## AUSTRALIAN SOCIETY OF REHABILITATION COUNSELLORS INC.



# The Australian Society of Rehabilitation Counsellors Inc (ASORC)

Submission to the Joint Standing Committee on the National Disability Insurance Scheme

On

The provision of hearing services under the National Disability Insurance Scheme (NDIS)

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### Introduction

The Australian Society of Rehabilitation Counsellors Inc (ASORC) thanks the Joint Standing Committee on the NDIS for its inquiry into the provision of services to deaf and hearing impaired people under the National Disability Insurance Scheme.

To date ASORC has been engaged with the Australian Government with regards to its recent reviews and policy development processes concerning services for people who are deaf or hearing impaired. This work has included participation in meetings, public consultations, the development of submissions and presentations to the Office of Hearing Services during 2015-2016.

ASORC is the peak professional body representing rehabilitation counsellors throughout Australasia. Established in 1976, ASORC is a non-party political, non-sectarian and not for profit organisation. The mission of ASORC is to promote the profession of rehabilitation counselling and to foster the professional capability of members.

Rehabilitation Counsellors are Allied Health Professionals who work within a counselling and case management framework to assist people who are experiencing disability, a health condition or social disadvantage to participate in employment or education, or to live independently and access services in the community.

### ASORC provides:

- A long standing and respected voice for the profession (over 30 years since inception).
- Resources, education, mentoring and supervision necessary for members to achieve career advancement and enhanced credibility in the profession and in the community.
- A robust set of core competencies and code of ethics
- Access to latest research and academic commentary through the ASORC ® Journal (AJRC).
- Access to a network of similarly skilled and minded professionals across Australia.

We are pleased to provide our submission and have chosen to provide responses to the following four of the Committee's eight terms of reference (TOR):

- TOR 1a: the eligibility criteria for determining access to, and service needs of, deaf and hearing impaired people under the NDIS;
- TOR 1c: the adequacy of funding for hearing services under the NDIS;
- TOR 1f: the liaison with key stakeholders in the design of NDIS hearing services, particularly in the development of reference packages. and
- TOR 1h: any other related matters.

### **Executive Summary**

The Australian Society of Rehabilitation Counsellors Inc. (ASORC) thanks the Joint Standing Committee on the NDIS for its inquiry into the provision of services to deaf and hearing impaired people under the National Disability Insurance Scheme and for the opportunity to provide a submission.

ASORC is concerned that the National Disability Insurance Authority has not accurately estimated the number of deaf and hearing impaired people who will require access to NDIS funding packages. ASORC estimates that at least 25,000 people, and probably as many as 120,000 deaf and hearing impaired people have a sufficient experience of impairment and disability to warrant services under the NDIS.

ASORC is concerned that the NDIS-proposed model for assessing deafness and hearing impairment does not take a holistic approach to the individual's experience of disability, but narrowly relies on an abstract measure of clinical impairment. Similarly, ASORC is concerned that NDIS' existing assessment processes do not assess the individual's experience of overall disability but focuses on assessing disability within a compartmentalized approach, therein excluding people from the system when their whole-of-life experience of disability is severe-profound in its impacts on education, employment and social inclusion. This narrowly-framed approach has significant economic impacts on Australia's productivity and frustrates the capacity of the NDIS to achieve the national impact it was designed to achieve. Moreover, in addition to the narrowly-constructed assessment process, proposed service models for deaf and hearing impaired are restricted to deficit-based, device-centric models.

In keeping with international approaches that have been demonstrated to be most costeffective, ASORC proposes a holistic approach to the delivery and evaluation of hearing services under the NDIS.

ASORC notes that professional standards and competencies exist for the accreditation of individuals who provide assessments of people with disability. ASORC is concerned about the extent to which individuals conducting disability assessments under the NDIS have achieved an appropriate standard of competency. To this end the Society proposes the following 13 recommendations.

### Recommendations

**Recommendation 1**: That NDIA estimates of the number of people to be included within its service framework be revised to properly account for the needs of deaf and hearing impaired people.

**Recommendation 2**: That the assessment of disability with regards to eligibility for NDIS services focuses on:

- a person's overall experience of disability, rather than discounting the experience of disability by taking a compartmentalising approach to their experiences of differing impairments
- ii. the socio-economic impacts of disability (e.g. disability serves as a barrier to education, employment or social inclusion) rather than on abstracted, clinical measures of impairment.

