A note on terminology

The term ‘Aboriginal’ is used throughout this resource to refer to the original inhabitants of the Australian continent—Aboriginal and Torres Strait Islander peoples. The term is used for the purpose of brevity and in preference to ‘Indigenous’.

Front cover

Sound Travelling

About the painting

The painting represents how sound waves travel through the ear and how delicate and fragile the outer, middle and inner ear are to the human body. Sound travelling connects us to culture, family and community.

About the artist

Ms Biara Martin is a proud young Whadjuk Noongar woman from the Swan Coastal Plains of Perth. Ms Martin is an aspiring young Aboriginal artist. She draws her inspiration from the stories of her Elders as well as her connection to land and culture.

Ms Martin is also influenced by a long line of strong Aboriginal women in her life, her mother Cheryl Martin and her two grandmothers, Whadjuk Elder Mrs Theresa Walley and Yamatji Elder Mrs Joan Martin (deceased) who are all well known for their Aboriginal art and cultural views. These themes emerge strongly in her artwork.

Biara is a Noongar word for banksia which her mother named her after.
To do that, we need to work together. This Strategy recognises and supports the integral role that families, carers, community, schools and Aboriginal community controlled health services play in addressing ear disease.

While aimed at children aged 0-10 years, the Strategy has a strong focus on the 0-5 year age group reflecting the critical importance of the early years for a range of health and development outcomes.

The Strategy supports the Government’s ongoing commitment to the Aboriginal health workforce, recognising a critical aspect of strengthening local healthcare systems is building pathways into the health professions for Aboriginal people.

Western Australia’s health system is continually improving to provide services that are accessible, better equipped to respond to local needs and delivered in a timely way. The Strategy advocates for tracking outcomes and measuring progress so we can identify what is working to effect positive change and where further resources may need to be directed.

The WA Child Ear Health Strategy:
- prioritises the establishment of a statewide ear disease information repository;
- encourages collaboration, coordination and a consistent and measurable approach across health services and providers;
- is aligned with and seeks adherence to current best practice approaches to ear health care as recommended by the current national guidelines and the State’s model of care;
- recognises the importance of health services and providers working effectively with parents, families and early childhood educators;
- seeks to ensure resources are directed to enhancing prevention, early diagnosis, management and surveillance;
- supports the use and expansion of telehealth and new technologies to broaden the scope of locally available healthcare services; and
- outlines the importance of ongoing training and enhanced skill-sets across health service staff to develop and sustain the local workforce and its capacity.

The intention of the Strategy is not to impose uniformity, but to better inform programs and providers; support healthcare staff; strengthen partnerships between services and the communities they serve; respect Aboriginal conceptions of health and wellbeing; and encourage innovation and a collaborative approach to improving children’s ear health outcomes.

This Strategy provides a roadmap to address the burden of ear disease through a holistic, comprehensive and coordinated approach across the State.

On behalf of the Western Australian Government, I commend the WA Child Ear Health Strategy.

Hon. Roger Cook MLA
Deputy Premier; Minister for Health; Mental Health
Executive summary

Otitis media is a common childhood illness that many children recover from quickly. For some children however, chronic otitis media accounts for high rates of hearing impairment, which can have a significant effect on a child’s language, education and psycho-social development.

In Western Australia, some children are particularly vulnerable to chronic ear disease, with the initial onset of otitis media occurring very early and persisting longer. The living conditions of many children can play a role in perpetuating high rates of ear health conditions. Risk factors of otitis media in children are often associated with the effects of socio-economic disadvantage and can include reduced immunity associated with poor nutrition, overcrowded living environments and poor quality water supplies. Exposure to tobacco smoke and reduced duration of breastfeeding, day care attendance, the number of siblings and use of dummies over six months of age are also considered important modifiable risk factors that require further study to determine specific effects.

While many children are vulnerable to chronic ear disease, in Western Australia it represents a particularly significant health burden for Aboriginal children who can experience their first onset within weeks of birth. Aboriginal children can also have more frequent and longer lasting episodes compared to non-Aboriginal children. Children living in remote communities have some of the highest rates of chronic ear disease in the world.

Therefore, while this Strategy does not exclude other children vulnerable to recurrent and persistent chronic ear conditions, it recognises the importance of a primary focus on Aboriginal children aged 0-10 years and services and programs that are designed to appropriately respond to Aboriginal community needs. This is necessary to address the inequitable burden of disease many Aboriginal children face, and in closing the gap on outcomes in health, education and social and emotional wellbeing.

