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Services for Australian
Rural and Remote Allied Health

**A Submission to the Australian Senate
Community Affairs References
Committee**

**Inquiry into Hearing Health
in Australia**

October 2009

INTRODUCTION

Services for Australian Rural and Remote Allied Health (SARRAH), welcomes the opportunity to submit items for comment and inquiry into hearing health in Australia, Australian Senate Community Affairs References Committee.

SARRAH is nationally recognised as a peak body representing rural and remote Allied Health Professionals working in both the public and private sector.

SARRAH's representation comes from a range of allied health disciplines including but not limited to: Aboriginal Health Workers, Audiology, Dietetics, Occupational Therapy, Optometry, Oral Health, Pharmacy, Physiotherapy, Podiatry, Psychology, Social Work and Speech Pathology.

These Allied Health Professionals provide a range of clinical and health education services to individuals who live in rural and remote communities. Allied Health Professionals are critical in the management of their clients' health needs, particularly with chronic disease and complex care needs.

Allied Health Professionals work across the Primary Health continuum. They have significant roles in health care and health education across the sectors. This includes disability and other services with education departments, family and community services and non-government organisations, Centrelink and CRS Australia.

The Allied Health Professional, particularly in rural and remote areas, is well versed to the interdisciplinary and team approach to health care, especially in management of chronic disease and to improve health behaviour.

It is noteworthy that in many smaller and more remote communities those people in need of primary health care are reliant on nursing and allied health services. If these health professionals are well supported then the need to access specialist and hospital services will be reduced.

The importance of the contribution to primary health care of the professions that SARRAH represent is acknowledged by the Government through funding of scholarships including professional development schemes. It is repeatedly demonstrated that Allied Health Professional services are essential to improving the quality of life and better health outcomes for rural and remote communities.

SARRAH maintains that every Australian should have access to equitable health services wherever they live and that Allied Health Professional services are basic and core to Australians' primary health care and wellbeing.

The following comments aim to specifically address the points of reference of the **Inquiry into Hearing Health in Australia**, whilst highlighting the need to recognise the important contribution of rural and remote Allied Health Professionals in the provision of hearing health in rural and remote communities.

Section 1 – The extent, cause and cost of hearing impairment in Australia.

- One in six Australians is affected by hearing loss. ¹
- Two Australian studies, Australian Hearing 2005 ² and Upfold and Ipsey, 1982 ³, suggest a prevalence of pre-lingual hearing loss (before the age of four) of 1.2/1,000 live births and of hearing loss acquired post lingually (between the age of 4 – 14 years) as 3.2/1,000 live births.
- Prevalence in adults, over the age of 21, is 26.3% for males and 17.1% for females. This equates to one in every four men and more than one in every five adults have a hearing loss. With an ageing population, hearing loss is projected to increase to one in every four Australians by 2050. ¹
- Middle ear disease associated with a hearing loss, has been demonstrated to have prevalence rates of between 19% - 33% in school age children in indigenous communities. ^{4,5.}
- Chronic Suppurative Otitis Media (CSOM) is very uncommon in first world countries and is best regarded as a disease of poverty. The World Health Organisation (WHO) has indicated that a prevalence of greater than 4% in a paediatric population is defined as a major public health problem. CSOM affects up to ten times this rate in many Aboriginal Communities, and the associated hearing loss has a life long impact. ⁶
- Access Economics 2006 report into the economic impact and cost of hearing loss in Australia, quantifies the real financial cost of hearing loss in 2005 as being \$11.75 billion or 1.4% of GDP. ¹
- Access Economics 2008 report into the cost burden of Otitis Media in Australia, estimates the cost for all Australians who experienced Otitis Media in 2008 to be \$1.05 billion for the low estimates case and \$2.6 billion for the high estimates case. ⁷

Section 2 – The implications of hearing loss for individuals and the community.

