# The HEARing CRC Member Organisations

## Core Members

- [Australian Hearing](#)
- [Cochlear](#)
- [MACQUARIE UNIVERSITY](#)
- [SIEMENS](#)
- [THE UNIVERSITY OF MELBOURNE](#)

## Support Members

- **Acoustics Pty Ltd**
- **attune**
- **audiology australia**
- **Hear and Say Centre**
- **Hybrid Electronics**
- **Murdoch Childrens Research Institute**
- **MURIGEN**
- **Neuromonics**
- **Royal Institute for Deaf and Blind Children**
- **SCIC**
- **SYDNEY SOUTH WEST AREA HEALTH SERVICE**
- **Taralye**
- **The University of Sydney**
- **University of Wollongong**
- **The Bionic Ear Institute**
- **The Children's Hospital at Westmead**
- **The Shepherd Centre**
- **Walter+Eliza Hall Institute of Medical Research**
The HEARing Cooperative Research Centre (CRC) is focused on the twin challenges of:

- more effective prevention; and
- improved remediation of hearing and communication disability.

**Aims**

Through research and its use, the HEARing CRC aims to reduce the economic impact of hearing loss by focusing member’s expertise on:

- maximising lifelong hearing retention
- reducing loss of productivity resulting from hearing disability
- increasing uptake and use of hearing technology; and
- providing postgraduate and professional education and training to support uptake and use of prevention and remediation initiatives.
Audiology Australia’s Mission

To provide leadership in science and practice of audiology through advocacy, promotion, education and networking. We enable audiologists to deliver the highest standards of person-centered care.

Recent position Paper on Audiology Service Delivery
Audiology Australia recommends the adoption of the World Health Organisation International Classification of Functioning Disability & Health (ICF) as a framework for delivery of person-centred audiological care.
1. Outline the WHO ICF and its applicability to telepractice

2. Provide some examples of research and telepractice already happening for adults and children with hearing impairment
Why Use the WHO ICF Framework?

- Establishes a framework for service delivery that focuses on the FUNCTION of a client in the context of their everyday lives
- Allows for the development of person-centered management plans
- Provides a common language across professions and policy makers for the description of function (e.g., for the National Disability Insurance Scheme)
International Classification of Functioning, Disability and Health

ICF

Approved by the World Health Assembly in May 2001
Environmental Factors

• Individual
  – immediate personal environment e.g. home, school, workplace

• Services and systems
  – formal and informal structures in the community and overarching systems that set the pattern e.g. organisations and services related to the work environment, health care systems, laws, informal rules

Telepractice
Audiology Example: Cathy Jones

Ageing

Bilateral moderate sensorineural loss

problems understanding speech in noisy situations, can’t hear phone ring, can’t hear TV at normal volume

withdraws from social situations, has stopped attending local card club

Environmental factors: lives alone in Cloncurry, eligible for government hearing services

Personal factors: Female, 63 years, tertiary educated, developing vision problems
Audiology Example: Anne Smith

Large Vestibular Aqueduct Syndrome

Deterioration from mild to severe to profound loss over 12 month period

Plateau of speech and language development. Behaviour poor - demonstrating frustration

Becomes withdrawn and not participating in play activities.

Environmental factors:
- lives with parents and younger sibling in Mackay. Attends day care twice a week.

Personal factors:
- 2yr old girl, motor coordination problems
2. Examples of Telepractice Studies in Audiology

- Evaluation of a self-fitting hearing aid
- Remote mapping of cochlear implants
The Self-Fitting Hearing Aid

onboard, in situ measurement of hearing thresholds

Automatic audiometer → Prescription formula

Real ear to coupler difference → Adjust hearing aid

Automatic application of prescriptive fitting algorithm

user responsible for:

- assembly
- fitting
- fine-tuning
- management
Remote Cochlear Implant Mapping

- 5 Families trained face to face for newly implanted children
- 10 families transferred who were familiar with the mapping procedure and use of videoconferencing
- All post switch on with minimum of 3 weeks implant use
- All but 1 involved in telepractice for habilitation
- Software loaded on cloud computer
- Use of remote access software to control computer on remote end
Examples of Equipment

eHAB® System (NeoRehab Pty Ltd, Brisbane, Australia)
www.neorehab.com

Cochlear self-mapping device
Telepractice will allow the delivery of person-centred hearing health care
Any Questions?

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