**Recommendation 3**: The assessment of deafness and hearing impairment, with regards to eligibility for NDIS eligibility, should take into account measures of pure tone audiometry within the context of any resulting psycho-social, communication disabilities or co-disabilities.

**Recommendation 4**: The NDIS assessment process be reviewed and amended such that:

- i. the focus of the assessment process is on the individual living within their complete experience of disability within given social settings
- ii. where a client is assessed as having two or more disabilities assessed at Tier 2, that their overall assessment equates to a Tier 3 assessment.

**Recommendation 5:** That services addressing client choice and education are provided to clients as an early intervention so that they are empowered to make informed decisions about the service packages they may select for themselves.

**Recommendation 6**: That approved professionals conducting assessments of disability, which determine an individual's eligibility for access to NDIS-funded packages, should have obtained a minimum level of professional competency-based training, specific to the assessment type being conducted.

**Recommendation 7**: That the NDIA provide funding to the Australian Society of Rehabilitation Counsellors to conduct training on competency-based assessments for assessors working within the NDIS system.

**Recommendation 8**: That the NDIA funds a holistic model of service provision for deaf and hearing impaired people.

**Recommendation 9**: That the NDIA conducts outcomes-focused evaluation on services provided to deaf and hearing impaired people.

Recommendation 10: That the NDIA:

- i. establish an appropriately-qualified and representative advisory committee for services for deaf and hearing impaired people
- ii. meet with this committee, to seek its advice and feedback on hearing services, at least twice a year.

**Recommendation 11**: That the NDIA recognises the Australian Society of Rehabilitation Counsellors as a Practitioner Professional Body under the NDIS.

**Recommendation 12**: That the NDIA engages the Australian Society of Rehabilitation Counsellors in appropriate consultation and accreditation processes concerning the NDIS. **Recommendation 13**: That the NDIA:

- endorse the provision of a range of non-device based hearing interventions, depending on client need, as per the ASORC proposed model for the delivery of non-device based hearing services under the NDIS.
- ii. adopt an outcomes-based model of service evaluation for hearing services.

### **Terms of Reference 1a**

# The eligibility criteria for determining access to, and service needs of, deaf and hearing impaired people under the NDIS

In addressing this TOR we raise the following four points:

# 1. Concern that planning for the NDIS did not consider the needs of deaf and hearing impaired people

Based on the epidemiology reported in Access Economics' *Listen Hear Report*, the Society estimates that there are approximately 25,000 people in Australia, aged less than 65 years, whose experience of impaired hearing is assessed as severe or worse. If one includes people whose hearing has been assessed as moderate in severity, the estimated number of target individuals is in the vicinity of 110,000 to 120,000 people. Several caveats surround these estimates. The Society notes that the prevalence of hearing impairment in the Indigenous communities is significant (e.g. long term impacts of otitis media) and not well addressed within the existing epidemiology. Similarly, the experience of impairment of refugees, particularly those coming from countries at war, as well as the needs of people with ear disorders, are underestimated within the exiting epidemiology. Importantly, children (aged less than 15 years) make up less than 0.5% of those with impaired hearing. That is, the vast majority of NDIS services for Deaf and Hearing Impaired people would be concerned with adults aged less than 65 years.

**Recommendation 1**: That NDIA estimates of the number of people to be included within its service framework be revised to properly account for the needs of deaf and hearing impaired people.

**Recommendation 2**: That the assessment of disability with regards to eligibility for NDIS services focuses on:

- a person's overall experience of disability, rather than discounting the experience of disability by taking a compartmentalising approach to a person's experiences of differing impairments.
- ii. the socio-economic impacts of disability (e.g. disability serves as barrier to education, employment or social inclusion) rather than on abstracted clinical measures of impairment.
- 2. The assessment of deafness or hearing impairment with regards the NDIS Deaf and hearing impaired people generally meet the NDIS access requirement¹ for admission to funded services because they have needs for support from a person or equipment to do everyday things for themselves due to an impairment that is permanent. However, the Society is concerned that the access criteria for services for people with impaired hearing, as defined above by the NDIA, is not consistently or coherently applied to the situation of deaf and hearing impaired people. Anecdotal reports indicate that the NDIA applies an arbitrary audiological *low fence* (i.e. a pre-determined minimum level of impairment, expressed in decibels) to determine a person's eligibility for funding under the NDIS. However, despite inquiries made by the Senate's Committee on Community Affairs in October 2016, it has not been possible to secure a coherent answer from the Office of Hearing Services or the NDIA, as to whether the use of such a low fence is being used, and if so, at what level has such a low fence been set.