- Hearing loss that is congenital and/or occurs prior to the development of speech and language, serves as a critical issue for a child's future. The impact of hearing loss on education outcomes is evident in the research with lower education outcomes achieved relative to their hearing peers.¹
- Adult hearing loss is associated with an increased risk for a range of health conditions, as follows:¹
 - Diabetes.
 - Stroke.
 - Elevated blood pressure.
 - Heart Disease.
 - Psychiatric Disorder.
 - Affective Mood Disorders.
 - Poorer social relations.
- Employment outcomes for people with hearing loss, when matched to gender and age, indicate that hearing impaired individuals have significantly higher rates of unemployment versus their matched hearing counterparts, after the age of 44 years.¹
- The total cost of family and other informal care provided to Australians with hearing loss in 2005 is estimated to be \$3.17 billion.¹

Section 3 – The adequacy of access to hearing services, including assessment and support services and hearing technologies.

In Australia, the provision of Audiology is divided into two main areas:

1. Diagnostic Audiology.
2. Rehabilitation Audiology.

Diagnostic Audiology includes the assessment and diagnosis of hearing loss or ear disease, and rehabilitation audiology is the audiological management of the hearing loss. Traditionally, the Ear, Nose and Throat (ENT) surgeon and/or medical officers are involved in the diagnostic phase, whereas the rehabilitation arm is performed by Audiologists, and in some cases Audiometerists (hearing technicians).

In Australia, diagnostic Audiology is provided by the state health system and rehabilitation Audiology is provided by the Commonwealth health system.

Private Audiology is available in diagnostic and rehabilitation services. There is very little subsidy provided by private health funds for these services.

Medicare supports diagnostic Audiology, but only if performed under the supervision of an ENT surgeon. Consequently, Audiologists are not able to claim these item numbers unless the service is performed in conjunction with an ENT surgeon.

Diagnostic

- Neonatal hearing screening, to identify congenital hearing loss was endorsed by a national forum for implementation in March 2001. To date the progress of this important and essential health screening function, according to the respective state government publications, is as follows:
 - Queensland: 61 hospitals providing universal hearing screening at rate of 98% of live births.
 - Western Australia: 46% of babies were tested in 2008 and the universal program is only being provided in Perth hospitals. There are no rural or remote programs in operation.
 - Victoria: has not adopted the international standard of universal hearing screening and is only providing "at risk" screening. There are some rural hospitals which have adopted universal hearing screening.
 - South Australia: 45 hospitals have adopted universal hearing screenings with >90% of babies being screened for hearing loss.
 - New South Wales: 98% of babies were tested for hearing loss in 2008. Additionally, if a family lives >100km away from a follow up clinic, they are eligible to apply for a travel subsidy to attend.
 - Northern Territory: The universal program is still being rolled out across the Territory and there are no statistics available to

date. Currently, the Darwin Hospital has commenced screening and the other 3 birthing hospitals in the Territory will commence soon.

- Tasmania: 4 maternity hospitals are providing the universal screening program with 80% of babies being tested for hearing loss.
- Please note there is no national coordination of the hearing screening programs in Australia. The corresponding state based databases do not “talk” to each other, and in some states, there are multiple information systems operating, which also do not “talk” to each other.
- All children, under the age of 21, who are diagnosed with a hearing loss that requires management and intervention, are referred to the Commonwealth funded *Australian Hearing*. Australian Hearing incorporates the National Acoustic Laboratories, which is internationally renowned for hearing research. The provision of hearing services is provided by Australian Hearing, using the research and facilities available to it, in a coordinated approach across over 106 permanent clinics and 285 visiting clinics in Australia. Australian Hearing provides the ongoing assessment, hearing aids, FM systems, maintenance of all devices, including cochlear implants, and liaison with relevant education authorities.
- The Australian Hearing information technology system, although advanced, does not provide an interface to other health and education systems operating in parallel.

Recommendations:

That the universal hearing screening program should operate as a national body to provide a coordinated and seamless approach to the diagnosis and intervention of hearing loss in infants.

That universal hearing screening needs to be implemented across all geographies in Australia to achieve the required rate of screening to be effective (>90%).

