What is a cochlear implant? A device:
- For individuals with hearing loss who do not receive enough benefit from hearing aids
- That electrically stimulates cells in the hearing nerve, which send signals to the brain to be interpreted as sound

How does a cochlear implant work?
- There are two components.
  - A surgically implanted auditory prosthesis with a receiver/stimulator and electrode array
  - Externally worn components including a speech processor (worn over the ear like a hearing aid) and transmitting coil (worn in the hair)
- Sound is picked up by the speech processor’s microphone
- The speech processor analyzes and digitizes sound into coded signals that are sent to the transmitting coil
- The transmitter sends code across the skin to the internal implant (receiver/stimulator) via an FM signal
- The internal implant converts code to electrical signals, which are sent to electrodes on the array inside cochlea to stimulate the hearing nerve
  - The hearing nerve sends signals to the brain that are interpreted as sound
  - The transmissions are rapid and sounds are heard instantly

Who is a candidate for a cochlear implant? An individual:
- Who does not receive enough benefit from hearing aids to understand speech well through listening alone and has significant difficulty communicating in everyday life
- With moderate to profound sensorineural hearing loss in both ears

What are the benefits? While varying based on each person’s hearing history, those with cochlear implants are able to:
- Detect sounds at soft and even very soft levels
- Understand speech better and become less reliant on lip reading
- Use the telephone more easily
- Understand better in noise
- Feel less isolated and more involved in daily life

How can an Audiologist improve YOUR quality of life?
IF YOU ARE A COCHLEAR IMPLANT CANDIDATE, YOUR COCHLEAR IMPLANT TEAM WILL RECOMMEND:

- Cochlear Implant Surgery
- Selection of advanced cochlear implant technology
- Careful fitting and programming of speech processor
- Aural rehabilitation therapy to facilitate use of the new sound

For more information please contact:
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