Table of Contents

1. Abbreviations and Acronyms used in this document .......................................................... 3
2. Introduction .......................................................................................................................... 4
   2.1 About this Report .......................................................................................................... 4
3. Background .......................................................................................................................... 5
   3.1 Program Overview: Healthy Ears Program ................................................................. 6
   3.2 Program Governance .................................................................................................... 6
4. Needs Assessment Methodology .......................................................................................... 7
   4.1 Research and Data Analysis Methodology .................................................................... 7
   4.2 Method .......................................................................................................................... 7
   4.3 Data Limitations ............................................................................................................ 7
   4.4 Summary of the Aboriginal and Torres Strait Islander ear health data ....................... 7
   4.5 Consultation Methodology ............................................................................................ 8
5. Victorian Aboriginal and Torres Strait Islander population distribution ............................ 10
6. Ear Health Service Outreach Model ................................................................................. 12
7. Healthy Ears: Service and Workforce Priorities ................................................................. 16
   7.1 Education and Awareness ............................................................................................ 16
   7.2 Workforce Training and Development ........................................................................ 17
   7.3 Screening and Assessment ........................................................................................... 18
   7.4 Access to Specialist Treatment and Management ....................................................... 19
   7.5 Infrastructure and Transport ........................................................................................ 19
8. Next Steps: Planning Healthy Ears outreach services for rural, regional and Aboriginal and Torres Strait Islander communities ................................................................. 21

APPENDIX A: SOURCE DOCUMENTS .................................................................................. 24

   Australian Institute of Health and Welfare (AIHW): Aboriginal and Torres Strait Islander Health Performance Framework 2012 report: Victoria ......................................................... 24

APPENDIX B: DATA SUMMARY ............................................................................................... 25

   Australian Bureau of Statistics, Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13 ................................................................. 25

   Australian Institute of Health and Welfare (AIHW): Aboriginal and Torres Strait Islander Health Performance Framework 2012 report: Victoria ......................................................... 28
## 1. Abbreviations and Acronyms used in this document

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>ACCHO</td>
<td>Aboriginal Community Controlled Health Organisation</td>
</tr>
<tr>
<td>AHW</td>
<td>Aboriginal Health Worker</td>
</tr>
<tr>
<td>AIHW</td>
<td>Australian Institute of Health and Welfare</td>
</tr>
<tr>
<td>ENT</td>
<td>Ear, Nose and Throat Specialist</td>
</tr>
<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>MBS</td>
<td>Medicare Benefits Schedule</td>
</tr>
<tr>
<td>MOICD</td>
<td>Medical Outreach Indigenous Chronic Disease Fund</td>
</tr>
<tr>
<td>The National Evaluation</td>
<td>Evaluation of the Medical Outreach Assistance Program and the Visiting Optometrists Scheme – Final Report</td>
</tr>
<tr>
<td>OM</td>
<td>Otitis Media</td>
</tr>
<tr>
<td>RHOF</td>
<td>Rural Health Outreach Fund</td>
</tr>
<tr>
<td>RWAV</td>
<td>Rural Workforce Agency Victoria</td>
</tr>
<tr>
<td>TAFE</td>
<td>Tertiary and Further Education</td>
</tr>
<tr>
<td>WHS</td>
<td>Wimmera Hearing Society</td>
</tr>
<tr>
<td>VACCHO</td>
<td>Victorian Aboriginal Community Controlled Organisation Inc</td>
</tr>
<tr>
<td>VAF</td>
<td>Victorian Advisory Forum</td>
</tr>
</tbody>
</table>
2. Introduction

The Rural Workforce Agency Victoria (RWAV) is a not for profit, government-funded agency that specialises in the recruitment, placement and support of GPs, nurses and allied health professionals. RWAV was formed in 1998 in response to the substantial general practice workforce shortages in rural and remote areas. RWAV is an experienced administrator of health outreach programs, having operated the Medical Specialists Outreach Assistance Programs (MSOAP) in Victoria for over a decade.

The Australian Government Department of Health’s Healthy Ears – Better Bearing, Better Listening (Healthy Ears), Rural Health Outreach Fund (RHOF) and Medical Outreach Indigenous Chronic Disease Program (MOICDP) are new flexible funds that consolidate a number of previous outreach health programs. These programs support multidisciplinary outreach health teams to improve ear health, mental health, maternal and paediatric health, eye health and chronic disease management in Victorian rural, regional and Aboriginal and Torres Strait Islander communities.

RWAV, the Victorian fundholder for all three programs, promotes the programs collectively as VicOutreach.

2.1 About this Report

This report presents the findings of a needs assessment for the Healthy Ears program conducted by RWAV from September to November 2014. Section 3 presents an overview of the program, including the background to establishing the program, an overview of the program and the program governance. Section 4 describes RWAV’s needs assessment methodology and Section 5 presents Aboriginal and Torres Strait Islander population distribution data.

Sections 6 to 8 present the findings from the Healthy Ears needs assessment process. The report concludes with a discussion of the considerations when delivering outreach health services for rural, regional and Aboriginal and Torres Strait Islander communities in Victoria.

The key priorities that have been identified for the Healthy Ears program in this needs assessment are:

1. Education and Awareness
2. Workforce Training and Development
3. Screening and Assessment
4. Ages 0-3
5. Access to Specialist Treatment and Management
6. Infrastructure and Transport
3. Background

Rural Workforce Agency, Victoria (RWAV) is the fundholder for both the Medical Outreach Indigenous Chronic Disease Program and the Rural Health Outreach Fund. RWAV promotes these programs to Victorian stakeholders as VicOutreach Aboriginal Health and VicOutreach Rural Health.

