

EXECUTIVE SUMMARY

Minimal Outcome Measurements In Adults

Treatment process in patients referred to a cochlear implant centre

Preoperative Assessment

Medical

Audiological

Hearing and Evaluation

Communication

Psychological Status

Information + Counselling

Surgery and In-patient Care

Multidisciplinary Team

Clinical Facilities

Postoperative Care

Fitting + Tuning

Rehabilitation + Assessment

Follow-up + Long term Assessment

Key points

Candidacy criteria, candidate selection, and postoperative rehabilitation vary considerably across cochlear implant centres and across countries. A consensus on a set of minimal outcome measurements is essential to ensure successful clinical and scientific collaboration on cochlear implants and other implantable solutions at an international level.

Background

- The HEARRING network, a group of leading experts in the field of hearing implants are committed to leading the exploration of new avenues of research in hearing implant science, to advancing clinical procedures and to developing and perfecting surgical techniques' (<http://www.hearing.com>). The prime objective of the HEARRING network is to provide the best possible treatment to people with hearing loss. To achieve this, the HEARRING network has formulated this set of standards on minimal outcome measurements for cochlear implantation. These Minimal Outcome Measurements need to address several clearly defined criteria to obtain optimal benefit from collective experiences all over the world.
- A Pubmed search on outcome measurements applied in clinical trials including subjects with hearing implants in the last two decades was conducted.
- Experts in the field of hearing implants were asked to provide information on potential outcome measurements.
- Based on the database search and expert opinions, two adult and one children's questionnaire were generated. 32 researchers related to the HEARRING network found a consensus on minimal outcome measurements.

Minimal outcomes measures consensus for adults

- Test intervals: preoperatively, 3/6/12 months after first fitting, from then on, a yearly basis
- Test measures: unaided tone audiometry, aided tone audiometry, speech audiometry in quiet, speech audiometry in noise
- Hearing Implant Sound Quality Index (HISQUI) to determine sound quality
- Yearly calibration of test equipment

Conclusion

- This set of minimal outcome measurements helps standardize clinical practice and supports monitoring of cochlear implant candidates and users.
- The minimal outcome measurements can also be used as a guideline for data collection and the establishment of a registry.

References

Based on: [Kleine Punte A, Van de Heyning P. Quality standards for minimal outcome measurements in adults and children. Cochlear Implants Int. 2013. 14 Suppl 2:S39-42.](#)