The Society contends that the determination of impairment based solely on one isolated clinical measure of impairment, does not assess the experience of disability, and that such a process is completely contrary to the goals of the NDIS, which is focused on the experience of disability. The Society contends that the assessment of hearing disability must take into

<sup>&</sup>lt;sup>1</sup> https://www.ndis.gov.au/ndis-access-checklist.html

account not only measures of hearing impairment using pure tone audiometry, but that such assessments must also include assessments of the co-presence of psycho-social and communication disabilities. A variety of such measures exist within the literature (see for example Hogan 2013).

**Recommendation 3**: The assessment of deafness and hearing impairment, with regards to eligibility for NDIS eligibility, should take into account measures of pure tone audiometry within the context of any resulting psycho-social, communication disabilities or co-disabilities.

# 3. Overly restrictive framing as to what constitutes severe to profound disability

Problematically, the NDIS is designed on the assumption that a person with a disability has 'an' impairment that is permanent in nature<sup>2</sup>. The assessment, funding and management processes under the NDIS make little provision for the fact that people may experience, for example, several disabilities concurrently that are moderate to severe in nature and that this combined experience of disability results in the person having needs for permanent support from a person or equipment to do everyday things for themselves. An analysis of data from the Survey of Disability Ageing and Carers illustrates this point.

In the first instance, people with hearing impairment may also report the experience of a second (or further) disability such as back problems (15.3%), arthritis and related problems (8.2%), and psychiatric disorders (6.5%). Quoting directly from the research, the Society notes that:

A person's age at the onset of hearing loss may directly affect their chances of finding and retaining employment, or do so indirectly through education or other factors. Of those with hearing loss as the main condition and not in paid work, a disproportionately high 45% reported hearing loss onset before the age of 20 years, suggesting that early onset of hearing loss is related to later employment difficulties. Hearing loss also appears to have a disproportionate impact in reducing the proportion in paid work among those who are relatively older (53% for those aged over 45 years), for women (60%), and for those having low education (51% for those with no post school educational qualifications). Of those with hearing loss who also had communication difficulties, the proportion not in paid work rose to 69% for those aged 45 years or over and 60% for those having no post-school educational qualifications. Age of onset is not recorded for this group. Taken together, these data suggest that hearing loss in itself is seldom the major factor associated with disability-related unemployment and non-workforce participation. The bulk of the problem appears to be associated with disabilities other than hearing loss. However, where hearing loss itself is associated with employment difficulties, the effects appear to be accentuated when people also are rendered more vulnerable in the labour market by communication difficulties, older age, being female, or low education levels (Hogan et al. 2009).

This analysis shows that hearing impairment was associated with an increased rate of non-participation in employment of between 11.3% and 16.6%. However, the rate of non-workforce participation associated only with hearing impairment itself was just 2.1%. That is, the substantive impact of employment associated with hearing disability, is, as the research cited above notes, associated with factors other than hearing impairment but which in themselves compound the experience of hearing impairment and the capacity for employment. The socio-economic impact of this insight was documented by Access Economics (2006) who found that hearing impairment was associated with a cost to the community of \$11.6 billion per annum with 57% of this cost associated with lost productivity.

These factors bear out the significance of the clinical, social and economic limitations associated with the NDIA's approach to impairment whereby impairment is operationalised from within a limited medical perspective where the impact of a specific disability is assessed, or where a package of assistance is proposed, outside of the greater context of the individual's lived experience of disability within specific community settings. The NDIS should be a system that enables a person to take their full place within society, rather than a system that offers assistance only on the basis of singularized impairment assessments. As such, several assessments that assign a rating of Tier 2 to a specific impairment collectively,

<sup>&</sup>lt;sup>2</sup> https://www.ndis.gov.au/ndis-access-checklist.html

have to be assessed in terms of the overall impact such disabilities have in the individual's life. Since support packages provide most assistance to clients rated as Tier 3, the NDIS must consider that two or more impairment assessments as Tier 2 equates to a Tier 3 assessment.

