NATIONAL RURAL HEALTH ALLIANCE INC.

Submission to House of Representatives Standing Committee on Health Aged Care and Sport

Inquiry into Hearing Health and Wellbeing

December 2016

Hearing health in rural and remote Australia is a long standing interest of the National Rural Health Alliance (the Alliance). A recent edition of the Alliance's magazine *Partyline* included an article about a mobile ear health outreach service in Western Australia. A copy of that article is appended to this Submission at Attachment A.

Achieving good ear health in rural and remote Australia is strongly dependant on many external factors, including the social determinants of health. International data shows that the strongest predictor of poor ear health is being male, Aboriginal and with a mother aged under 20 (1). Australian data shows that poor living and housing conditions, exposure to smoking and lack of access to medical care are all significant factors resulting in poor ear health (1).

The prevalence of ear infection in Aboriginal and Torres Strait Islander children is among the highest in the world and produces outcomes that can impact upon speech and education (1). As a result, Aboriginal and Torres Strait Islander Australians have a high rate of ear disease and hearing loss, combined with poorer access to and use of health services, when compared with non-Indigenous Australians (2).

Addressing ear disease and hearing loss is not simply a medical issue. In situations where environmental conditions are as much a causative factor as disease agents (such as bacteria or viruses), there must be a holistic approach to achieve better control.

The Alliance supports the growth of outreach services to support better care and arrangements as well as more timely and responsive treatment. Should existing arrangements remain in place for the delivery of health services in rural and remote Australia, the Alliance would strongly support a refocussing to enable additional outreach services to support better ear health care and treatment in rural and remote communities.

The Alliance membership includes Speech Pathology Australia. Speech and language pathologists are one of the key allied health providers of services to support better hearing and improved communication in children and adults experiencing hearing loss. They work in multi-disciplinary teams with local health and community care providers to understand the range of hearing issues and develop culturally appropriate treatment and care plans. Speech pathologists also link children and adults to other support services to address deficits in a range of other areas linked to hearing, including literacy.

Access to the additional services provided by allied health to support general practitioners and Aboriginal Medical Services is vital to ensure that hearing loss is minimised.

Outreach services, such as the Deadly Ears Program and the Mobile Telemedicine-Enabled Screening and Surveillance Service, have also been delivered through visits to rural and remote community day care and schools to conduct health and hearing screening of Aboriginal and Torres Strait Islander children and make surgical referrals as necessary. In a cost effectiveness analysis, the use of such mobile telemedicine assisted services has been demonstrated to be cost effective over standard treatment and to be suitable for adaptation in other jurisdictions (2). One of the major limiting factors of rolling out additional telemedicine services will be in the acceptability of the service model in local communities and the ability to engage and train local health workers to support uptake of the service modality.

The use of primary health care checks in detecting and managing adult onset hearing loss also needs careful consideration. Because the hearing loss is not often detected early in adults, once detected it can require significant intervention to support the affected individual. McMahon et al include data estimating the annual loss to productivity due to retirement from hearing loss is

approximately $6.7 billion (in 2013 $s) with an annual loss of economic impact due to hearing loss of $11.7 billion (3).

McMahon et al describe adult onset hearing loss as often well established by the time an individual seeks assessment. The Blue Mountains Study in 1997-2000 found that by age 50, 22.4% of their cohort had mild hearing loss with prevalence of hearing loss doubling with every subsequent decade (3). The average age at which individuals seek assessment of their hearing is about 70 – by which time they, and their family, are struggling with a range of communication issues.

In identifying the range of barriers to seeking earlier intervention, McMahon et al suggest that lack of knowledge about hearing loss generally and the availability of local services is only one of many barriers. Often individuals prioritise other health issues above their hearing, or delay seeking help due to real or perceived costs.

One option is to provide greater education and information to general practitioners to enable them to raise hearing issues as part of regular primary health care checks and ensure that they know what referrals are available locally or nearby (3).

In an earlier study, Wilson et al examined the availability of data on hearing loss and how poor data impacted on the ability of health planning to cater for hearing health needs (4). There is a lack of robust epidemiological data on the extent of hearing loss nationally: Wilson et al was one of the first studies to use a representative sample to determine the prevalence of hearing loss in Australia (4). Unfortunately, the cohort did not specify either the geographic spread or indigeneity of its sample. Wilson et al found that nationally, 6.9% of the population aged 18 or over had moderate or greater hearing impairment (4). Based on current population, that would suggest that in 2016, about 1.2 million people were hearing impaired to at least a moderate degree.[1]

In conclusion, the causes, detection and management of hearing loss in children and adults are complex and not simply health related issues. Addressing hearing loss will require significant coordination across a range of sectors that influence the environment in which ear disease occurs in children and the behaviours that support early detection of adult onset hearing loss.

Encouraging the inclusion of hearing checks from childhood in regular health checks through general practice will support better identification of hearing issues. In rural and remote communities, the need to ensure access to an appropriately resourced, culturally competent multi-disciplinary team to identify, refer and treat ear health locally, supported by telemedicine and surgical intervention when necessary is vital to minimise long term damage to hearing in children. In adults, including hearing in regular general practice checks will also ensure hearing isn't lost in competing priorities.

Supporting quality general practice in rural and remote Australia with outreach services that are well coordinated and supported in local communities will also result in better outcomes for children, particularly Aboriginal and Torres Strait Islander children.

About the National Rural Health Alliance

The Alliance is comprised of 39 national member organisations. We are committed to improving the health and wellbeing of the 7 million people living in rural and remote Australia.

[1] Using ABS data **31010DO002_201603** Australian Demographic Statistics, Mar 2016

Our members include consumer groups, representation from the Aboriginal and Torres Strait Islander health sector, Health professional organisations (representing doctors, nurses, midwives, allied health professionals, dentists, optometrists, paramedics and health service managers) and health service providers. A full list of members is at Attachment B.