The pervasive nature of ear infections means that children can experience rapid reinfection. Addressing the burden of chronic ear disease requires a comprehensive and coordinated approach incorporating a number of agencies and service providers, front line workers, as well as families, communities and individuals. In order to achieve lasting change in children’s ear and hearing health outcomes, services supporting environmental health, housing, nutrition, social and emotional wellbeing and family functioning, education and early care of children must be provided in conjunction with ear health services.

The WA Child Ear Health Strategy (the Strategy) aims to provide an agreed, sustainable direction for both government and non-government agencies. It lays the foundation for achieving greater consistency and coordination across a range of service providers in Western Australia. Its primary focus is to ensure health services and providers improve the ear health and hearing outcomes of all children vulnerable to chronic infection. While targeted at children aged 0-10 years, the Strategy has a particular focus on the 0-5 year age group in recognition of the critical importance of the early years to a range of outcomes over the life course.

The Strategy has been developed by the WA Child Ear Health Strategy Working Group and is based on both the WA Department of Health, Otitis Media Model of Care (2013) and the only current national accredited evidence-based clinical care guidelines, Recommendations for Clinical Care Guidelines on the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations (2010) (the national clinical care guidelines).
The Strategy specifies a set of priorities that seek to facilitate better information on the statewide burden of ear disease, support greater emphasis on prevention, ensure consistency in the approach to treatment, management and care, and establish an evidence base on what is effective and where resources are best directed.

The Strategy responds to the need for a broad approach to harness and coordinate the goodwill, array of activities and commitment of numerous stakeholders. It is designed to act as a roadmap for the State and support the direction, content and activities of regional plans and local level approaches and services. While looking to promote consistent collaboration and coordination, it also supports local autonomy in precisely how the Strategic Priorities are implemented on the ground. It seeks to guide policy, program and service design and delivery at a regional and local level, as well as inform the purchasing and contracting of related services by key funders including the Australian Government, Western Australian Government and industry.

The Strategy has seven Strategic Priorities that are designed to respond to key issues and gaps in the State’s ear health sector, whilst also highlighting the necessary requirements to facilitate progress and success in achieving the goals and vision for Western Australia. These are not hierarchical or sequential with each considered critically important to addressing needs and gaps.

The Strategic Priorities are:
1. Enhanced Prevention
2. Standardised Surveillance
3. Consistent Treatment
4. Workforce Development
5. Program Evaluation
6. Coordination and Partnerships
7. Comprehensive Evidence

Enablers influencing achievement of the goals of the Strategy include:
- partnerships and linkages across agencies and all levels of government;
- agreed quality improvement processes and a set of performance measures;
- operational planning that supports the Strategy’s priorities;
- funding arrangements that act as an incentive for providers to work collaboratively and contribute to consistent data collection and reporting processes;
- systems that ensure an integrated, multidisciplinary, team approach; and
- support and endorsement by the State, regional and metropolitan Aboriginal health stakeholder groups.

Ultimately this Strategy seeks to improve health outcomes by facilitating greater coordination, alignment, communication and partnerships across the State’s many relevant services and stakeholders. It aims to support strategies and processes that improve awareness and understanding about the importance of prevention, prompt diagnosis and enhanced primary care treatment. Its goal is to ensure children have timely access to quality care, and that the number of children adversely affected by ear disease is permanently reduced.
Introduction

A substantial amount of work has been directed at improving the ear and hearing health of children across Western Australia, particularly Aboriginal children.

There are many excellent ear health programs, services and initiatives provided by skilled, experienced and committed people. Guidance is provided by the WA Department of Health, Otitis Media Model of Care (2013), which includes key recommendations for prevention, primary care and specialist care designed to improve the care and coordination across a child’s ear health journey.

That said, the sector has variously been described by practitioners and observers as challenging, fragmented, and characterised by a plethora of service providers, funders, specialists, government and non-government programs. There is an array of protocols, guidelines and frameworks, with reportedly variable adherence to the WA Otitis Media Model of Care and the national clinical care guidelines.

This inevitably leads to confusion and overlaps, as well as gaps in training, diagnosis and treatment, service delivery, data collection, reporting, communication and funding.

The approach to ear health across much of Western Australia can be summarised as one where, overall, chronic ear disease is not being managed at the earliest opportunity with effective treatment, comprehensive follow up and a primary health care approach. The asymptomatic nature of much ear disease means that many children are only seen when conditions are at an advanced stage. This means the condition is often beyond the capacity of primary health carers to manage locally without specialist involvement. This increases demand for limited ear nose and throat services (particularly surgery) and allied health services, and means families in rural and remote regions often having to travel long distances to access care.

