



## **Position Paper:**

**WHO are we hear for?**

**Models of Service Delivery**

## Contact

Audiology Australia  
Suite 7, 476 Canterbury Road  
Forest Hill VIC 3131  
Phone: 03 9877 2727  
Fax: 03 9877 0645

Email: [info@audiology.asn.au](mailto:info@audiology.asn.au)

## Position statement

Audiology Australia recommends the adoption of the World Health Organisation International Classification of Functioning, Disability and Health (ICF) as a framework for delivery of person-centred audiological care.

## Introduction and Rationale

### Why use the WHO-ICF framework?

Audiology Australia advocates that all audiological services should be delivered in a person-centred fashion. At the core of care provision is the need to understand and work towards maximising an individual's functioning. Focusing on function is central to providing goal-oriented, evidence-based audiological care.

The ICF was developed by the World Health Organisation (WHO) and was published in 2001.

The ICF framework:

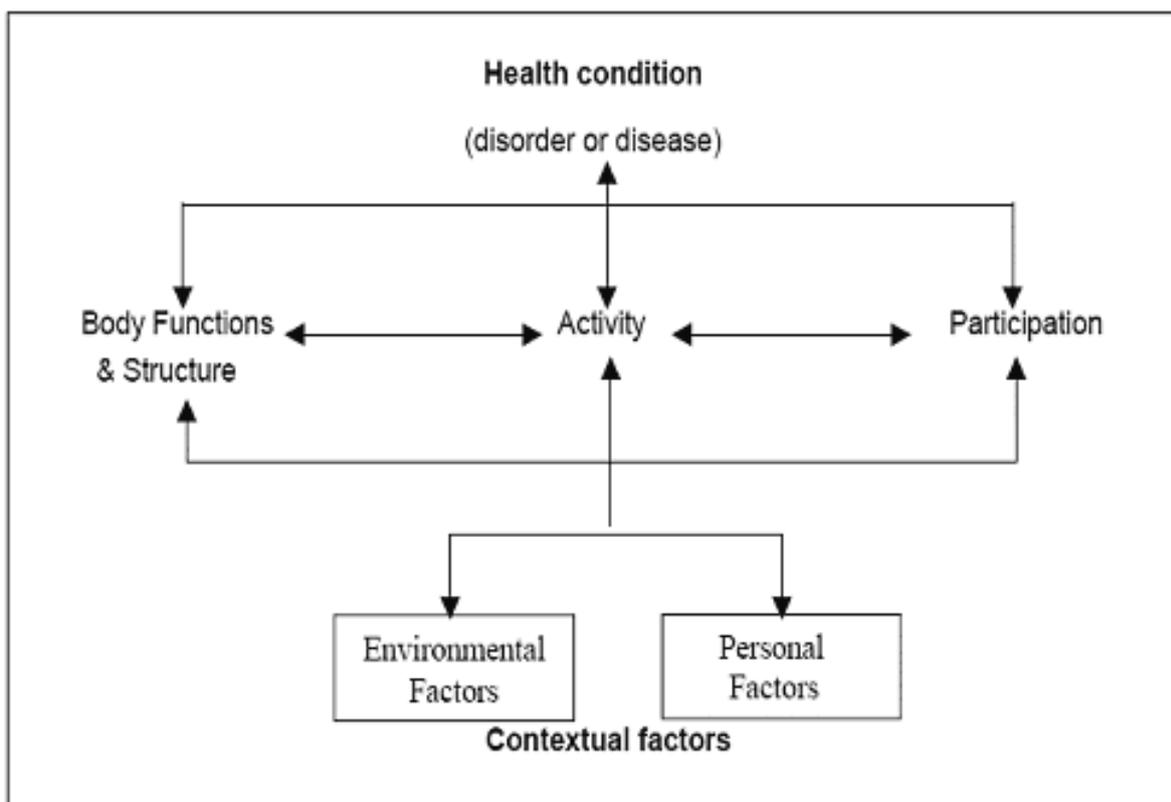
- Represents a biopsychosocial approach and supports service delivery which focuses on the function of a client in the context of their everyday lives;
- Is associated with a rehabilitation model of clinical practice, rather than a medical model, and is therefore considered most appropriate for the management of chronic health conditions such as hearing impairment;
- Facilitates the development and implementation of person-centred management plans; and,
- Provides a common language across professions and policy makers for the description of function (e.g., for the National Disability Insurance Scheme).