**Recommendation 4**: The NDIS assessment process be reviewed and amended such that:

- i. the focus of the assessment process is on the individual living within their complete experience of disability within given social settings
- ii. where a client is assessed as having two or more disabilities assessed at Tier 2, that their overall assessment equates to a Tier 3 assessment

## 4. The need for expertise in disability assessment such as the skills possessed by Rehabilitation Counsellors

Hearing impairment itself is assessed through various audiometric tests. Such tests are typically provided by audiologists and audiometrists. Critical to the success of NDIS services for Deaf and Hearing Impaired people is the recognition that impairment does not equate to disability. Unlike the assessment of impairment, which is conducted by audiologists etc, disability assessments are traditionally conducted by Rehabilitation Counsellors. These assessments include post-school educational and vocational assessments as well as mental health assessments. It is critical therefore that the scope of the NDIS assessment process is holistic and inter-disciplinary such that the clients' needs with regards the experience of disability are addressed in a holistic manner. Attention is drawn in particular to the objectives of the NDIS which are focused on the experience of significant disability in everyday life, rather than impairment per se. As such, a person who has had a successful cochlear implant procedure, for example, though audiologically severely or profoundly deaf, may only experience disability in activities of everyday life, at a mild to moderate level. By contrast, a hearing aid user or a person who does not benefit from device inputs may retain a severe level of disability.

Within a service delivery framework centered on choice, such as the NDIS, prospective clients should be made aware of the range of providers that they may see with regards addressing their specific support needs. To this end, assessment of impairment itself should not be the entry point for NDIS Hearing Services. Rather, such a program should commence with the provision of client information with regards choices and options and that the responsibility for case management lies with those responsible for disability management, not impairment assessment.

**Recommendation 5:** That services addressing client choice and education are provided to clients as an early intervention so that they are empowered to make informed decisions about the service packages they may select for themselves.

The Society is profoundly concerned that sufficient professional standards have not been formulated or mandated for people working as disability assessors within the NDIS system. The assessment of the lived experience of disability, particularly with regards to access to education, employment and the promotion of social inclusion requires that the assessor possesses expert skills such as those required in order to be a member of the Australian Society of Rehabilitation Counsellors. To this end, people conducting assessments of individuals with disability require a minimum standard of competency-based training in disability assessment concerned with employment and social inclusion.

**Recommendation 6**: That approved professionals conducting assessments of disability, which determine an individual's eligibility for access to NDIS-funded packages, should have obtained a minimum level of professional competency-based training, specific to the assessment type being conducted.

**Recommendation 7**: That the NDIA provide funding to the Australian Society of Rehabilitation Counsellors to conduct training on competency-based assessments for assessors working within the NDIS system

### **Terms of Reference 1c**

### The adequacy of funding for hearing services under the NDIS

The Society is concerned by anecdotal reports that the NDIA perceives that the provision of hearing aids or devices such as implants and speech processors as the entirety of services required for deaf and hearing impaired adults. As noted above, it has not been possible to ascertain from the NDIA, what models of service provision for deafness and hearing impairment the NDIA actually funds. However, our analysis of existing data indicate that a device-centric approach is highly problematic, if only because some 20% of presenting clients do not obtain sufficient benefit from such devices.<sup>3</sup>

The Society is concerned about this because research conducted by some of its members demonstrates that even when using devices such as hearing aids or cochlear implants, some 42% of individuals still have notable difficulties communicating in everyday situations. As such hearing aids and devices may be necessary in assisting the management of hearing impairment, but they alone do not eliminate the experience of disability or reduce it to such an extent that people do not need assistance from others to do everyday things such as talking and listening successfully. The weight of international evidence on hearing disability and rehabilitation demonstrates that a service model that involves the provision of devices, psycho-social support and communication training is the most cost-effective intervention in these instances.

Similarly, the Society proposes that the NDIA utilises an outcomes, rather than an inputs, model of intervention (see TOR 1h) in determining the extent to which its funding packages have addressed the needs of deaf and hearing impaired clients. Outcomes in this instance would address educational, psychological and socio-economic outcomes.

**Recommendation 8**: That the NDIA funds a holistic model of service provision for deaf and hearing impaired people

**Recommendation 9:** That the NDIA conducts outcomes-focused evaluation on services provided to deaf and hearing impaired people.

### **Terms of Reference 1f**

# The liaison with key stakeholders in the design of NDIS hearing services, particularly in the development of reference packages

Prior to addressing this TOR we provide some contextual information about Rehabilitation Counsellors and their expertise with regard to the NDIS.

### What is a Rehabilitation Counsellor?

Rehabilitation Counsellors are Allied Health Professionals who work within a counselling and case management framework to assist people who are experiencing disability, a health condition or social disadvantage to participate in employment or education, or to live independently and access services in the community.

Rehabilitation Counsellors are specialist counsellors who understand the impact of disability, health conditions and disadvantage on people's lives, and especially the importance that work and education plays in achieving a sense of inclusion, independence, optimism and self esteem.