Long-standing and ongoing challenges within the ear health sector in Western Australia require a statewide Strategy to:

- establish a minimum data set and agreement across the State to collect data at a regional level;
- ensure a consistent approach to diagnosis, treatment, surveillance and referral;
- align service providers with a set of agreed priorities and goals;
- integrate and coordinate multiple providers and agencies;
- enhance and sustain relevant Aboriginal and health workforce;
- increase the infrastructure and use of telehealth and technology to reduce costs, enhance access and compliance to treatment and reduce the necessity for people to leave their communities; and
- measure outcomes, identify gaps and track the incidence and prevalence of ear disease.
Purpose

The WA Child Ear Health Strategy recognises there are many children at significant risk of poor ear and hearing health, requiring a multilevel, multidisciplinary approach to achieve and sustain improvements in outcomes.

The Strategy has been developed to foster commitment to a collaborative and consistent approach to tackling ear disease in Western Australia. It has been informed by, and is aligned with, a number of key national and State reports, frameworks, guidelines and principles (see Appendix A for a detailed list).

The Strategy is designed to promote a greater focus on the 0-5-year age group; facilitate consistent best practice treatment pathways; and enhance the resources directed at prevention, surveillance and a robust evidence base.

It aims to promote an agreed, evidence based and sustainable approach across government and non-government agencies and service providers.

Stakeholders

A number of stakeholders share responsibility for addressing and improving ear and hearing health conditions amongst Western Australia’s children.

These include families and carers, the Aboriginal community controlled health sector, community health services, primary care providers, general practitioners, allied health practitioners, nurses and nurse practitioners, specialists, research institutes, a range of Australian and State funded health service agencies and departments, as well as non-health departments such as education.

Health outcomes are influenced by numerous factors, many beyond the control of traditional health networks. Working collaboratively is therefore critical to developing and delivering effective health initiatives.

A broad range of sectors thus have an important role to play in supporting ear and hearing health, including industry, education, the parks and recreation sectors, non-government organisations and all levels of government.
Implementation

It is anticipated that relevant State, regional and metropolitan health stakeholder groups will play an important role in implementing the Strategy through aligning it with local, regional and operational plans.

The Strategy acknowledges many Aboriginal and non-Aboriginal children are vulnerable to a high burden of disease that can directly impact on their healthy development. This Strategy is intended to address this inequity while also remaining relevant to all children.

Guiding principles

The Strategy is underpinned by a number of guiding principles. These are:

- Recognition of the need for regional and local responses to regional and local needs and priorities.
- Commitment to a collaborative approach to improving outcomes between health services and providers, government and non-government stakeholders, the regions and communities.
- Community-level approach supported by comprehensive primary health care, health promotion, and a sufficient and appropriately skilled health workforce.
- Recognition that best-practice, high-quality care is achieved when health care professionals work in a coordinated manner across primary health, community and specialist care services with the involvement of family, carers and community.

- The need for a strengths-based approach to community development and the provision of adequate resources to engage, support and empower communities and households to address and maintain their own and their children’s health with culturally appropriate health services and programs.
- Commitment to programs, services, activities, evaluation and research that provide sustained improvements in health outcomes across the generations.

It also respects the cultural diversity, views, values and expectations of Aboriginal people within the planning and development of health programs and services.

The Strategy’s principles incorporate those of the WA Aboriginal Health and Wellbeing Framework 2015-2030. These are:

- Cultural security
- The health and wellbeing of Aboriginal people is everyone’s business
- Partnerships
- Aboriginal community control and engagement
- Access and equality
- Accountability

Vision

A holistic and best practice approach to children’s ear and hearing health across Western Australia to reduce the burden of disease, including its developmental, educational, social and economic impact.
Goals

The Strategy starts with the premise that vulnerable children’s ear and hearing health requires a multilevel, multidisciplinary approach to achieve and sustain improvements in outcomes.

The overarching goal of the Strategy is to align health services and providers with the priorities and thereby enhance Western Australia’s approach to children vulnerable to poor ear health and hearing loss. This will be achieved through:

- Focus on the early age of onset of ear disease and recurrent and persistent infections, particularly in the first five years of life.
- Consistent approaches to prevention, prompt diagnosis and effective management of ear disease of children vulnerable to poor ear health.
- Supporting families to provide optimal ear health care for their children.
- Supporting workforce development strategies to build and retain a sustainable, skilled Aboriginal health workforce through varying career pathways and employment opportunities.
- Facilitating a collaborative, coordinated, streamlined and consistent approach to preventing, monitoring and treating ear diseases at a local, regional and State level.
- Supporting a statewide consistent approach to strengthening the evidence base on the prevalence of otitis media and conductive hearing loss, and identify what is working to effect positive change.

