



CENTER FOR COCHLEAR IMPLANTS

Cochlear Implant Process: Explanation of Evaluation Steps

Phase I

1. **Cochlear Implant Evaluation** – This visit with the cochlear implant audiologist will involve extensive soundbooth testing with and without hearing aids. The results of these tests combined with your hearing loss history is used by the audiologist to determine if a cochlear implant is likely to be helpful to you or your child. If so, the audiologist will counsel and educate you about cochlear implants so that you understand all that is involved before you decide to proceed with the rest of the cochlear implant evaluation process (2 hour appointment).
2. **Otologic Medical Evaluation** – The physician at Dallas Ear Institute will take a full medical history, perform a physical exam, and review the hearing tests performed at the Cochlear Implant Evaluation. If the physician agrees that a cochlear implant is an appropriate option, the next phase of the evaluations can be scheduled* (45 minute appointment).

Phase II

*The steps outlined below are a **general guide** of what can be expected during Phase II. **Following your Otologic Medical Evaluation, your physician will determine which of the steps below are required, and our CI Coordinator will contact you with the details.**

1. **MRI or CT Scan** – It is required that all patients have a scan to evaluate the inner ear anatomy and screen for any brain conditions prior to cochlear implant surgery. Children usually require sedation or anesthesia for the scan; therefore, in their case, it is performed in Medical City's Radiology Department. Adults and older children have their scan performed in a nearby outpatient facility. A CT or MRI scan of the head that has been performed in the recent past can be evaluated to see if it is adequate for our purposes.
2. **Vaccine** – It is recommended by the FDA and CDC that all patients receiving a cochlear implant be **fully vaccinated** against pneumococcal bacteria to protect against meningitis. The recommended vaccines for adults and children are listed on CDC's site: <https://www.cdc.gov/pneumococcal/vaccines/cochlear-implants.html>. If you have any questions about whether you or your child has been **fully vaccinated**, please ask your primary care provider to compare the vaccines you have received in the past to this currently recommended list.
3. **Genetics Evaluation (CHILDREN ONLY)** – In 80% of children born with hearing loss, the hearing loss is because of a genetic cause. Determining the exact gene that caused the hearing loss is helpful to the physician in understanding the condition. It also helps the parents understand how future children can be affected. Genetic blood testing for hearing loss is now very practical and cost effective. In some cases, it may be recommended

that your child see a doctor who specializes in genetics. The geneticist will take a detailed family history, perform a physical exam, and possibly obtain a blood sample for genetic testing and later counsel the parents regarding the results.

4. **Auditory-Verbal Evaluation** – For ADULTS, this assesses (A) the effects of hearing loss in the patient’s listening and speaking skills at home, work, educational and social settings, (B) the possible benefits of a cochlear implant, and (C) the need for hearing therapy and/or speech therapy after the cochlear implant is activated.

For CHILDREN AND ADOLESCENTS, this assesses the patient’s potential for learning to (A) hear and comprehend spoken language with a cochlear implant, and (B) develop speech to use as a primary means of communication. The roles of the parent and the child’s educational setting are discussed and how they impact the benefit from cochlear implantation.

For ALL patients, the purpose of short or long term therapy is discussed. Adult family members are encouraged to attend the evaluation to learn how to support the patient.

5. **Psychological Evaluation** – For ADULTS, the purpose of the screening is to (A) obtain information regarding overall cognitive, adaptive, vocational, and emotional functioning relevant to preoperative concerns, and (B) assist the individual and their family in identifying and addressing current stressors and other factors which could influence compliance following cochlear implantation.

For CHILDREN AND ADOLESCENTS, the purpose of the screening is to (A) obtain information regarding overall cognitive, adaptive, emotional and behavioral functioning, (B) assist in developing a plan to address skills of compliance and independence relevant to cooperation in rehabilitation, and (C) answer questions, address concerns, and offer emotional and behavior support to enhance preoperative or postoperative rehabilitation.

6. **Videonystagmography (VNG) Balance Testing (ADULTS ONLY)** – This test involves a series of balance tests to determine the amount of balance function in each ear. The results of these tests can affect the choice of ear for cochlear implantation and help detect certain patients who may be prone to balance difficulties after cochlear implantation (30 minute appointment).
7. **Surgical Clearance** – If you are age 40 or older, or of any age with medical conditions such as: high blood pressure, heart conditions, diabetes, etc., you may need to see your primary care physician and/or cardiologist for an exam that includes an EKG, Chest X-ray, and general blood tests. Your physician should fax us these results with a note stating that you are in reasonable condition to undergo the cochlear implant surgery.
8. **Insurance Precertification** – The insurance precertification will begin once your MRI has been reviewed by your physician at Dallas Ear Institute, or once all required evaluations have been completed. Obtaining approval from your insurance company for cochlear implantation can take several weeks. Our Insurance Specialist will be working diligently to obtain insurance authorization. Once your insurance provides authorization, our Insurance Specialist will contact you to inform you of your estimated out-of-pocket surgeon fees, if applicable.

PHASE III

1. **Device Selection/Expectations and Scheduling Surgery** – When all of the above steps are completed, your audiologist will review realistic expectations of cochlear implantats with you, and confirm which brand of cochlear implant you have chosen to then order your equipment. Once this step is completed, our Surgical Coordinator will contact you to schedule your surgery. You will also be contacted by our CI Coordinator with the tentative date and time for your Postoperative Check/Cochlear Implant Activation.

2. **Cochlear Implant Surgery** – The surgery takes approximately 1.5 hours. The majority of patients go home the same day of surgery except infants who often spend 1 night in the hospital. Further details of the surgery will be discussed with you by your physician and can also be found on our website:
<https://www.dallasear.com/services/the-center-for-cochlear-implants/>.
3. **Postoperative Check/Cochlear Implant Activation** – This occurs approximately 1 week after surgery. You will see your audiologist to check the incision for proper healing, and for programming of the cochlear implant. You will leave the office with the cochlear implant functioning. This is the beginning of learning to hear with an implant. You will return at regular intervals for your audiologist to reprogram your processor to optimize your stimulation levels. You will also be counseled and educated on the external components of the cochlear implant system (1.5 hour appointment).
4. **Auditory-Verbal (Hearing) Therapy** – Your hearing therapist will assist you in achieving the most benefit with your cochlear implant for participation in the mainstream of society. This is a very important part of improving your performance with the cochlear implant. The frequency and duration of your Auditory-Verbal Therapy will be determined by your therapist.

Once you know the date of your Cochlear Implant Activation appointment, contact your therapist to schedule your therapy session. Therapy will begin sometime after activation of your cochlear implant.