In late 2013, the Department of Health (the department) approached RWAV to administer the Healthy Ears – Better Hearing, Better Listening program (‘Healthy Ears’), a component of the Closing the Gap – Improving Eye and Ear Health Services for Indigenous Australians measure.

The program supports multidisciplinary team-based, outreach, ear health services to Aboriginal and Torres Strait Islander children and young people (0–21 years) living in urban, regional and rural locations in Victoria. These teams aim to improve access to culturally-safe prevention, detection, management and follow-up care ear health services for Aboriginal and Torres Strait Islander children. The program covers the travel, accommodation and other costs incurred by health professionals who provide outreach hearing health services. The program also supports the service hosting the visiting health professionals with a service coordination payment.

RWAV acted as the interim program administrator for six months from January 2014 – June 2014 while the department conducted further analysis of jurisdictional service requirements to inform future funding. In July 2014, the department contracted RWAV as the ongoing program administrator through a three-year funding agreement.

During the interim period, RWAV integrated the Healthy Ears program into RWAV's established VicOutreach program administration infrastructure to maximise efficiency and promote VicOutreach as a cohesive brand to the service sector. The program, promoted as VicOutreach Healthy Ears, retained a separate budget and reporting line within the administrative model.

During this period, RWAV also engaged the Wimmera Hearing Society Inc. (WHS) to deliver outreach ear disease detection services to Aboriginal Community Controlled Health Organisations (ACCHOs) in rural and regional Victoria. During each visit, WHS conducted ear screens for Aboriginal and Torres Strait Islander children. All children identified with hearing issues were referred to a General Practitioner (GP), Audiologist or Ear, Nose and Throat (ENT) specialist. WHS encouraged the Aboriginal Health Worker at the hosting ACCHO to follow up children who were referred for further investigation, four to six weeks after their scheduled visit to the GP or specialist and monitor these children until their ears were healthy.

The timing of the 2014–15 VicOutreach Healthy Ears Activity Work Plan restricted the assessment of need for Healthy Ears services to desktop research and a limited number of consultations with stakeholders. The broader VicOutreach Needs Assessment phase commenced prior to formalising the Healthy Ears funding agreement, excluding detailed discussions about Healthy Ears from many of the VicOutreach consultations with ACCHOs.

As a result, this Needs Assessment is focussed specifically on the Healthy Ears program and will be applied to the 2014-15 and 2015-16 financial years.
3.1 Program Overview: Healthy Ears Program

The aim of the Healthy Ears program is to increase access to a range of health services including primary health for Aboriginal and Torres Strait Islander children and youth (0-21) for the diagnosis, treatment and management of ear and hearing health.

The objectives of the program are to increase:

- Aboriginal and Torres Strait Islander children’s access to multidisciplinary care in primary health care settings
- The range of services offered by visiting health professionals to prevent, detect and manage ear diseases more effectively, as well as promote ear and hearing health in Aboriginal and Torres Strait Islander children.

3.2 Program Governance

The Australian Government defines the operations and eligible services for outreach funding support through Service Delivery Standards for each of the programs. A copy of the Healthy Ears Service Delivery Standards can be found at [https://www.rwav.com.au/programs/outreach-services](https://www.rwav.com.au/programs/outreach-services)

The program is guided by a Victorian Advisory Forum (VAF) comprising a broad range of stakeholders with relevant knowledge and involvement with existing health delivery arrangements in regional, rural and Aboriginal and Torres Strait Islander communities in Victoria. The VAF membership is listed at [Appendix A](#).

The VAF has a dual function:

- Provide a consultative mechanism for RWAV and the Department of Health (the department) to determine how best to deploy resources to address the identified priorities in Victoria.
- Evaluate all outreach proposals presented by the RWAV and endorse those proposals that meet both the priorities of the programs and the needs of the proposed locations.
4. Needs Assessment Methodology

The needs assessment process involved:

- Conducting desktop research into ear health status and service usage data
- Consulting with health services and other organisations on local area health needs, current and planned ear health services, and to assess infrastructure support.

4.1 Research and Data Analysis Methodology

RWAV conducted a desktop research of available ear health data relevant to this needs assessment.

The research and data analysis is designed to:

- Identify the prevalence of otitis media (middle ear infection), hearing loss and other ear related disease in Aboriginal and Torres Strait islander people nationally
- Identify how the rates of ear disease compare with the non-Indigenous population nationally
- Identify Aboriginal and Torres Strait Islander ear health and hearing problems by State.

4.2 Method

The desktop analysis was undertaken over a one month period in September 2014. The project methodology has involved:

1. Literature search for publicly available data and information on Aboriginal and Torres Strait Islander ear health status data available nationally and by State (see Appendix B).
2. Analysis of the evidence available relative to the priority service and workforce requirements identified through the consultation process.

4.3 Data Limitations

Whilst broad Aboriginal and Torres Strait Islander ear health data is available for Australia and Victoria, it is not publically available at Victorian LGA levels or by Medicare Local.

These limitations have also been confirmed in a recent national study which states that a ‘comprehensive national profile of the prevalence and impact of ear disease among Indigenous children is not yet available; however, the current evidence (clinical, epidemiological and by self-report) shows prevalence rates that are much higher than among non-Indigenous children and well above World Health Organization thresholds’.

This research draws on the best publicly available data; however, it cannot provide an assessment of the data accuracy or quality.

4.4 Summary of the Aboriginal and Torres Strait Islander ear health data

Nationally in 2012–13, around one in eight (12%) Aboriginal and Torres Strait Islander people reported having diseases of the ear and mastoid and/or hearing problems.

---

1 Australian Government, Australian Institute of Health and Welfare, Australian Institute of Family Studies, Ear Disease in Aboriginal and Torres Strait Islander Children, Resource Sheet 35, produced by the Closing the Gap Clearinghouse, November 2014
Within the Aboriginal and Torres Strait Islander population, the prevalence of ear/hearing problems was similar for males and females (13% and 12% respectively).