Priorities

The Strategy’s seven priorities respond to the key issues and gaps in the State’s ear health sector.

The priorities are:

1. Enhanced Prevention
2. Standardised Surveillance
3. Consistent Treatment
4. Workforce Development
5. Program Evaluation
6. Coordination and Partnerships
7. Comprehensive Evidence
Rationale

A number of factors are critical in the early diagnosis and prevention of recurrent ear disease. These include ear health assessments, surveillance and timely access to primary care treatment as well as specialist ear, nose and throat services when required. That said, effective ear health care and sustained prevention of disease cannot be achieved through screening and medical treatment alone.

The complexity of causal pathways, including the influence of an array of broad social and environmental determinants, especially poverty, complicates the prevention, treatment and management of otitis media. A comprehensive and sustainable approach must address the environmental, social and economic factors underpinning ear health disease.

Social determinants

A number of confounding factors reduce the benefits of health programs and services. These include the household environment, community infrastructure, access to clean drinking water and nutritious food, people’s health literacy and ability to access appropriate and quality services. Adequate and safe water supply, sanitation, waste disposal, drainage and facilities for storage and preparation of food and washing all influence health. The generally poor state of environmental health conditions in many communities are critical determinants in high levels of infections that significantly contribute to many people’s ill health.

Extreme disadvantage often impacts negatively on health and wellbeing. The impact of high levels of stress, public housing inadequate for use, poor health hardware, and a range of factors related to poverty can directly impact on the way a family functions and a child develops. These factors play a role in some young children experiencing a high burden of recurrent, acute and chronic infection.

Limited understanding or awareness of modifiable lifestyle risk factors and preventative measures for ear and hearing health among families, communities and those whose work brings them into regular contact with young children hampers sustainable prevention, early intervention, timely access to treatment and effective primary care management.

An important part of a preventative approach to ear and hearing health is enhancing people’s understanding of the risk factors and the importance of responding quickly. Programs and clinical protocols/practices need to support, educate and capacity-build carers and families to better understand ear health conditions, risk factors, and the importance of adherence to treatment.

These measures are also critical to enable and empower families to:

- exert greater control over their children’s health;
- make informed health decisions; and
- make positive behavioural changes.

Long term and sustainable change in the rates of recurrent infection and related hearing, speech, language, learning and developmental issues requires a focus on prevention and education targeted at family and carers, primary health care staff, child care workers and primary school personnel.

Prevention and education aimed at the community is important, and requires information or strategies that are culturally secure, responsive to local contexts, and work in collaboration with the community. Strategies must also be respectful of the ways in which Aboriginal people conceptualise health and manage health information, and should also appeal to younger Aboriginal people, many of whom are parents.
Early years focus

The importance of positive health and social experiences in the early years, including prenatal health, is increasingly recognised as laying the groundwork for a lifetime of wellbeing.

Poor child development outcomes are the result of a complex set of causal factors which require greater emphasis on prevention and early intervention. The impact and high rates of early onset of otitis media among children aged 0-5 years suggests that the greatest impact for change lies with a focus on prevention and effective management among this age group.

Prioritising the early years includes engaging women during pregnancy as an important opportunity to make behavioral changes that can potentially alter a child’s long-term health outcomes. An early years focus means working to ensure that parents, teachers, midwives, community health nurses, Aboriginal health workers and primary care clinicians all have a good understanding of the long term importance of ear health and children’s ears being regularly checked and monitored.

Enhancing capacity

Making sustainable positive change in children’s ear and hearing health requires programs that support parents and other family to be empowered and proactive about their children’s ear and hearing health. Health services, providers and professionals working with children must recognise and respond to a diverse spectrum of need and work in culturally appropriate partnerships with families.

The primary health care workforce’s capacity, including that of Aboriginal health workers, is crucial to the effectiveness of enhanced coordination and effective management and treatment systems. This mediating factor requires ongoing investment and support and is directed at awareness raising, education and training, online knowledge exchange, upskilling, mentoring and role modeling.

It requires recognising the important contribution made by the Aboriginal health workforce and ongoing Aboriginal employment across the sector.

Identifying and supporting those with an interest or passion in this area is important, as is developing articulated career pathways in ear and hearing health and opportunities to work towards recognised and accredited qualifications.

Need for an enhanced evidence base

Greater understanding of the prevalence of ear disease requires consistent data to be collected across the State. This can be complemented by robust program evaluation that focuses on the contribution made by specific programs and investment and assesses their cost-effectiveness.

