THE HEALTHY EAR APP

THE NEED

Where other Australian kids have runny noses, remote Aboriginal children have runny ears. Nine out of ten children in remote communities have some form of ear disease and many suffer constant hearing loss as a result. The impact on language development, behaviour and school performance is devastating. It is a key reason why educational outcomes for Aboriginal children are well below national averages, particularly for remote area children. Many Aboriginal children in remote areas have hearing loss associated with middle ear infections (Otitis media, OM) that persist throughout the early informative years. The infections are generally asymptomatic so remain undetected and untreated, with progression to chronic suppurative otitis media (CSOM or "runny ears"). Long periods of hearing impairment are associated with cognitive and social disadvantage, developmental disability and academic delays. Medical interventions are important in the prevention and management of otitis media, but adherence is poor and ear health is not a priority. This needs to change. Resources are needed to improve communication about the causes and implications of poor ear and hearing health, to increase family participation in the management of ear infections and in assisting their hearing impaired child with communication and learning.

THE PARTNERSHIP OPPORTUNITY

What is needed now, and most of all, is concerted work to educate parents at the pre-school stage. In the remote context, where English is often a second or even third language, we need to make sure we do so in ways that parents will connect with and understand, using strong visuals and technologies they use every day.

For this project, Menzies will develop a new culturally appropriate phone app, translated into five different Aboriginal languages. It will be designed in consultation with the Child Health Indigenous Reference Group and involve extensive qualitative research in Top End remote communities. Its core aims are to:

- educate parents about the causes and implications of their children's poor ear and hearing health;
- increase family participation in the management of ear infections;
- help parents to better support their hearing impaired child with communication and learning to improving their developmental progress;
- reduce the incidence of permanent hearing damage by encouraging new parents to act sooner and more decisively, in seeking medical intervention;
- align the app to the new national guidelines for management of otitis media being developed by Menzies in partnership with the Commonwealth Department of Health; and
- promote the new app evidence-based and customised for the Indigenous and remote context via Indigenous media channels and to health professionals, so that they may play a role in encouraging its uptake.

THE IMPACT

This project focuses on managing and reducing preventable hearing loss among Aboriginal children with a particular focus on the remote communities in which ear disease is endemic. If successful, the Healthy Ear app will be rolled out nationally, via Indigenous health clinics in remote communities and urbanbased Indigenous health networks. It will be widely promoted via Indigenous media organisations and Aboriginal Medical Services.

PARTNERSHIP SOUGHT \$60,000

Menzies requires \$60,000 to conduct this project, including \$25,000 for salaries and travel costs for qualitative research in remote communities, and \$35,000 for app development, dissemination and evaluation.

STATS AND FACTS

- It is estimated that three out of five Indigenous children start school with a hearing impediment as a result of endemic ear disease. Australian Aboriginal children have the highest rates of ear disease in the world, at almost three times the rate of second place getter, Nigeria.
- In rural and remote areas, only 20% to 30% of Indigenous kids attain basic literacy and numeracy benchmarks in primary school.
- In Australia, only 33% of Aboriginal children complete their schooling, compared to a national average of 77%.
- Nation-wide, only 2% of Indigenous people have a tertiary qualification, compared to 12.8% of all Australians.

"In remote regions, there's no school for the deaf – it's a daily reality in classrooms in which the majority of kids have hearing impairments. If kids can't hear, they can't learn. The schools are doing their best, as are the health clinics, but what we need most of all is to get in early and fix this problem where it starts – with very young babies, and in the family home. This app will target parents and educate them about preventing and managing their children's hearing loss. It's a small project with huge potential."

 Professor Amanda Leach, Senior Principal Research Fellow, Menzies Centre for Research Excellence in Ear and Hearing Health, Child Health Division

Contact