The proportion of Aboriginal and Torres Strait Islander people with ear/hearing problems was the same in non-remote areas and remote areas (both 12%).

Aboriginal and Torres Strait Islander people were significantly more likely than non-Indigenous people to have diseases of the ear and mastoid and/or hearing problems (rate ratio of 1.3).

According to the 2008 National Aboriginal and Torres Strait Islander Social Survey (2008), about 6% of Indigenous children aged 0–14 in Victoria had ear or hearing problems. This compared with almost 9% of Indigenous children nationally.

Further detail on Aboriginal and Torres Strait Islander ear health data can be located in Appendix C of this document.

4.5 Consultation Methodology

Over a one month period from October to November 2014, RWAV consulted with a range of stakeholders through semi-structured interviews conducted mainly in person. Where this was not able to occur consultations were by telephone and/or email. Due to the limitations of available data, the consultation outcomes have been used as the main source of information in determining the priorities identified in Section 6 of this document.

The consultation plan was designed to:

- Communicate the Healthy Ears program to stakeholders
- Validate the community and service need reflected in the available data
- Identify existing ear health services
- Identify ongoing service needs and service gaps
- Support future health service planning
- Establish or strengthen productive relationships with organisations with health service planning responsibilities
- Identify and, where possible, engage potential outreach health professionals and host services.

RWAV identified the following four key stakeholder groups to consult:

**Current Service Providers**

RWAV consulted with the following ear health service providers in Victoria:

- Wimmera Hearing Society
- The Royal Victorian Eye and Ear Hospital
- Australian Hearing
- Local and regional hospitals and specialist services (public and private) where possible.
Local Health Services

RWAV consulted all Aboriginal Community Controlled Health Organisations (ACCHOs) in Victoria (see the full list in Appendix E) and community health services that hold knowledge on local area health needs and gaps in the local system. RWAV consulted with these organisations to:

- Identify existing services, infrastructure and equipment on site dedicated to ear health service delivery
- Validate the service needs identified through the data and identify multidisciplinary health teams to address needs and service gaps
- Identify potential host services and assess locations for capacity to establish, support and sustain outreach ear health services
- Determine appropriate service delivery models
- Identify existing local networks to ensure future outreach ear service planning is aligned and integrated with local needs assessments and current service delivery.

Medicare Locals and Department of Health regional offices hold knowledge about regional trends and service systems. RWAV consulted with these organisations as part of the broader VicOutreach Needs Assessment to:

- Prioritise communities in need
- Identify key informants for local consultations
- Identify the capacity of the current health system in different locations to support outreach health services
- Establish working partnerships to assist in future needs assessments and other program planning activity.

The Victorian Aboriginal Community Controlled Health Organisation (VACCHO) were also contacted, specifically on the delivery of training to Aboriginal Health Workers in Victoria.
5. Victorian Aboriginal and Torres Strait Islander population distribution

The 2011 Census data found that there were 40,550 Aboriginal and Torres Strait Islanders in Victoria. Fifty-two per cent (21,345) lived in rural Victoria.

Table 1: Victorian Aboriginal and Torres Strait Islander populations greater than 500,200 by Local Government Area

