WE HEAR YOU INVESTIGATING ATTITUDES TOWARD HEARING DEVICES

At age 67, Mary received a cochlear implant on her left side. There were tears of joy when she recognised sound coming from that side for the first time in years. Within 6 months, she was participating in conversations more confidently and regaining a social life.





escribed as a miracle by many, the sensation of sound that cochlear implants deliver to the profoundly deaf or those that derive little benefit from hearing aids, is an example of the collaboration between research, medicine and technology at its best.

Why then, have fewer than an estimated 5% of adults in Australia who would benefit from cochlear implants taken up the opportunity?

COLLABORATION

Researchers from the Australian Institute of Health Innovation (AIHI) have collaborated with Cochlear Limited to find answers to this question. Together they undertook a unique qualitative research project to investigate attitudes towards hearing treatments. What they uncovered was professional and consumer uncertainty and a health system that is hard to navigate.

Leading the AIHI team is Professor Frances Rapport, an internationally top cited qualitative health researcher and Professor of Health Implementation Science at AIHI.

Professor Rapport's expertise in implementation science focusses on ensuring research has real world impact.

"Collaborating with industry and consumers accelerates the impact that our research can have where it is most needed. With Cochlear Limited, we can deliver highly relevant results to hearing impaired consumers, their families and the health system," explains Professor Rapport.

Hearing loss is a growing healthcare pandemic and has been identified by the World Health Organisation as one of its top priorities, with more than 46 million people in high income countries like Australia living with disabling hearing loss. Despite cochlear implants having been available for decades and proven to be a safe and effective technology, uptake in Australia and worldwide is low.

BARRIERS AND FACILITATORS

In order to uncover the barriers and facilitators to uptake, AIHI and Cochlear Limited recognised the value of involving consumers, their families and healthcare professionals in the process of research design.

Cochlear Limited's Clinical Studies Program Manager Chris Warren points out that pre-trial qualitative research is rarely conducted in audiology.

This study is one of the first of its kind to rigorously analyse clinician and patient feedback to inform design of a randomised clinical trial," he said.

AlHI researchers, with their depth of expertise in qualitative research and implementation science, utilised a range of research methods including interviews, qualitative open-ended surveys and questionnaires to discover the attitudes to hearing devices of healthcare professionals and consumers. They also explored how much these groups knew about hearing loss in general, where to get help, and what avenues they preferred as sources of information on hearing devices.

In preparation for the research, it was recognised that some communication methods may be preferred by people with hearing impairment and so options such as email, face to face meetings and phone interviews were offered to participants.

"It is important to ensure our research is relevant to the lived experience of people with profound hearing loss as well as to those healthcare professionals assisting them," said Professor Rapport.

Professor Rapport's research has shown that consumers and healthcare professionals are uncertain about when it is appropriate or beneficial to investigate the use of a hearing device. Also, that people are not confident of the steps to take to begin the journey—reflecting the Organisation for Economic Cooperation and Development (OECD) statement that the Australian healthcare system is too hard for people to navigate.

BARRIERS AND FACILITATORS UNCOVERED INCLUDED:

- Consumers often do not know where to seek help when they notice a hearing impairment in themselves or a family member.
- GPs would benefit from more training to identify hearing impairment and knowing when to refer to an ENT specialist or audiologist.
- Audiologists can be limited in their product offerings due to commercial ties with specific hearing device suppliers.

Recognising a sector-wide challenge, Cochlear Limited and AIHI aim to make the pathways to care more transparent and accessible.

RESEARCH DESIGN

Cochlear Limited is planning a randomised controlled trial (RCT) that will inform the development of evidencedbased guidelines for determining which hearing device (hearing aid and cochlear implant) is most suitable given each patient's degree of hearing loss and daily listening needs.

Importantly, the research AIHI has undertaken with consumers and healthcare professionals will ensure

the RCT has real-world applicability. Results from the qualitative research will be used to not only inform the design of the RCT but also the dissemination of information during and after the research phase.

We also appreciate that the burden of hearing loss can be great for the patient and their family and can lead to mental health issues and impacts on employment and relationships. The cost of hearing devices is also an ongoing burden, with expenses including batteries and upgrades. There is also a fear of surgery."

The collaboration between AIHI and Cochlear Limited provides a valuable opportunity to incorporate this knowledge into the design of the RCT ensuring that the outcomes reflect the real need of the hearing-impaired community, their families and healthcare professionals.

Author: Professor Frances Rapport, Professor of Health Implementation Science, Australian Institute of Health Innovation, Macquarie University and Academic Lead, MD Research, Macquarie University.