That the information technology platform should be integrated to provide ease of communication between bodies and to enable better access for the community.

- After the age of 21, an adult can access hearing assessment services at state government public hospitals. Currently, not all hospitals provide Audiology departments. According to the Audiological Society of Australia (ASA) website, the public hospitals with Audiology departments are, as follows:
 - NSW = 16, with 10 being in Sydney and 6 in regional NSW.
 - NT = 4, with 3 being in Darwin and 1 in regional NT.

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- QLD = 8, with 6 being in Brisbane or nearby and 2 in regional QLD.
 - SA = 6, with all located in metropolitan centres.
 - TAS = 1 in Hobart.
 - Vic = 20, with 12 in metropolitan centres and 8 in regional VIC.
 - WA = 10 with 4 being metropolitan centres and 6 being regional WA.
- State government funded public hospitals provide assessment and any relevant medical intervention. There can be significant waiting periods associated with the provision of either or both of these services.

Recommendations:

That consistent with the Australian Government's A healthier future for all Australians, report, the current state government hospital system be restructured to provide greater access to hearing assessment and medical intervention.

That in recognition of the evident lack of acute remote and community based services, a greater commitment to primary health care, rural based services and the use of Allied Health Practitioners is required.

That therapeutic endorsement be provided to Audiologists to provide antibiotics for the treatment of middle ear disease to assist in the disease management in rural and remote communities.

That Audiologists be able to refer directly to ENT surgeons in rural and remote communities to expedite specialist medical service access.

That these initiatives are implemented with training and quality assurance to ensure safety for patients.

- If an adult requires rehabilitation in the format of hearing technology or a hearing rehabilitation program, this is available under the *Office of Hearing Services* (OHS) scheme. To be eligible for this scheme you need to be an Australian Citizen or permanent resident 21 years or older and you are:
 - a Pensioner Concession Card Holder;
 - receiving Sickness Allowance from Centrelink;
 - the holder of a Gold Repatriation Health Card issued for all conditions;
 - the holder of a White Repatriation Health Card issued for conditions that include hearing loss;
 - a dependent of a person in one of the above categories;
 - a member of the Australian Defence Force; or
 - undergoing an Australian Government funded [vocational rehabilitation service](#) and you are referred by your service provider.

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- The OHS program enables a hearing impaired person to access a complete hearing rehabilitation program including the provision and maintenance of hearing aids or assistive listening devices. This service is provided by many hearing service providers both public, (Australian Hearing), and private. Access levels and technology levels are superior to international standards although the rural communities have less access when compared to urban centres.
 - The OHS program enables Cochlear Implants and other implantable technologies to be repaired and maintained, but it does not cover any cost to supply this equipment in the first instance.
 - There is no subsidised program available for all other individuals who fall outside the aforementioned eligibility criteria.
 - There are private Audiology practices for hearing impaired individuals to access, however the cost is often prohibitive.
 - The largest financial cost component for hearing loss is productivity loss, which accounts for 57% of all financial costs or \$6.7 billion.¹
 - Nearly half the people with hearing loss are of working age (15-64 years) and in 2005, there was an estimated 158,876 people not employed due to hearing loss. This productivity cost is due to high unemployment rates for people with hearing loss over the age of 45 years.¹

Recommendations:

That the eligibility criteria for the OHS program be reviewed to enable the working age group to access services.

That the OHS program enables access to all hearing technologies for rehabilitation, not just conventional hearing aids. This includes implantable technology.

- A major issue in remote and rural communities is the ability to attract and retain health professional staff. Audiologists are in demand in Australia at present, and this is further exacerbated in the rural and remote communities. There are no easy solutions to resolving the workforce planning issues, however initiatives that are making a difference and require further support from government include:
 - Increase the equity of scholarships for rural and remote Allied Health Professionals as compared to other health professionals.
 - Support and professional development for rural and remote Allied Health Professionals to ensure they have the appropriate level of additional skills to manage a possible lack of greater medical support.
 - Modify continuing professional development (CPD) requirements for rural and remote Allied Health Professionals. There are little if any, local accredited events for gaining CPD points and the

cost of attending metropolitan events is often prohibitive for rural and remote practitioners to attend.