Rehabilitation Counsellors have advanced professional skills in personal counselling,

<sup>&</sup>lt;sup>3</sup> See survey of Disability Ageing & Carers

vocational assessment, vocational counselling, vocational training and job placement, case management and co-ordination of services, injury prevention and management, and independent living planning.

Many Rehabilitation Counsellors work with State and Federal funded vocational rehabilitation providers to assist people with a disability, health condition or disadvantage, get 'back on their feet' and into the paid workforce. These services are those that might be funded under such programs such as Disability Employment Services and Jobactive (previously Job Services Australia).

There is also a large number of Rehabilitation Counsellors employed with private Workplace Rehabilitation providers providing services to people who have been injured in a Workplace or Motor Vehicle accident or situation for which they are able to claim compensation.

Other Rehabilitation Counsellors may work in the areas such as Employment Services Assessments (ESAt), injury prevention and management, disability advice, non-vocational disability services, advocacy and public policy.

As Rehabilitation Counsellors possess substantial professional and academic skills on which to build, during their careers they may find themselves working in fields such as counselling therapy, university lecturing, research, management, or developing new disability programs. Others may specialise in working with people with particular disabilities or disadvantages, such as people with mental health conditions, drug and alcohol abuse, ex-offenders or refugees.

#### ASORC expertise and capacity to provide hearing services

In April, 2016, the Australian Society of Rehabilitation Counsellors conducted a national wide consultation with its members concerning their interest in and their capacity to provide a range of services for people who are deaf or hearing impaired. The study found that:

- members have ongoing and extensive experience (mental health assessments, adjustment to disability and motivational counselling services, employment services) in working with deaf and hearing impaired people, including those eligible for Commonwealth supported services
- members expertise includes addressing the more complex needs of those whose hearing impairment is severe or more profound
- members use a variety of assessment and counselling strategies addressing the specific needs of these clients
- Client support needs vary by severity of hearing impairment on average people with mild losses require 8 hours' intervention, moderate 13 and severe 21 hours.
- The majority of members (88%) were interested in providing services to this client group
- Our needs assessment identified that we have a national capacity to provide these services

In addressing this TOR we raise the following two points:

#### 1. Absence of consultation

The Australian Society of Rehabilitation Counsellors is very concerned about the absence of consultation that has occurred between the NDIA, the Society itself, and key stakeholder groups working in the areas of deafness and hearing impairment. Moreover, given the complexity of the issues impacting this group of service recipients and the ongoing complexities noted herein with regards to addressing such needs, the Society proposes that the NDIA establish an appropriately qualified and representative advisory committee for services for deaf and hearing impaired people and that it meet with that committee, to seek

its advice and feedback on hearing services, at least twice a year.

#### **Recommendation 10**: That the NDIA:

- i. establish an appropriately qualified and representative advisory committee for services for deaf and hearing impaired people.
- ii. meet with this committee, to seek its advice and feedback on hearing services, at least twice a year.

### 2. ASORC to be identified as a specific Practitioner Professional Body

Based on our national assessment of expertise and capability, ASORC asserts that its members have the necessary expertise, capability and availability to provide the necessary disability services for Deaf and Hearing Impaired people under the NDIS.

ASORC similarly asserts itself as the foremost professional body representing Rehabilitation Counsellors in Australia, and, as such, that ASORC be recognised as a Practitioner Professional Body under the NDIS and that it be engaged by the NDIA in appropriate consultation and accreditation processes.

**Recommendation 11:** That the NDIA recognises the Australian Society of Rehabilitation Counsellors as a Practitioner Professional Body under the NDIS.

**Recommendation 12**: That the NDIA engages the Australian Society of Rehabilitation Counsellors in appropriate consultation and accreditation processes concerning the NDIS.

### **Terms of Reference 1h**

### Any other related matters

Given that we have not been consulted regarding the development of the Reference Packages nor the possible range of services that can be offered in this instance. ASORC proposes a model for the delivery of non-device based hearing services under the NDIS.