<table>
<thead>
<tr>
<th>LGA</th>
<th>DH Region</th>
<th>Predominant RA</th>
<th>TOTAL ERP LGA Pop 2011</th>
<th>TOTAL ATSI Pop 2011</th>
<th>%ATSI pop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Shepparton</td>
<td>Hume</td>
<td>2</td>
<td>61,737</td>
<td>2240</td>
<td>3.6</td>
</tr>
<tr>
<td>Mildura</td>
<td>Loddon Mallee</td>
<td>3</td>
<td>51,848</td>
<td>1966</td>
<td>3.8</td>
</tr>
<tr>
<td>Greater Geelong</td>
<td>Barwon South West</td>
<td>2</td>
<td>215,151</td>
<td>1899</td>
<td>0.9</td>
</tr>
<tr>
<td>Greater Bendigo</td>
<td>Loddon Mallee</td>
<td>2</td>
<td>101,868</td>
<td>1518</td>
<td>1.5</td>
</tr>
<tr>
<td>Casey</td>
<td>Southern Metro</td>
<td>1</td>
<td>260,404</td>
<td>1502</td>
<td>0.6</td>
</tr>
<tr>
<td>East Gippsland</td>
<td>Gippsland</td>
<td>3</td>
<td>42,793</td>
<td>1424</td>
<td>3.3</td>
</tr>
<tr>
<td>Darebin</td>
<td>North and West Metro</td>
<td>1</td>
<td>143,057</td>
<td>1281</td>
<td>0.9</td>
</tr>
<tr>
<td>Wyndham</td>
<td>North and West Metro</td>
<td>2</td>
<td>166,038</td>
<td>1235</td>
<td>0.7</td>
</tr>
<tr>
<td>Whittlesea</td>
<td>North and West Metro</td>
<td>2</td>
<td>160,371</td>
<td>1217</td>
<td>0.8</td>
</tr>
<tr>
<td>Ballarat</td>
<td>Grampians</td>
<td>2</td>
<td>95,007</td>
<td>1208</td>
<td>1.3</td>
</tr>
<tr>
<td>Hume</td>
<td>North and West Metro</td>
<td>1</td>
<td>175,063</td>
<td>1153</td>
<td>0.7</td>
</tr>
<tr>
<td>Latrobe</td>
<td>Gippsland</td>
<td>2</td>
<td>73,564</td>
<td>1124</td>
<td>1.5</td>
</tr>
<tr>
<td>Frankston</td>
<td>Southern Metropolitan</td>
<td>1</td>
<td>130,055</td>
<td>1088</td>
<td>0.8</td>
</tr>
<tr>
<td>Mornington Peninsula</td>
<td>Southern Metropolitan</td>
<td>1</td>
<td>149,156</td>
<td>1053</td>
<td>0.7</td>
</tr>
<tr>
<td>Yarra Ranges</td>
<td>Eastern Metropolitan</td>
<td>2</td>
<td>148,754</td>
<td>1040</td>
<td>0.7</td>
</tr>
<tr>
<td>Swan Hill</td>
<td>Loddon Mallee</td>
<td>3</td>
<td>20,830</td>
<td>951</td>
<td>4.6</td>
</tr>
<tr>
<td>Campaspe</td>
<td>Loddon Mallee</td>
<td>2</td>
<td>36,665</td>
<td>861</td>
<td>2.3</td>
</tr>
<tr>
<td>Melton</td>
<td>North and West Metro</td>
<td>2</td>
<td>112,168</td>
<td>854</td>
<td>0.8</td>
</tr>
<tr>
<td>Moreland</td>
<td>North and West Metro</td>
<td>1</td>
<td>155,087</td>
<td>785</td>
<td>0.5</td>
</tr>
<tr>
<td>Brimbank</td>
<td>North and West Metro</td>
<td>1</td>
<td>191,084</td>
<td>783</td>
<td>0.4</td>
</tr>
<tr>
<td>Wodonga</td>
<td>Hume</td>
<td>2</td>
<td>36,043</td>
<td>741</td>
<td>2.1</td>
</tr>
<tr>
<td>Banyule</td>
<td>North and West Metro</td>
<td>1</td>
<td>122,722</td>
<td>665</td>
<td>0.5</td>
</tr>
<tr>
<td>Wellington</td>
<td>Gippsland</td>
<td>3</td>
<td>41,945</td>
<td>624</td>
<td>1.5</td>
</tr>
<tr>
<td>Knox</td>
<td>Eastern Metropolitan</td>
<td>1</td>
<td>154,097</td>
<td>577</td>
<td>0.4</td>
</tr>
<tr>
<td>LGA</td>
<td>DH Region</td>
<td>Predominant RA</td>
<td>TOTAL ERP LGA Pop 2011</td>
<td>TOTAL ERP ATSI Pop 2011</td>
<td>%ATSI pop</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------</td>
<td>----------------</td>
<td>------------------------</td>
<td>-------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Greater Dandenong</td>
<td>Southern Metropolitan</td>
<td>1</td>
<td>142,591</td>
<td>546</td>
<td>0.4</td>
</tr>
<tr>
<td>Warrnambool</td>
<td>Barwon South West</td>
<td>2</td>
<td>32,592</td>
<td>527</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Metropolitan Department of Health Regions
Rural Department of Health Regions
6. Ear Health Service Outreach Model

Based on the outcomes of the consultations and with reference to key studies including the *Deadly Ears, Deadly Kids, Deadly Communities: 2009-2014*\(^2\), the *Recommendations for Clinical Care Guidelines on the Management of Otitis Media in Aboriginal and Torres Strait Islander populations* (2010)\(^3\) and the *Ear Disease in Aboriginal and Torres Strait Islander Children, Closing the Gap Clearinghouse (2014)*\(^4\), the following workforce services and community supports have been identified as key to the prevention and management of otitis media and other forms of ear disease in Aboriginal communities.

**Education and Awareness**
- Family
- Aboriginal Health Worker (AHW)
- Teachers and Child Care Worker

**Assessment: Screening, Surveillance and Diagnosis**
- AHW
- General Practitioner (GP)
- Practice Nurse
- Audiometrist
- Audiologist (including Paediatric Audiologist)

**Treatment, Management and Rehabilitation**
- Family
- Ear Nose and Throat (ENT) Specialist
- Audiologist
- GP
- AHW
- Related Allied Health roles (for example Speech Pathologist)
- Schools, Teachers and Child Care Worker

---


\(^3\) Australian Government, *Department of Health and Ageing, Recommendations for Clinical Care Guidelines on the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations*, updated 2010

Key enablers to supporting these stakeholders include:

- **Partnerships** between related services across the community (for example Schools, Child Care services and health services)
- **Workforce Development and Training** (for example AHW training, Allied Health training, multidisciplinary workforce models)
- **Information and Knowledge** (developing systems to accurately record ear health data in the community).

Figure 1 shows the links between the service stages along the ear health continuum of care and the enablers underpinning those stages. For the patient journey, there would be varied entry and exit points depending on diagnosis and treatment. This is consistent with the Closing the Gap study which has highlighted the importance of a ‘coordinated approach comprising disease prevention, treatment and management’.

Figure 2 provides examples of the workforce required to assess, treat and manage ear health in the Aboriginal Community at different stages of the continuum. Central to this workforce at all stages of ear and hearing care is the role of the AHW who, in a coordinated ear health service model, would provide community based promotion and assessment services and manage the follow up consultations and rehabilitation outcomes with the client.

---

5 Australian Government, Australian Institute of Health and Welfare, Australian Institute of Family Studies, Ear Disease in Aboriginal and Torres Strait Islander Children, Resource Sheet 35, produced by the Closing the Gap Clearinghouse, November 2014
Figure 1: Ear Health Service Cycle

EDUCATION AND AWARENESS

SCREENING AND ASSESSMENT

SECONDARY / TERTIARY TREATMENT

PRIMARY TREATMENT AND MANAGEMENT

ONGOING MANAGEMENT AND REHABILITATION

PARTNERSHIPS

WORKFORCE DEVELOPMENT

INFORMATION AND KNOWLEDGE
Figure 2: Aboriginal Health Service: Coordinated Ear Health Workforce Model

ASSESSMENT & PRIMARY
AHW, GP, Nurse, Audiometrist, Audiologist

MANAGEMENT
GP, Allied Health, Nurses, Teachers, Child Care

AHW

SECONDARY
Audiologist
ENT Specialist

TERTIARY
ENT Surgery
Audiologist
7. Healthy Ears: Service and Workforce Priorities

In October and early November 2014, RWAV undertook a range of consultations with ACCHOs, community health services and service based providers and agencies to identify key priorities for the provision of a best practice ear health service to the Aboriginal and Torres Strait islander community aged between 0 and 21.