- Encourage metropolitan health services to release their professional staff for 2-4 week periods as part of a community service obligation. The costs could be reimbursed to the metropolitan employer, potentially including an opportunity cost reimbursement. Alternatively, the government could consider a tax deduction for community service obligations performed by businesses. The experience would provide the Allied Health Professional with a unique perspective of Audiology. The rural or remote community would benefit from the provision of a professional service.

Recommendations:

That the number of allied health scholarships is increased and greater professional development support is provided to practitioners who are in rural and remote communities, or intend to practice there.

That access to CPD is improved for rural and remote Allied Health Professionals to ensure they maintain their accreditation in the relevant professional body.

That a Government sponsored approach is consider for allied health service provision to rural and remote Australia by metropolitan service providers completing community service obligations.

Section 4 – The adequacy of current hearing health and research programs, including education and awareness programs.

- The prevalence of hearing loss is rising, with hearing loss projected to increase to 1 in every 4 Australians by 2050. ¹
- Noise induced hearing loss is the most preventable cause of hearing loss, and yet for 37% of people with hearing loss, noise was at least partially responsible for it. ¹
- Recreation hearing loss is a relatively new area and there is no consensus, to date, as to the contribution recreational noise exposure makes to the overall prevalence of hearing loss.
- There have been some short term public health education campaigns sporadically, for example targeting hearing protection amongst farmers.
 - A “Managing Farm Safety” course was made available to farmers on a volunteer basis. 224 farmers participated in the 1 day training course and were provided with a resource kit. At follow up, 6 months later, the farmers who attended the training course, were 8 times more likely than their matched counterparts to use hearing protection. ⁹
- The Office of Australian Safety and Compensation Council have developed national standards for the management of occupational noise exposure. The standards have been adopted by the different state regulation authorities, but their interpretation and implementation differs between states. There is no national coordinated campaign.

Recommendations:

That occupational noise exposure is regulated by a national coordinated body.

That there a specific program be in place for farmers, whose needs are unique as they are responsible for their own health, rather than an employer being responsible for their safety and health in the workplace.

- In rural and remote communities, it is essential for a multidisciplinary approach to hearing and greater health care. The role of the Audiologist in remote setting is more than just testing – there is a greater responsibility. They are required to train and educate community members, leaders, teachers and other health workers.
- These training programs are essential and need to be ongoing. Currently, funding is provided for training of health workers, but local communities need broader programs with all the key members of the community trained in hearing health care, particularly community workers.

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- There needs to be training resources developed and the trainers supported both financially and professionally to deliver the programs.
 - Annual training in hearing health care would be advantageous for all community workers – new and existing. This could be delivered at the same time as the eye education program in rural communities.

Recommendations:

That the current health worker program be extended to include all community workers.

That annual hearing health training be provided to all community workers.

That these programs be delivered in conjunction with other existing health programs.

That the training resources are developed in a range of indigenous languages as well as English.

Section 5 – Specific issues affecting indigenous communities.

- The high prevalence of middle ear disease in indigenous communities is well documented.^{4,5,6} The issues contributing to this are complex and multiple.
- SARRAH aims to provide a set of recommendations that are realistic and although not exhaustive, aim to provide practical solutions to a complex situation.

The following comments are focussed on the Northern Territory, although it is understood that indigenous communities lie far outside this geographical area.

