

Hearing healthcare treatment options Cochlear™ Edge

Communication ability scale and corresponding treatment options: As auditory function declines, technology requirements increase.

LOW

MODERATE

HIGH

Communication Difficulty



High Quality OTC⁺ Aids

Benefits include:^{1,2**}

- Situational use
- Improved audibility in quiet
- Improved speech understanding in quiet
- Improvement in noise
- Streaming capability

Hearing Aids

Benefits include:^{3**}

- Improved ability, comfort and speech understanding in noise
- Localizing of sounds
- Telephone use
- Listening to music
- Streaming directly from phone
- Remote adjustments and programming

Hearing Systems

Benefits include:^{**}

- **All the benefits of hearing aids plus**
- Streaming TV audio
- Remote companion microphone

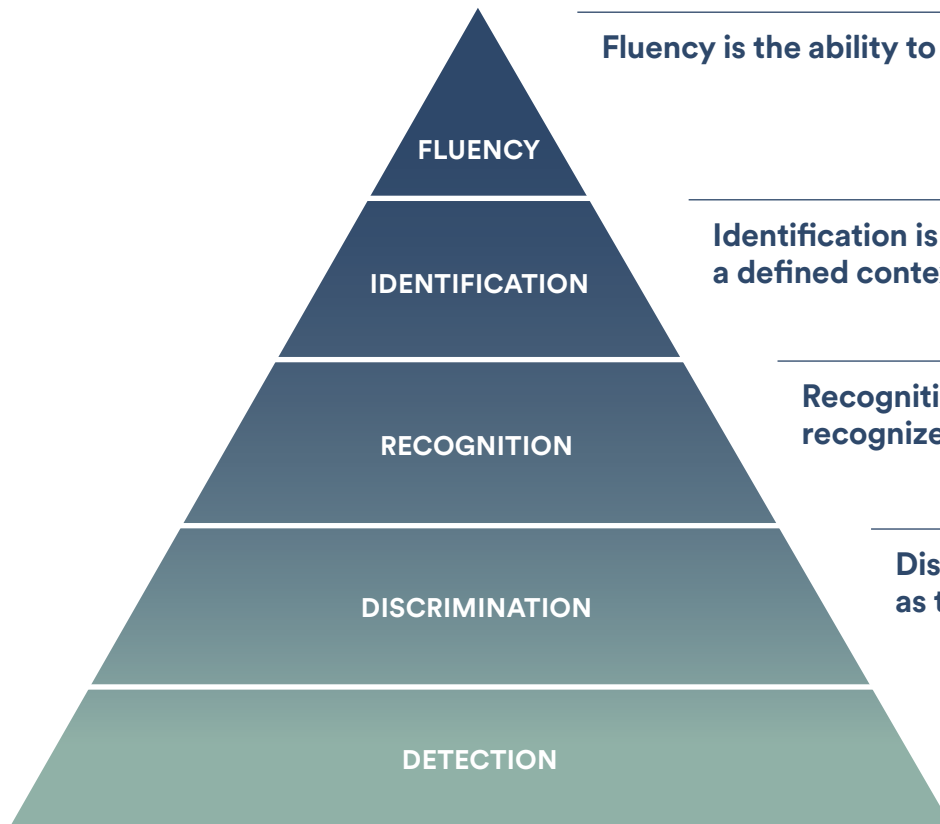
Cochlear Implants

Benefits include:^{4-6**}

- **All the benefits of hearing systems plus**
- Direct stimulation of the inner ear
- Optimizes speech understanding in quiet and noise

Auditory Hierarchy

The term Auditory Processing or Auditory Hierarchy refers to how the brain perceives and interprets sound information. Several skills determine auditory processing ability—or listening success. A general five-step hierarchy has been developed, but all skills work together and are essential for daily listening.



Fluency is the ability to understand and actively participate in conversation.

Identification is the ability to easily recognize and understand words without a defined context.

Recognition is the ability to hear combinations of speech sounds and recognize them as a word in a defined context.

Discrimination is the ability to perceive two or more speech sounds as the same or different.

Detection is the ability to respond to the presence or absence of sound. It is the first step in learning to hear.

*Over-The-Counter

*Benefits are achieved when devices are properly fitted by a professional.

This material is intended for health professionals. If you are a consumer, please seek advice from your health professional about treatments for hearing loss. Outcomes may vary, and your health professional will advise you about the factors which could affect your outcome. Always read the instructions for use. Not all products are available in all countries. Please contact your local Cochlear representative for product information.

1. Sacco G, Gonfrier S, Teboul B, Gahide I, Prate F, Demory-Zory M, et al. Clinical evaluation of an over-the-counter hearing aid (TEO First®) in elderly patients suffering of mild to moderate hearing loss. *BMC Geriatr* [Internet]. 2016 [cited 2023 Aug 25];16(1). Available from: <http://dx.doi.org/10.1186/s12877-016-0304-4>.

2. Over-the-counter hearing aids [Internet]. NIDCD. [cited 2023 Aug 25]. Available from: <https://www.nidcd.nih.gov/health/over-counter-hearing-aids>.

3. Cox RM, Johnson JA, Xu J. Impact of advanced hearing aid technology on speech understanding for older listeners with mild to moderate, adult-onset, sensorineural hearing loss. *Gerontology* [Internet]. 2014 [cited 2023 Aug 25];60(6):557–68. Available from: <http://dx.doi.org/10.1159/000362547>.
4. Balkany et al (2007) Nucleus Freedom North American clinical trial. *Otolaryngol, Head Neck Surg*, 136:757-762.
5. Runge CL et al (2016) Clinical outcomes of the Nucleus 5 cochlear implant system and SmartSound 2 signal processing, *J Am Acad Audiol*, 27(6):425-40.
6. Cochlear Limited. D1296247. CLTD 5620 Clinical Evaluation of Nucleus 7 CochlearImplant System. 2017, Sept; Data on file.