The consultations often referred to the Ear Health Service model described above as a guide to the discussions in identifying priority needs across Victoria. It was clear that overall there are elements of an ear health service ACCHOs model in place in most sites but a comprehensive approach from assessment through to treatment and management was rarely identified.

It was also identified throughout the needs assessment consultations that there are other programs currently providing ear health services to Aboriginal communities in Victoria. This includes the Australian Hearing Specialist Program for Indigenous Australians (AHSPIA). Australian Hearing is funded through the Department of Health to provide tertiary-level rehabilitative hearing services for children and adults who have been diagnosed with permanent hearing loss and to provide outreach services to reduce the impact of hearing loss in urban, rural and remote Aboriginal and Torres Strait Islander communities.

In Victoria, Australian Hearing employs audiologists from Melbourne and regional areas to travel to ACCHOs, with extensive coverage across the state but varying degrees of regularity across sites. Only three ACCHOs do not currently receive a service from Australian Hearing. Australian Hearing identified early stage screening and diagnostic assessments, training for AHWs in providing screening services, and access to ENT support as major gaps in ear health service delivery across Aboriginal communities in Victoria.

The needs and priorities raised by ACCHOs and service agencies (including Australian Hearing) through the consultations are reflected below.

7.1 Education and Awareness

The need to address poor knowledge of the causes, preventions and interventions of ear disease has been recognised by the Australian Government. This has also been recognised in the Recommendations for Clinical Guidelines on the Management of Otitis Media which states that ‘awareness among families and teachers for early identification of language and behavioural problems, early hearing assessment and appropriate management is very important for the prevention of OM related hearing loss and its consequences’.

---

6 Australian Government, Australian Institute of Health and Welfare, Australian Institute of Family Studies, Ear Disease in Aboriginal and Torres Strait Islander Children, Resource Sheet 35, produced by the Closing the Gap Clearinghouse, November 2014
7 Australian Government, Department of Health and Ageing, Recommendations for Clinical Care Guidelines on the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations, updated 2010
In support of the need to promote awareness, health promotion materials have been developed for national distribution under the Care for Kids’ Ears campaign highlighting the recognition of ear disease and the importance of seeking treatment\(^8\).

The education and awareness of families, schools, child care services and other health professions in relation to ear disease was raised as a service gap in the consultations. Ideas to address this raised by ACCHOs included:

- Publication of a local ear health training kit for parents (one ACCHO in particular has developed much of this material but currently lacks funds to publish it)
- Developing and distributing promotional campaigns (e.g. posters, DVDs)
- Newsletters
- Regular screening of young people at community events, mothers’ groups, or paediatric clinics where at least one parent was present.

### 7.2 Workforce Training and Development

In developing a statewide strategic response to ear disease in the Aboriginal and Torres Strait Islander community, Queensland Health specifically identified workforce development as a system enabler with key strategic actions aimed at building the capacity of the Aboriginal and Torres Strait Islander Health Worker, early education and the visiting specialist workforce\(^9\). The training and development of AHWs as the key workforce in delivering primary care in communities is further supported in the Clinical Guidelines on the Management Otitis Media ‘to improve prevention, diagnosis and management of OM’\(^{10}\).

The training of AHWs in the ACCHOs was regularly raised as a high priority in the early detection of ear disease amongst young people during the consultations for this program. Whilst some sites had AHWs that were trained and were still undertaking screening roles, many did not. Australian Hearing stated that they were previously funded to provide formal training to the AHWs but this funding ceased approximately five years ago and many of the AHWs trained at that time are no longer employed in the ACCHOs. RWAV found four sites where trained AHWs were employed in the role where they continue to provide ear screening services, although one was leaving that role within a month of the consultation meeting. It was also identified that NACCHO has previously provided training in ear health assessment and screening for AHWs in Victoria in 2013 under the national ‘Ear and Health Workforce’ project.

At one site where an AHW was trained and was providing a screening service it was stated that, although the training enabled him to conduct screening in schools, it was informal training and as a result the ACCHO was unable to claim any Medicare payments for the service. The ACCHO stated

---

\(^8\) Australian Government, Department of Health and Ageing, Care for Kids’ Ear Resources, 2013


\(^{10}\) Australian Government, Department of Health and Ageing, Recommendations for Clinical Care Guidelines on the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations, updated 2010
that, to resolve this, AHWs need to be provided with the opportunity to undertake Certificate IV in Audiometric Assessment training. A web based search currently only identifies one provider (Western Sydney TAFE) as delivering this course in Australia.

Many, but not all, of the ACCHOs also have equipment for screening purposes (audiometers and otoscopes). However, this was often underutilised due to the lack of trained staff on the site and was also unlikely to have been recently calibrated due to a lack of training for AHWs.

7.3 Screening and Assessment

Screening programs are an important component of a coordinated strategy to improve the ear health of Indigenous children. Successful screening programs depend ‘on the reliability of the screening test, and the referral and follow-up’\(^\text{11}\).

Through consultations, it was identified that general ear screening and assessments of young people in the community are not regularly provided as a discrete health program. Often ear disease is only identified upon presentation for noticeable ear pain, hearing issues or when presenting to the GP for other issues. As a result, many communities are not able to provide an early intervention program and ear disease is often only identified in the later stages, requiring more complex treatment and management. The WHS screening service provided through the RWAV Healthy Ears program to date was generally considered vital to addressing this service need. During the course of the consultation this service was also extended to four more communities with an identified screening need.

