A Submission to the Australian Senate
Community Affairs References Committee

Hearing Health in Australia

October 2009

INTRODUCTION

Multi-channel Cochlear Implants, an Australian invention, and one of the greatest if not the greatest rehabilitation audiology invention to date – provide hearing impaired individuals who do not benefit from conventional technology, the opportunity to achieve greater communication outcomes.

Although the suitability criteria for cochlear implantation is broadening and is individually assessed, it is a technology that is predominantly suitable for those with severe to profound hearing loss, whereby conventional technology, ie hearing aids, do not provide adequate outcomes.

Over the past 10 years, on average, 422 cochlear implant surgeries are performed each year in Australia, with approximately 42% being on people under the age of 21. In 2008, 900 cochlear implant surgeries were performed.

In total, there are 5,900 implantees in Australia and 50% are over the age of 21, with 40 % of those individuals being over the age of 65 (or 1344 implantees).

The funding of cochlear implant systems and associated programs, is approximately **65% privately funded**, therefore with the public scheme providing approximately 35% of services and technology. For those individuals over the age of 65, 40% are privately funded, therefore a total of 800 implantees, Australia wide, are funded in the public program over the age of 65.

The provision of cochlear implant services in Australia to children is world leading. There are a number of components to a Cochlear Implant program, with respective funding required and in the case of paediatrics, provided. Please refer to the following table for the detail of a paediatric cochlear implant program.

Element of Cochlear Program	Funding Source - Paediatric
Pre-Cochlear Implant: trial of conventional technology.	Australian Hearing.
Pre-Cochlear Implant: assessment of suitability. Multidiscipline approach.	Australian Hearing. State Government hospital ENT, Audiology, Speech Pathology and Social Work departments. Hearing Impaired Early Intervention/Education organisations and state government education bodies.
Cochlear Implant Surgery.	State Government hospitals. Private health insurance companies. Self funded.
Cochlear Implant and Speech Processor (the hardware or equipment).	State Government hospital system. Private health insurance companies.
Cochlear Implant "Switch on".	State Government hospital audiology departments. Early Intervention organisations.
Cochlear Implant mapping.	State Government hospital audiology departments. Early Intervention organisations.
Early intervention/education support services.	Hearing Impaired Early Intervention/Education organisations and State Government education bodies.
Maintenance of cochlear implant and speech processor.	Australian Hearing.
Replacement of speech processor.	Australian Hearing. Private Health Insurance companies.

The waiting times for cochlear implant programs for children, are optimal for outcomes and the State and Commonwealth Governments should be congratulated on a comprehensive provision of services for children who require this technology.

This submission concerns the **public adult funding policy**, in particular the replacement and upgrade of speech processors, and hence the inadequacy of the program, for a relatively small number of participants.

The primary recommendation being put forward in this submission, to the Senate Inquiry for Hearing Health in Australia, is to provide replacement speech processors to adult cochlear implantees who are eligible for the current Office of Hearing Services Program.

The secondary recommendation is for the Senate to consider a review of the adult cochlear implant public funding scheme.

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 in projected to increase to one in every four Australians by 2050. [1]
- Prevalence of severe to profound hearing loss under the age of 14, is approximately 25% of hearing impaired children, or in 2005 it was 2567 children. [2]
- Prevalence projections suggest that the number of children with severe to profound hearing loss will increase by 7.4% by 2050. This is a function of population growth. [1]
- Prevalence of severe or profound hearing loss in adults (over the age of 15) is 2% of the adult population or in 2005 it was 403,055 adults.[1]
- In the absence of a substantive education program, the projected prevalence of people >15 years of age, with a severe or profound hearing loss will increase by 121% from 2005 to 2050. [1]
- Currently 3,100 adults in Australia have a cochlear implant and 1,900 of those are over the age of 50. [4]
- It is estimated that less than 10% of adults who would benefit from a cochlear implant have received one. [1]
- 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]

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

- Congenital hearing loss and/or 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 for 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.

This details the adult cochlear implant program in Australia.

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 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.

This applies to all rehabilitation Audiology, except implantable technology. Implantable rehabilitation audiology is performed by a multi disciplinarian team of health professionals and is part of the diagnostic system and therefore the public program is funded by state health systems.

The Commonwealth hearing program, administered by the Office of Hearing Services (OHS), provides to an eligible adult, if required, rehabilitation in the format of hearing technology or a hearing rehabilitation program. 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.

