

The Presbyterian Board of Governors Cochlear Implant Center of Excellence at GBMC

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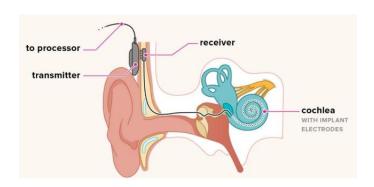
Hearing Aids vs. Cochlear Implants

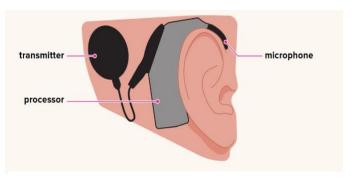
- Hearing aids are devices designed to make sounds louder. For individuals who have healthy sensory hair cells in their inner ear (cochlea), hearing aids are a successful treatment option. However, for individuals with significantly damaged sensory hair cells, hearing aids are no longer beneficial as they can only make sounds louder, not clearer. This causes distortion of sound, making it harder to understand speech.
- Cochlear implants provide electrical stimulation, bypassing the damaged sensory hair cells, giving individuals access to clearer sounds and improved speech understanding.

Cochlear Implant

There are two components of a cochlear implant. The internal component is an electrode that is surgically inserted into the cochlea. The external component is worn outside of the head. It picks up sound from the environment, processes it, and sends this information to the internal component.

When the external component is worn on the head, the two components work together to provide the individual with access to clearer sounds. This may lead to improved speech understanding.





Images from: www.healthline.com/health/cochlear-implant#what-is-it

Benefits of Cochlear Implants

It has been well-documented that cochlear implants improve:

- ✓ Awareness of sound in the normal hearing range
- ✓ Speech understanding in quiet and in noise
- ✓ Quality of life

- ✓ Communication in the workplace and with peers
- ✓ Music appreciation
- ✓ Telephone use
- ✓ Television/movie viewing



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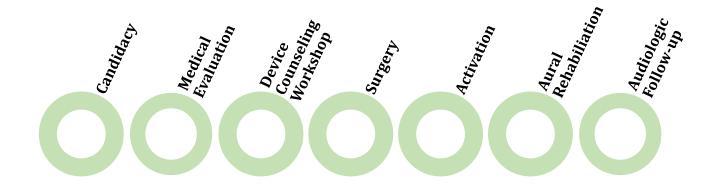
Hearing Performance Expectations

- Individual progress with your cochlear implant will vary depending on your medical and hearing history.
- Most patients experience improved speech understanding outcomes within the first year following implantation.
- Progress is gradual and sounds become more "natural" as the brain adapts to the electrical stimulation.
- Other listening skills such as talking on the telephone, watching television, and listening to music may follow.

Insurance and Out-of-Pocket Expenses

Unlike hearing aids, many insurance companies provide support for cochlear implantation and necessary equipment. This equipment will come with a thorough 5-year warranty on all major components and shorter warranties on other components. In addition to the cochlear implant system, it will be necessary to receive programming, testing, education, and troubleshooting services that may not be covered by your insurance company and will be out-of-pocket expenses.

Process



There are multiple steps in the process of cochlear implantation.

Please refer to "Next Steps Towards Cochlear Implantation" for detailed information.