Some ACCHOs already displayed comprehensive ear health management strategies from screening and early intervention (including as part of the ‘Ages and Stages’ health checks and/or school screening by the AHW), with referral to the site based GPs, access to a supported visiting audiologist (through Australian Hearing) and access to local ENT specialists.

Ages 0-3 Years

The importance of neonatal hearing screening is well recognised across studies in the management and early intervention of ear disease. Neonates screened in the first month of their life ‘have earlier referral, diagnosis and treatment; they also have better language outcomes at school’\(^\text{12}\). The Clinical Guidelines on the Management Otitis Media have also dedicated as Priority 1, children under 3 years old with discharging ears in the section, ‘Prioritisation of Primary Health Care Services in Different Settings’\(^\text{13}\).

It was stated in the consultations by most services that dedicated paediatric ear services are largely absent in the 0-3 age bracket age. The services provided by Wimmera Hearing Society (through this RWAV Healthy Ears program) and Australian Hearing are generally well accessed by the ages of 4 or 5 and over but it was identified that additional resources would need to be allocated to focus on the

\[^{11}\text{Australian Government, Australian Institute of Health and Welfare, Australian Institute of Family Studies, Ear Disease in Aboriginal and Torres Strait Islander Children, Resource Sheet 35, produced by the Closing the Gap Clearinghouse, November 2014}\]

\[^{12}\text{Australian Government, Australian Institute of Health and Welfare, Australian Institute of Family Studies, Ear Disease in Aboriginal and Torres Strait Islander Children, Resource Sheet 35, produced by the Closing the Gap Clearinghouse, November 2014}\]

\[^{13}\text{Australian Government, Department of Health and Ageing, Recommendations for Clinical Care Guidelines on the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations, updated 2010}\]
younger ages. This is usually undertaken through visual response audiometry specifically aimed at that age group, which requires specific equipment to be effective.

Ear disease in children aged 0-3 is often undiagnosed due to servicing gaps in the age group and by the time it is diagnosed it may have progressed to a more chronic stage, often leading to slight hearing loss and speech and learning difficulties. Whilst newborn babies are screened upon birth there is very little in place to identify ear health issues prior to schooling. One site in particular was very interested in establishing a paediatric audiology service for this purpose. In that community, it was stated that there was no consistent service for this age group available locally and the ACCHO was an ideal location to undertake this, with an audiologist already available in the service. The missing component was the necessary equipment.

7.4 Access to Specialist Treatment and Management

Under the recommended treatment, algorithms for clinicians and health workers in the Clinical Guidelines on the Management Otitis Media tertiary referral to ENT and/or audiological services is identified as a key treatment pathway in the management of persistent OM in high-risk populations, the management of Chronic Suppurative Otitis media (CSOM), the management of dry perforation and the management of hearing loss due to OM.  

Access to specialist treatment and management was regularly identified as a major barrier to ear health services in the consultations for Healthy Ears. This includes:

- Access to ENT Specialists (not only geographic access but also the financial access affected by high costs of local private providers)
- Audiologists for diagnostic assessments
- Speech Pathologists

There were variations in the level of service gaps in these areas between each site and region. For example, the need for access to an ENT specialist in the Gippsland area was considered to be a very high priority by all ACCHOs, whereas in other areas (for example Mildura) it was considered that access to the local ENT was adequate at this stage.

Access to specialist treatment and management was generally considered to be the key service gap in the ear health service continuum across most locations due to the high cost of treatment, the long waiting lists and often the long distance required to travel to consulting and surgery services.

7.5 Infrastructure and Transport

Systems that allow for the collection and analysis of data to monitor trends in outcomes and underlying causes is crucial in identifying successful strategies in the management of ear disease.

---

14 Australian Government, Department of Health and Ageing, Recommendations for Clinical Care Guidelines on the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations, updated 2010
15 Australian Government, Australian Institute of Health and Welfare, Australian Institute of Family Studies, Ear Disease in Aboriginal and Torres Strait Islander Children, Resource Sheet 35, produced by the Closing the Gap Clearinghouse, November 2014
One ACCHO identified a gap in the ability of health services to accurately retrieve good data to identify need and support applications for funding under the current clinical software systems. The same practice also identified the ability of clients to travel to the service with a very large catchment as a barrier to accessing dedicated screening days. It was suggested to RWAV that all visiting specialists should be able to allocate a budget in their funding applications to support the transportation of clients to the service.
8. Next Steps: Planning Healthy Ears outreach services for rural, regional and Aboriginal and Torres Strait Islander communities

8.1 Challenges in delivering outreach services

The findings in this needs assessment will guide RWAV in planning and prioritising outreach ear health services funded through VicOutreach. In 2011, the Australian Government commissioned the Evaluation of the Medical Outreach Assistance Program and the Visiting Optometrists Scheme – Final Report 16 (the national evaluation), a comprehensive review of the outreach health services programs. The national evaluation and RWAV’s considerable experience in administering outreach services identify some of the challenges in establishing and retaining outreach health services in local communities that must be considered as RWAV progresses with the programs.

These challenges include:

**Recruiting health professionals to provide outreach services:** Only some health professionals are willing to make long-term commitments to providing outreach health services in Aboriginal health due to the time commitment and the impact on remuneration. Sourcing willing providers from closer regional hubs can also be problematic, with the few available health professionals being in high demand. RWAV plans to strengthen the recruitment effort and promote service delivery models, such as clusters and telehealth, to most effectively utilise the pool of visiting health professionals.

