

Defining patient-centred outcomes to demonstrate success in hearing rehabilitation using patient and professional Delphi reviews

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Background

- There is a wide variety and number of outcome measures used to assess hearing rehabilitation
- Yet, no consensus on what outcome domains should be targeted for measurement as markers of “successful” rehabilitation
- Most existing outcome measures have been developed with minimal involvement of consumers of hearing care

Methods

- Simultaneous three-round online Delphi reviews were conducted with two groups:
 - Consumers of hearing care (n = 64)
 - Professionals in hearing rehabilitation, including audiologists, managers, researchers, consumer advocates, and device manufacturers (n = 50)
- Domains were developed using open-ended questions from a workshop (consumers) and round 1 (professionals)
- In rounds 2 and 3, domains rated using a five-point Likert item (very important to very unimportant)
- Consensus was defined as 80% of respondents rating an item as Important or Very Important
- The top 5 domains from each review were then ranked for importance, and put to a consensus workshop of key stakeholders who, following discussion, ranked the four top-rated domains.

Results

- Domains and consensus are presented below
- Bolded domains were those ranked most highly
- Final agreed outcome domains were:
 - **improved communication ability, improved personal relationships, improved well-being, and reduced social participation restrictions**

Conclusions

- Strong focus on psychosocial outcomes, rather than traditional measures, such as use of hearing devices or satisfaction with services
- Very little mention of hearing devices, supporting the use of domains and measures appropriate for non-device rehabilitation as well as device-based rehabilitation
- Strong recognition of the broader impacts of hearing difficulties, including the impacts on family, social, and community life
- Many identified outcome domains do not have established outcome measures that have been validated in hearing rehabilitation
- Establish an independent body to develop a national outcomes database
- This research has led to recommendations to the Australian Government’s Department of Health

Consensus outcome domains

Patients

Professionals

I can communicate well with my family	100%	Improved communication ability	100%
I can use my hearing aids effectively	100%	Improved personal relationships	100%
I can communicate effectively with people	98%	Improved communication in groups	97%
My hearing impacts less on my family	98%	Improved participation in activities	97%
I am able to do the things that I want to do	95%	Reduced social isolation	97%
I hear clearly with my hearing aids	95%	Reduced listening effort	97%
My hearing aids are comfortable	95%	Improved social engagement	90%
I am satisfied with the hearing care I receive	95%	Improved self-management ability	87%
I have the skills I need to communicate	93%	Improved well-being	87%
I trust my hearing care professional	93%	Increased independence	87%
I can live my life independently	90%	Reduced loneliness	83%
I am able to participate in the social events that I want	90%	Improved community engagement	83%
I have more control over my hearing	88%		
I can use the telephone effectively	88%		
I am better able to hear the TV as a result of my hearing care	84%		

Percentages show proportion of respondents to Round 3 rating an item as Important or Very Important

