based on your child's needs

- How long are the follow-up/post-op appointments?
  - A typical follow up appointment can last from 90-120 minutes

You are able to speak with someone from the cochlear implant manufacturer before choosing one for your child. When contacting the manufacturer, you want to tell them you are in the candidacy process and want to speak to them about their device.

- The cochlear implant manufacturer:
  - Advanced Bionics: 1-877-829-0026
  - Cochlear Americas: 1-800-523-5798
  - Med-El: 1-888-633-3524

## To schedule an appointment, call (614) 722-6200.