**Access to GP services:** GP services are core to coordinated health care in the community and provide the basis for visiting health professionals to provide outreach services. A lack of access to a GP, whether through unavailability or lack of bulk-billing, can compromise the sustainability of outreach services, particularly in ACCHOs. RWAV will assess the availability of GP services during the application process and encourage local host services to promote visiting health professionals to local GPs. The VicOutreach team will work closely with RWAV’s Workforce and Aboriginal Health Consultants to support ACCHO to access GP services.

**Pressures on accommodation:** Room space in rural ACCHOs services can be tight, with some facilities unable to accommodate more than one visiting health professional at a time. This has implications for the multidisciplinary team-based service delivery models and requires capacity within the host service to coordinate multiple visiting health professionals. RWAV will provide funding to support host services to arrange adequate facilities and coordination capacity for visiting health professionals when establishing outreach services.

**Bulk-billed versus privately-billed services:** Consultations with ACCHOs have reconfirmed the national evaluation's finding that bulk-billed services remove barriers to health care. The inherent challenge is that a profitable service is more likely to continue if outreach funding support is withdrawn as, once established, the health professional has a financial interest in continuing to provide the service. RWAV will encourage visiting health professionals to bulk-bill disadvantaged

---

community members and consider the mix of local and visiting health services to ensure there is adequate access to bulk-billed services.

**Service integration:** A visiting health professional must work closely with local health professionals to deliver care. This involves a range of activities, including promoting service availability to local GPs and other primary care professionals, developing clear referral and exit planning processes, and using care plans and other mechanisms to allow for effective local management of patients between visits. RWAV will assess service integration through the application process.

**Upskilling:** Both formal and informal upskilling is an extremely important part of the role of visiting health professional, with many health services seeing visiting health professionals as an opportunity to develop their staff, particularly in more isolated locations. The national evaluation noted the value of informal upskilling by health professionals (such as during meal and tea breaks) and being available to advise local staff beyond the outreach visit. RWAV will support and promote upskilling activities in ear health under the Healthy Ears program provided to ACCHOs by visiting health professionals.

**Telehealth:** Considerable investment has been made in establishing telemedicine capacity in rural health services; however, the use of telemedicine to provide services to rural and regional communities is not broadly used. There is a large scope for enhancing telemedicine service across a range of specialties and RWAV will encourage telehealth as part of the application process and through the annual service review wherever possible.

### 8.2 Planning for coordinated models for service delivery: Healthy Ears

The successful delivery of the Healthy Ears program will rely on developing coordinated, multidisciplinary responses to the priorities identified in both the desktop research and the consultations undertaken by RWAV, consistent with the Department of Health ‘Service Delivery Standards’.

Hub and spoke outreach models that build on and integrate with the existing workforce and services will be crucial in improving ear health outcomes in the Aboriginal and Torres Strait Islander communities in Victoria. This includes working closely with ACCHOs, local and regional hospitals, local and regional private health providers, schools, child care services, community programs and relevant community service providers. The successful prevention, recognition, diagnosis, treatment and management of ear disease is not limited to the health portfolio. This was also recognised in the Deadly Ears, Deadly Kids, Deadly Communities framework which was intended to impact on services in:

- Health
- Aboriginal and Torres Strait Islander policy
- Community development
- Environmental health
- Education
- Employment
- Justice
The Ear Health Service Outreach Model developed in Section 6 of this document will provide a platform for planning a coordinated primary health care response to local needs across all of the services that impact on, or are affected by, ear disease and hearing loss in the Aboriginal and Torres Strait Islander communities.

17 Queensland Government, Deadly Ears Deadly Kids Deadly Communities: 2009-2013, Making Tracks to Close the Gap in Ear Health for Aboriginal and Torres Strait Islander Children in Queensland, 2009
APPENDIX A: SOURCE DOCUMENTS

The following documents were sourced in developing this Needs Assessment.

- Australian Bureau of Statistics (ABS), Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13

- Australian Government, Australian Institute of Health and Welfare, Australian Institute of Family Studies, Ear Disease in Aboriginal and Torres Strait Islander Children, Resource Sheet 35, produced by the Closing the Gap Clearinghouse, November 2014


- Australian Government, Department of Health and Ageing, Recommendations for Clinical Care Guidelines on the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations, updated 2010

- Australian Indigenous HealthInfoNet and EarInfoNet, www.healthinfonet.ecu.edu.au


- Stuart J, Department of Community Medicine and Paediatrics, University of Newcastle, Australian Doctors’ Fund, Ear Disease in Aboriginal Children – Is Prevention an Option, Australian Doctors’ Fund, Feb 1992

- VACCHO 2013-16 Strategic Plan, Victorian Aboriginal Community Controlled Health Organisation Incorporated, 2013
APPENDIX B: DATA SUMMARY

Australian Bureau of Statistics, Australian Aboriginal and Torres Strait Islander Health Survey: First Results, Australia, 2012-13

EAR DISEASES AND HEARING PROBLEMS

In the Aboriginal and Torres Strait Islander population, hearing loss continues to be a health issue of concern. For many Aboriginal and Torres Strait Islander people, hearing loss is caused by chronic otitis media (middle ear infection) in childhood. Aside from the difficulties that hearing loss may cause in daily social interactions, children that experience hearing loss may have difficulty following what is being taught at school, which, in turn, may lead to poorer educational and employment outcomes in later life.

RESULTS FROM 2012–13

In 2012–13, around one in eight (12%) Aboriginal and Torres Strait Islander people reported having diseases of the ear and mastoid and/or hearing problems.

Within the Aboriginal and Torres Strait Islander population, the prevalence of ear/hearing problems was similar for males and females (13% and 12% respectively).

The proportion of Aboriginal and Torres Strait Islander people with ear/hearing problems increased with age, ranging from around one in fourteen (7%) Aboriginal and Torres Strait Islander children aged 0–14 years, to just over one-quarter (28%) of those aged 55 years and over.