This position statement is written with members of Audiology Australia, consumers of audiological services and policy-makers in mind.

## Definition

The ICF is based on the premise that health, disability and functioning are integrated and interrelated. Within this model, individuals' experiences of functioning are not considered the consequence of disease, but the result of the interaction between a health condition (such as hearing loss) and contextual factors (personal attributes and environmental influences). Health conditions affect a person's body structure and function, their activities and their participation. Contextual factors can ultimately act as facilitators or barriers to functioning. The complexity of these relationships is depicted in Figure 1 and Table 1 contains a definition of all ICF terminology along with examples relevant to audiology.

Figure 1 International Classification of Functioning, Disability and Health (World Health Organisation, 2001)



**Table 1 Definition of terms within the biopsychosocial ICF framework and audiology examples**

Term		Definition	Audiology example	Term for describing disorder or dysfunction
Functioning and disability	Body Function and Structure	Physiological functions of body systems, including psychological functions	Reduced audibility, temporal and spectral resolution of sound	Impairment
		Anatomical parts of the body, such as organs, limbs and their components	Loss of inner and outer hair cells of the cochlea	
	Activity and participation	The execution of a task or action by an individual. It represents the individual perspective of functioning.	Difficulties hearing speech in noisy situations, problems hearing television at a normal volume for others	Activity limitations
		Involvement in a life situation. It represents the societal perspective of functioning.	Withdrawal from social situations, changed from full-time to part-time employment	Participation restrictions
Contextual factors	Environmental factors	<ul style="list-style-type: none"> <li>Made up the physical, social and attitudinal environment in which people live and conduct their lives. For example, family, employment, government agencies, laws and cultural beliefs.</li> <li>Are external to individuals and can have positive (facilitator) or negative (barrier) influence on the individual</li> </ul>	<p>Facilitators: Provision of a quiet work environment (not open plan) so that conversations at work are easier.</p> <p>Barriers: No family support for social occasions, employer not receptive to workplace modifications</p>	Environmental barriers
	Personal Factors	<ul style="list-style-type: none"> <li>Include race, gender, age, educational level, coping styles, etc.</li> <li>Not specifically coded in the ICF because of the wide variability among cultures. They are included in the framework, however, because although they are independent of the health condition they may have an influence on how a person functions.</li> </ul>	High levels of anxiety influence ability to participate in situations where there is any background noise, introverted personality	

## Implementation into clinical practice

The challenge of the ICF is that effective person-centred audiological care requires all aspects of function and disability be addressed in the re/habilitation process. Case history-taking should include discussions beyond the typical biomedical questions (e.g., duration of hearing loss, tinnitus, vertigo, etc) and include discussions of the biopsychosocial consequences of the health condition (e.g., activity limitations, participation restrictions, personal factors, environmental barriers). Management likewise needs to broaden to explicitly address the activities, participation and contextual factors that influence function. In audiology, assumptions are sometimes made that dealing with the impairment (by conducting audiological assessments and fitting amplification devices) will automatically lead to improvements in other areas of function. The evidence does not support this and a more holistic approach is recommended.

Developing and implementing person-centred audiological services is not a simple matter and there are a range of factors that influence how services are provided. The list in Table 2 serves as a reminder of the range of factors that need to be considered when developing models of audiological service delivery throughout urban, regional and remote areas of Australia.

**Table 2 Outline of aspects warranting consideration in audiological service delivery in Australia** (Adapted from Wylie et al (2013))