We advocate for good health and wellbeing for people living in rural and remote Australia. The Alliance welcomes the opportunity to make a Submission to the Inquiry into the hearing health and wellbeing of Australia.

References

1. Yiengprugsawan V, Hogan A. Ear Infection and Its Associated Risk Factors, Comorbidity and Health Service Use in Australian Children. Int J Otolaryngol. 2013;2013.
2. Nguyen K-H, Smith AC, Armfield NR, Bensink M, Scuffham PA. Cost-Effectiveness Analysis of a Mobile Ear Screening and Surveillance Service versus an Outreach Screening, Surveillance and Surgical Service for Indigenous Children in Australia. PLoS ONE [Internet]. 2015 Sep 25 [cited 2016 Dec 13];10(9). Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4583184/
3. McMahon CM, Gopinath B, Schneider J, Reath J, Hickson L, Leeder SR, et al. The Need for Improved Detection and Management of Adult-Onset Hearing Loss in Australia. Int J Otolaryngol. 2013;2013.
4. Wilson DH, Walsh PG, Sanchez L, Davis AC, Taylor AW, Tucker G, et al. The epidemiology of hearing impairment in an Australian adult population. Int J Epidemiol. 1999 Apr 1;28(2):247–52.

Attachment A

Heading outback for ear health – Debra Royle

In May 2016, I accompanied the Perth-based Earbus Foundation of WA on a one-week outreach ear health visit in the Pilbara in North West Western Australia. The primary source of funding for these visits is the Australian Government's Healthy Ears: Better Hearing, Better Listening program, which aims to improve ear health in Indigenous children and youth under 21 years of age.
The Earbus team screens and monitors hearing levels, and provides health education and treatment in remote Aboriginal community schools, as well as South Hedland Primary School, a day care centre and a women's refuge. The members of the multidisciplinary team include an audiologist, primary health practitioner (GP or nurse practitioner), nurse educator, nurse audiometrist and a person responsible for data entry and transportation, who also happens to be the Foundation's CEO. Periodically an ear nose and throat surgeon joins the team, and two 'Captain Starlights' from the Starlight Children's Foundation attend every second visit.

The Earbus Foundation's regular visits to remote communities are enabling major improvements for the children living in these communities.
The Foundation works collaboratively with the local Aboriginal Medical Service. This is essential for the provision of medications and for maintaining patient medical records, from data supplied by the team.
Consistent membership of the multidisciplinary team has buildt rapport with the children, their families, and with staff at the schools and local service providers. Dedicated and caring health professionals and volunteers work in a culturally appropriate and inclusive way.
Clinics are mostly held on school premises which minimises the amount of time away from lessons.
The service is able to locate and transport children, and their guardians if necessary, to the school to provide pre-operative information and obtain consent for surgery, and post-operative follow-up.
Earbus has implemented an Ear Health Ambassador program where children who have had positive treatment outcomes are trained to reinforce health messages to their peers between visits. The Captain Starlights enhance the children's experience through fun and creative activities, while freeing up time for the clinicians to do their tasks.
Local services provide in-kind support, such as providing storage space equipment between visits.
However, there are some challenges. Working hours are long due to distances travelled to reach remote communities each day. The service must contend with bush driving conditions: rough roads, animals on the road, long iron ore trains, and tyre blowouts. Multiple strategies are required to ensure treatment consent and compliance. There are never enough tissues!
We all went home exhausted on Friday night, yet satisfied that we had improved the children's health and wellbeing. Ongoing funding for programs, new equipment and staff is always needed.
To find out more and to help visit earbus.org.au and starlight.org.au

Strelley Community School

Audiologist, Lara Shur

Nurse, Dee Parker

Professor Harvey Coates AO

The Earbus team

Attachment B

National Rural Health Alliance - Member Body Organisations
Australasian College for Emergency Medicine (Rural, Regional and Remote Committee)
Australasian College of Health Service Management (rural members)
Australian College of Midwives (Rural and Remote Advisory Committee)
Australian College of Nursing - Rural Nursing and Midwifery Community of Interest
Australian College of Rural and Remote Medicine
Australian General Practice Network
Australian Healthcare and Hospitals Association
Allied Health Professions Australia Rural and Remote
Australian Indigenous Doctors' Association
Australian Nursing and Midwifery Federation (rural nursing and midwifery members)
Australian Physiotherapy Association (Rural Members Network)
Australian Paediatric Society
Australian Psychological Society (Rural and Remote Psychology Interest Group)
Australian Rural Health Education Network
Council of Ambulance Authorities (Rural and Remote Group)
Congress of Aboriginal and Torres Strait Islander Nurses and Midwives
CRANAplus
Country Women's Association of Australia
Exercise and Sports Science Australia (Rural and Remote Interest Group)
Federation of Rural Australian Medical Educators
Health Consumers of Rural and Remote Australia
Indigenous Allied Health Australia
Isolated Children's Parents' Association
National Aboriginal Community Controlled Health Organisation
National Aboriginal and Torres Strait Islander Health Worker Association
National Rural Health Student Network
Paramedics Australasia (Rural and Remote Special Interest Group)
Rural Special Interest Group of Pharmaceutical Society of Australia
RACGP Rural: The Royal Australian College of General Practitioners
Rural Doctors Association of Australia
Rural Dentists' Network of the Australian Dental Association
Royal Far West
Royal Flying Doctor Service
Rural Health Workforce Australia
Rural and Indigenous Health-interest Group of the Chiropractors' Association of Australia
Rural Optometry Group of Optometry Australia
Rural Pharmacists Australia
Services for Australian Rural and Remote Allied Health
Speech Pathology Australia (Rural and Remote Member Community)