Around one in thirty (3%) Aboriginal and Torres Strait Islander children aged 0–14 years were reported to have hearing loss. The same proportion (3%) of Aboriginal and Torres Strait Islander children were reported to have otitis media. Chronic otitis media is the most common cause of hearing loss in Aboriginal and Torres Strait Islander children. In all other age groups, hearing loss was the most commonly reported ear/hearing problem, affecting between 7% of Aboriginal and Torres Strait Islander people aged 15–24 years to 26% of those aged 55 years and over.

The proportion of Aboriginal and Torres Strait Islander people with ear/hearing problems was the same in non-remote areas and remote areas (both 12%).

CHANGE OVER TIME

Between 2001 and 2012–13, the prevalence of ear/hearing problems in the Aboriginal and Torres Strait Islander population decreased significantly from 15% to 12%. While rates for ear/hearing problems have fallen in both non-remote and remote areas over the past decade, the decrease in non-remote areas was not statistically significant.

HOW DO THESE RATES COMPARE WITH THE RATES FOR NON-INDIGENOUS PEOPLE?

After adjusting for differences in age structure between the two populations, Aboriginal and Torres Strait Islander people were significantly more likely than non-Indigenous people to have diseases of
the ear and mastoid and/or hearing problems (rate ratio of 1.3). There were statistically significant
differences between age standardised rates for both males (rate ratio of 1.2) and females (rate ratio
of 1.5), and in all age groups under 55 years.
### Table 3.1 Selected health characteristics, by State/Territory—2012–13, Aboriginal and Torres Strait Islander persons (estimate)

<table>
<thead>
<tr>
<th></th>
<th>NSW</th>
<th>Vic.</th>
<th>Qld</th>
<th>SA</th>
<th>WA</th>
<th>Tas</th>
<th>NT</th>
<th>ACT</th>
<th>Aust</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>'000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Self-assessed health status(a)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>17.7</td>
<td>3.6</td>
<td>14.6</td>
<td>2.5</td>
<td>7.1</td>
<td>1.6</td>
<td>5.4</td>
<td>0.6</td>
<td>53.0</td>
</tr>
<tr>
<td>Very good</td>
<td>32.7</td>
<td>8.2</td>
<td>27.9</td>
<td>6.1</td>
<td>13.9</td>
<td>4.4</td>
<td>12.8</td>
<td>1.3</td>
<td>3</td>
</tr>
<tr>
<td>Excellent/very good</td>
<td>50.4</td>
<td>11.8</td>
<td>42.5</td>
<td>8.6</td>
<td>21.0</td>
<td>6.1</td>
<td>18.2</td>
<td>1.8</td>
<td>160.</td>
</tr>
<tr>
<td>Good</td>
<td>43.0</td>
<td>9.3</td>
<td>42.6</td>
<td>8.6</td>
<td>20.5</td>
<td>5.0</td>
<td>16.9</td>
<td>1.3</td>
<td>107.3</td>
</tr>
<tr>
<td>Fair</td>
<td>24.5</td>
<td>5.7</td>
<td>20.8</td>
<td>4.1</td>
<td>7.5</td>
<td>2.6</td>
<td>6.3</td>
<td>0.6</td>
<td>72.0</td>
</tr>
<tr>
<td>Poor</td>
<td>10.1</td>
<td>2.5</td>
<td>7.0</td>
<td>1.8</td>
<td>4.0</td>
<td>1.6</td>
<td>2.1</td>
<td>*0.2</td>
<td>29.2</td>
</tr>
<tr>
<td>Fair/poor</td>
<td>34.6</td>
<td>8.2</td>
<td>27.8</td>
<td>5.9</td>
<td>11.5</td>
<td>4.2</td>
<td>8.3</td>
<td>0.8</td>
<td>101.3</td>
</tr>
<tr>
<td><strong>Selected current long-term conditions(d)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ear/hearing problems(h)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25.2</td>
<td>6.3</td>
<td>20.2</td>
<td>5.6</td>
<td>11.0</td>
<td>3.2</td>
<td>6.4</td>
<td>0.7</td>
<td>78.4</td>
</tr>
</tbody>
</table>

* estimate has a relative standard error between 25% and 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(h) Includes complete deafness; partial deafness and hearing loss not elsewhere classified; diseases of the middle ear and mastoid processes; diseases of the inner ear; and other diseases of the ear.
Ear Health
Hearing loss, especially in childhood, can lead to social and learning difficulties and behavioural problems in school, which may have a negative effect on educational outcomes. Hearing loss among Aboriginal and Torres Strait Islander people is widespread and much more common than in the broader Australian population. Data are presented on children's ear health using self-reported prevalence data from the 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) and hospitalisation rates for diseases of the ear and mastoid process.

Key findings
• According to the 2008 NATSISS, about 6% of Indigenous children aged 0–14 in Victoria had ear or hearing problems. This compared with almost 9% of Indigenous children nationally.

• Between July 2008 and June 2010, Indigenous people in Victoria were hospitalised with a principal diagnosis of diseases of the ear and mastoid process at 2.0 per 1,000 which was lower than for non-Indigenous people in Victoria (2.6 per 1,000), and lower than for Indigenous people in New South Wales, Victoria, Queensland, South Australia, Western Australia and the Northern Territory combined (3.3 per 1,000).

• From 2004–05 to 2009–10 in Victoria, there were no significant changes in hospitalisation rates for diseases of the ear and mastoid process among Indigenous and non-Indigenous people.

• Over the same period in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, there was a significant increase in hospitalisation rates for diseases of the ear and mastoid process among Indigenous people (average yearly increase of 0.2 hospitalisations per 1,000) and no significant change among non-Indigenous people.