- It is to be noted, with appreciation, that the recent intervention program has provided a higher level of infrastructure to the Northern Territory hearing services program. As an example, recently, 17 sound proof booths have been installed in community schools. This is providing the audiologist/s with the tools to assess hearing in children under the age of 3. This was not available prior to the intervention, in most communities.
- At present, the intervention is focussing on surgical intervention. This is also a benefit of the program, as prior to the intervention surgery was only provided in Darwin. As part of the intervention, the surgeons and the greater surgical support team travel to the communities to provide the surgery and relevant surgical follow up services. This is also a very positive step forward.
- One of challenges of the intervention is to ensure there are adequate services in place in the communities following the visits to the communities and after the intervention per se.
- There is a significant lack of Allied Health Professionals in the Northern Territory, including, but not limited to Audiologists. Please refer to section 3 for recommendations to start to deal with this issue.
- Access to, and coordination of, hearing care in the Northern Territory is haphazard at best. There are currently several agencies involved, including:
 - NT Government.
 - Several Aboriginal Medical Services.
 - NT hospitals.
 - Australian Hearing.
 - Australian Commonwealth government intervention “Closing the Gap”.
- Access to the aforementioned services is not clear. A referral from a District Medical Officer (DMO) and GP is the official route, however many agencies will accept a referral from anyone. Several agencies also work in conjunction with the communities, by providing notice of

when they will be attending the community and encouraging all the children to attend for assessment. At worst, the Audiologist will turn up at a community and start working through a list of children who attend the school.

- The different agencies are responsible for the different components of hearing care, which could be screening, diagnostic assessment, medical services, surgical services, hearing rehabilitation. There is no coordination or integration of the different agencies and, more importantly from a client's perspective, the clinical pathway is unclear, cumbersome and lacks direction.
- Each agency has their own information technology systems; none of the systems are integrated. This results in several patient databases all holding different, but important, client information. Consequently, the care of clients is often inefficient and clients are often "lost" between the agencies. Patient reporting is an onerous task as it is manual. This is a significant issue in a workforce poor environment.
- Compounding this issue is the reality that children often attend appointments with different community members, or on their own. Therefore the more information that can be integrated, the more comprehensive the health professional can be in assisting the child in their health care.
- There is an urgent need for ONE patient/client health database for all health practitioners to access.
- Australian Hearing provides the rehabilitation service to all children under the age of 21. Due to the very nature of middle ear disease, hearing loss can fluctuate. Consequently, children with a mild impairment may never actually receive rehabilitation services or medical services as they are too mild to provide a device to or to perform surgery on – although there is an underlying hearing/middle ear problem.
- Although these decisions could be clinically appropriate in isolation, the reality is that many children slip through the system and whilst not being bad enough for surgery nor bad enough for a hearing aid, they do not have normal hearing or normal middle ear/s.
- Technology is available that would assist the multitude of children that fall into this category. It is called a Soundfield Amplification System. This technology can be fitted to a classroom to provide an amplified signal to all children in the classroom and therefore the children hear clearer speech.
- Research strongly supports the use of Soundfield amplification systems, as follows:
 - Massie (2003) showed through a cross design study of 242 children in 12 classes, results, after 12 months of using a

soundfield amplification system, showed significant improvement in literacy, reading, writing and maths.

- Heeney (2003), a New Zealand study, with 626 students in 5 schools involved in the research, showed evidence for improved outcomes in literacy, phonological awareness, reading comprehension and reading vocabulary. In addition, significant improvements were noted for students with histories of middle ear disease and students who were non-native language learners.
- Both studies indicate that classroom sound field amplification seemingly benefits all children and young people.
- Currently there is no funding for soundfield amplification systems in Australia. Australian Hearing will provide individual devices, such as a hearing aid, but they are not funded to provide soundfield amplification systems. Communities who want to purchase this technology need to do so at the community expense. Soundfield amplification systems should be fitted and maintained in every classroom.
- At present, the Commonwealth government has committed \$58.3million over 4 years to the intervention program. There is no further commitment to the program after this time frame.

Recommendations:

That the urgent development of an integrated patient database is required for all health practitioners in Northern Territory to access.

That the immediate unification and therefore integrated coordination occurs between the 5 agencies currently providing hearing health care in the Northern Territory.

That the soundfield amplification systems be installed and maintained in every classroom in Northern Territory.

That ongoing funding commitment by the Commonwealth Government beyond the current 4 years occurs to enable a long term coordinated approach to "closing the gap".

References

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