<b>Cultural appropriateness</b>	
<b>For an individual</b>	Consider the individual's role in the family and community and the cultural appropriateness of the service
<b>For a family</b>	Beliefs (e.g., religious or cultural) about disability, diagnosis and intervention
<b>For a community</b>	Hearing loss may impact the whole community eg indigenous communities with a high prevalence of chronic otitis media
<b>For a population</b>	Paediatrics – specialised services that overlap with educational sectors
<b>Sector and location of service delivery</b>	
<b>Public</b>	Australian Hearing, hospital, community health
<b>Private sector</b>	Private clinic, ENT practice
<b>Non government or charity</b>	Early intervention centre, Hearing aid bank service. Rural and remote services can be provided
<b>Research</b>	University, manufacturer, National Acoustic Laboratories
<b>Public domain</b>	Educational materials used for management and diagnosis available on internet, Television commercials
<b>Remote</b>	Specialist visits to remote areas and or use of telepractice into home or to local community centre
<b>Agent of delivery of intervention</b>	
<b>Audiologist</b>	Initiates the care plan for the client, implements and monitors as required
<b>Audiometrist</b>	May be part of audiological process or independent of audiology intervention
<b>Audiology assistant</b>	Role as per Audiology Australia Position statement. Supervision and guidance by Audiologist
<b>Hearing health worker</b>	Role clarified with supervision and guidance by Audiologist
<b>Client / family member</b>	Role clarified with supervision and guidance by Audiologist
<b>Nurse practitioner</b>	Follows job description – may have supervision and guidance by Audiologist
<b>Personal Care Assistant</b>	Role assisting people with hearing loss living in residential care
<b>Level of intervention</b>	

<b>Primary</b>	Prevention or education
<b>Secondary</b>	Early diagnosis and intervention
<b>Tertiary</b>	Re/habilitation aimed at maximizing the functional abilities of a person with hearing impairment
<b>Recipients of intervention</b>	
<b>Individual</b>	Direct intervention to client
<b>Immediate circle</b>	Intervention with client and extended family, significant others, educators etc
<b>Paid or voluntary workers</b>	Support workers e.g., nursing home staff
<b>Wider community</b>	Residential care management, policy makers, multidisciplinary professionals involved in (re)habilitation

## Case examples applying the WHO ICF

In each of the two examples below, relevant ICF terminology is included in brackets.

1. Cathy Jones is 63 years old. Cathy has a bilateral moderate sensorineural hearing loss (impairment). She has difficulty understanding speech in noise cannot hear the phone ring at times and cannot hear the TV at a normal volume for others in her family (activity limitations). She has started to avoid going out to social events in recent times and has resigned as secretary of the local bridge club (participation restrictions). Cathy lives alone in a retirement village in a country town and is a self-funded retiree so not eligible for government hearing services (environmental factors). She is tertiary educated and has recently been diagnosed with macular degeneration (personal factors).
2. Annie Chow is 2 years old and has been diagnosed with Large Vestibular Aqueduct Syndrome. Her hearing has deteriorated from mild, to severe-profound, over the past 12 months (impairment). Her speech and language development has plateaued over this period and her behaviour is problematic (activity limitations). She has become very attached to her mother at all times and reluctant to join in play activities with other children (participation restrictions). Annie lives with both parents and has a younger sibling; she attends day care one day per week and is with her maternal grandmother the other days of the week (environmental factors). She has some motor coordination problems (personal factors). Her family speak Mandarin at home (personal factors).

The complexity of managing cases such as these becomes clear when all elements of the ICF framework are considered. In both cases, focusing on impairment by the provision of hearing aids alone will not address all of the issues necessary to improve function. Considerations of the ICF and factors outlined in Table 2 highlight that for example, Cathy is likely to need a great deal of support with aid management because of her deteriorating vision, and Anne will need a range of professional services to achieve age-appropriate development (e.g., audiology, speech pathology, occupational therapy, physiotherapy).

In addition, traditional audiological clinic-based care may not address the needs of individuals. For example, Cathy may benefit from telepractice with support for her use of hearing aids provided over the phone and/or via the internet, and a personal care assistant could be included in her management program. Annie is likely to benefit from the multi-professional health care team supporting her parents and the staff in the day care centre to facilitate her development. Her family's cultural needs and expectations should be considered in her model of service delivery.

### **Recommendations for training and demonstration of understanding**

- Audiology Australia members should participate in CPD events that facilitate an understanding of, and support the implementation of ICF-based audiology services. Audiology Australia is responsible for providing these opportunities in a fashion most accessible to members.
- The Clinical Competency document for audiology students should reflect the imperative to conduct all audiology services from the perspective of the ICF.

### **Summary**

Audiology Australia recommends the adoption of the World Health Organisation International Classification of Functioning, Disability and Health (ICF) as a framework for delivery of person-centred care and advocates that all Audiology Australia members should be adequately informed about the ICF, its applicability to their work and be able to implement person-centred, function-focused audiological care. Audiology Australia's commitment to the framework should also be broadcast to relevant consumers and policy makers.

## Relevant References

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