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.

If an eligible person for the OHS program is also severe or profoundly hearing impaired they may nominate or may be directed by the OHS, to access services via *Australian Hearing* (a Commonwealth Government Statutory Authority) under a Community Services Obligation or CSO, funding scheme.

The OHS program does not fund the cochlear implant or the speech processor. **The OHS should provide all hearing impaired individuals, who are eligible for the program, with access to the most appropriate technology, regardless of the severity of the hearing loss.**

The OHS program enables Cochlear Implants and other implantable technologies to be repaired and maintained, if a maintenance program is selected by the recipient. **Currently the OHS will not replace the speech processor when it can no longer be repaired, nor will they upgrade to new technology when it becomes available.** Therefore these clients are required to self fund this replacement. Unfortunately, these individuals within the OHS program, can in almost all cases, are not able to afford the replacement costs.

Please note: that these individuals do not have a hearing aid supplied under the OHS scheme and therefore do not incur the usual costs of someone in the program.

The speech processor is the external component of the cochlear implant and the reality of a broken speech processor for a cochlear implantee, is that they have no auditory function at all, or to be blunt, they are stone deaf.

Although implantees under the age of 21 are provided with replacement speech processors, adults *eligible* for the OHS program are not.

It is of concern that the OHS program is not providing equity in service provision and this anomaly is discriminating against those strongly in need of hearing technology, but who do not have good enough hearing to utilise conventional hearing aid technology.

Recommendation:

That the OHS program be extended to include the replacement of speech processors for eligible adults.

The cochlear implant and speech processor is provided by the state health system. The waiting lists for this technology are not acceptable and currently in Queensland, the adult cochlear implant waiting list is over 3 years.

Private Audiology is available in diagnostic and rehabilitation services. There is very little subsidy provided by private health funds for conventional hearing aids, however there is 100% reimbursement by private health funds for cochlear implants and speech processors for its members. Other clinical services required for successful cochlear implantation, for example regular mapping and maintenance, are primarily self-funded. Medicare supports diagnostic Audiology, but only if preformed under the supervision of a medical practitioner. Consequently, when cochlear assessment and/or mapping is performed under the supervision of a medical practitioner, a Medicare subsidy may be applicable.

The Department of Veteran Affairs provides a comprehensive cochlear implant program to its eligible veterans.

Recommendations:

That the funding for the provision of cochlear implants and speech processors for suitable candidates be increased to meet the demands of the program.

Consistent with the Commonwealth Government's *A healthier future for all Australians framework,* it is recommended that a national coordination of this adult program be considered to improve access to services.

The table below summarises the adult cochlear implant program with the small anomaly highlighted which the Senate Inquiry has the ability to rectify.

Element of Cochlear Program	**Funding Source – Adults**
Pre-Cochlear Implant: trial of conventional technology.	Self funded. If eligible, OHS program.
Pre-Cochlear Implant: assessment of suitability. Multidiscipline approach.	Self funded. State Government hospital ENT, Audiology, Speech Pathology and Social Work departments.
Cochlear Implant Surgery.	Self-funded. Private health insurance companies. State Government hospitals. DVA.
Cochlear Implant and Speech Processor (the hardware or equipment).	Self-funded. Private health insurance companies. State government hospital system. DVA.
Cochlear Implant "Switch on"	Self-funded. State Government hospital audiology departments. DVA.
Cochlear Implant mapping.	Self-funded. State Government hospital audiology departments. DVA.
Maintenance of cochlear implant and speech processor.	Self-funded. If eligible, OHS program.
Replacement of Speech Processor.	Self-funded. Private Health Insurance companies. DVA. There is currently no public funding (except DVA veterans) available for this element of the program.

These recommendations are made in good faith by the ENT surgeons listed below, who provide cochlear implantation to suitable persons in the Queensland State Government program and in private practice.

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References

1 Access Economics Report (2006) *The economic impact and cost of hearing Lloss in Australia.* Canberra.

2 Australian Hearing (2005) *Demographic details and aetiology of persons under the age of 17 years with a hearing impairment who have been fitted with a hearing aid.* Unpublished report, NAL Chatswood.

3 Upfold LJ, Ipsey J (1982) "childhood deafness in Australia – Incidence and maternal rubella, 1949-1980" *Medical Journal of Australia* 2:323-326.

4 Hand, S. General Manager Cochlear Pty Ltd Australia and New Zealand. Unpublished recipient data.