## ASORC Proposed Model for Delivery of Non-Device based Hearing Services under NDIS –

- 1. Audiological assessment by accredited hearing service provider
- 2. Case manager also refers client to a Rehabilitation Counsellor who assesses client need for Psycho-social and or Vocational Support Services.
- 3. ASORC proposes that services offered to deaf and hearing impaired clients be client-centred, needs based and multi-modal in nature, with the package of services varying to fit clients' wishes:
- 4. There may be several models of non-device based intervention depending on client need:
  - a. A Hearing Rehabilitation Counselling model could consist of:
    - i. Assessments (Hearing self-efficacy; DASS (mental health)
       assessment; Montreal Hearing Services Base-line survey (examples
       of these assessments can be found in the Easier Listening Program)
    - ii. Provision of an appropriate program of hearing rehabilitation and motivational counselling such as the Montreal Program (see Easier Listening workbook)<sup>4</sup> with specific emphasis on accepting of disability counselling strategies, engaging family support etc.
    - iii. Programs centred on vocational needs

<sup>4</sup> We note that there are a range of possible service delivery models (including the work of Louise Hickson and Better Hearing Australia) that would be used depending on client need and provider circumstances.

- b. For the 20% of clients<sup>5</sup> that will not receive adequate benefit from a hearing device:
  - i. Assessments (Hearing self-efficacy; DASS (mental health) assessment; Montreal Hearing Services Base-line survey (examples of these assessments can be found in the Easier Listening booklet as attached)
  - ii. Provision of an appropriate program of hearing rehabilitation and motivational counselling such as the Montreal Program (see Easier Listening workbook) with strong emphasis on managing stigma, communication coping strategies and use of Assistive Listening Devices and/or AUSLAN as appropriate to need and circumstances
- 5. Evaluation of intervention outcomes
- 6. Rehabilitation Counsellor provides a report (with client consent) back to Case Manager
- 7. Typically the program will occur over a six month period, allowing adequate time for the client to make the necessary psycho-social adjustments to improve readiness for hearing services

### What are the likely costs of this service provision?

Based on our national survey of members, it is likely that on average, and depending on the level of disability and need, that clients with impaired hearing will require approximately some 21 hours of disability related service delivery at an average cost of approximately \$130 per hour (plus GST).

### **Quality assurance indicators and measures**

ASORC proposes that the NDIA adopts a series of quality assurance indicators for its hearing services packages that are matched with appropriate and easy to use client outcome measures.

**Indicator 1**: The extent to which the intervention reduces the client's experience of hearing impairment

• Measures as advised by hearing service providers

**Indicator 2**: The extent to which the intervention reduces the client's experience of hearing disability

 A range of measures are available to address this indicator including the Montreal Short Form Questionnaire

**Indicator 3**: The extent to which the intervention enhances client hearing related quality of life

 A range of measures are available to address this indicator including the AQoL as well as single item measures

**Indicator 4**: The extent to which the intervention enhances client social participation

 A range of measures are available to address this indicator including the Hearing Participation Survey which is a short form of the Glasgow Hearing Aid Benefit Inventory

**Indicator 5**: The extent to which the intervention offers value for money to the Australian tax payer

 A cost utility analysis can be conducted utilising documented program costs and selected measures as above. A series of refereed journal papers are available that examine the assessment of cost utility in hearing services.

### **Recommendation 13:** That the NDIA:

- i. endorse the provision of a range of non-device based hearing interventions, depending on client need, as per the ASORC proposed model for the delivery of non-device based hearing services under the NDIS.
- ii. adopt an outcomes-based model of service evaluation for hearing services.

<sup>&</sup>lt;sup>5</sup> See survey of Disability Ageing & Carers

### References

Abrams H, Chisolm TH, McArdle R. (2002) A cost-utility analysis of adult group audiologic rehabilitation: are the benefits worth the cost? <u>J Rehabil Res Dev.</u> Sep-Oct;39(5):549-58.

Access Economics (2006) Listen Hear! The Economic Impact and Coast of Hearing Loss in Australia. Access Economics Canberra.

Australian Bureau of Statistics (2003; 2012) Survey of Disability Ageing and Carers. Catalogue 4430.0 Canberra <a href="http://www.abs.gov.au/ausstats/abs@.nsf/mf/4430.0">http://www.abs.gov.au/ausstats/abs@.nsf/mf/4430.0</a>)
Coates HL, Morris PS, Leach AJ, Couzos S: Otitis media in Aboriginal children: tackling a major health problem. Med J Aust 2002, 177(4):177–178.

Hogan, A. [2008] (2013 2nd edition) Easier Listening. Practical strategies for managing hearing loss. EGA Insights. Canberra. (32 pages)

Hogan, A; O'Loughlin, K; Kendig, H; Davis, A.; (2009) Hearing loss and employment International Journal of Audiology, 48:3 117-12.