Consistent data collection will allow for the effective planning for delivery of targeted ear health services. Identifying the extent to which programs are achieving their objectives will assist in determining the impact of targeted resources, information and care coordination systems.
Rationale

Coordination and integration
Clinical, audiological, allied, screening and specialised medical services must work in partnership with those best placed to provide appropriate and culturally sensitive primary care, continuity of care and health promotion and disease prevention education.

Other critical approaches include:
- linking and coordinating the range of organisations, systems and health providers that operate within primary health care;
- building on existing coordination mechanisms across different health services and providers such as shared clinical information and management of the transition of patients;
- linking primary healthcare services with other sectors;
- communication between health professionals to promote continuity of care; and
- analysing data to effectively plan for targeted ear health service provision.

This integrated, coordinated and partnership approach to ear and hearing health care is necessary to address fragmentation, support consistency in services and provide for more informed planning and processes across agencies. It also supports streamlined patient care across primary, secondary and tertiary services.

Development of the Strategic Priorities
The Strategic Priorities respond specifically to the issues impacting on the ear health sector, and are designed to promote and support a coordinated, consistent and integrated approach across health services and providers and other stakeholders. They are intended to guide and assist organisations to identify gaps, needs and priorities as well as plan the allocation of resources, workforce and engagement strategies and measure their effectiveness and change.

They also seek to establish a comprehensive evidence base on the statewide prevalence of ear disease and hearing loss, as well as greater understanding on what is working to effect positive change.

Overall, the Strategic Priorities are designed to enhance:
- the capacity to measure the State’s burden of ear disease;
- understanding of where progress is being made and its impact;
- the detection and treatment of children’s ear disease early in life;
- understanding of the modifiable risk factors for ear disease;
- the size of the local Aboriginal health workforce;
- the skills of the existing workforce;
- consistency in diagnosis, surveillance, treatment and referral pathways across services and providers; and
- opportunities for greater coordination and partnership.

Next steps
It is anticipated that this Strategy will provide guidance to funders, health services, primary care providers and other health providers on ways to address the burden of ear disease through a holistic, comprehensive and coordinated approach.

Relevant local, regional and State stakeholders will play an important role in the statewide implementation and operationalisation of the Strategy. Engagement between a statewide working group and local and regional governance structures will be an important aspect to the delivery of the Strategy.
Strategic priorities

Strategic Priority 1  Enhanced Prevention

Increase awareness of the importance of children’s ear health and understanding of the modifiable risk factors for children’s ear disease through:

- dedicated focus on the ear health of 0-5 year old children across all primary health care services and providers;
- embedding ear health care information in a range of resources and programs of relevant agencies and service providers aimed at parents, carers, early childhood educators and the community; and
- increased opportunistic ear health assessments of 0-5 year old children by relevant primary health care staff.

Strategic Priority 2  Standardised Surveillance

Improved early identification of ear disease and comprehensive management including routine, regular follow up through:

- creation of an ear surveillance protocol for Western Australia that aligns with relevant child health programs.

Strategic Priority 3  Consistent Treatment

Strengthen the consistency in ear disease treatment, referral pathways and provision of timely, accessible and high quality care across the State through:

- alignment of local and regional ear health protocols, policies, guidelines and training with the national clinical care guidelines, State model of care and the CARPA Standard Treatment Manual 6th Edition; and
- enhanced telehealth infrastructure and application of telehealth services to provide equitable access to quality specialist health care advice and reduce waitlists.

Strategic Priority 4  Workforce Development

Enhance provision and capacity of ear and hearing health services and providers across the State through:

- support for dedicated and ongoing training, upskilling and mentoring of relevant health service staff including Aboriginal health workers/Aboriginal health practitioners, nurses, nurse practitioners, general practitioners, allied health staff and other medical practitioners; and
- support and increase strategies and opportunities to build and retain a local skilled Aboriginal health workforce.
Strategic priorities

**Strategic Priority 5  Program Evaluation**

Embed regular evaluation utilising qualitative and quantitative research methods to:
- build the collective knowledge base on the effectiveness and cost benefits of specific programs, services and ear health promotion activities; and
- achieve information on outcomes and results rather than just outputs and activities.

**Strategic Priority 6  Coordination and Partnerships**

Create and develop intersectoral partnerships across government agencies, health service providers and relevant stakeholders at a local and regional level to:
- increase collaboration, coordination and sharing of resources;
- address and manage relevant environmental health risk factors; and
- identify gaps, reduce duplication and fragmentation of services.

Health service providers to strengthen partnerships with Aboriginal communities to promote and enhance engagement with service providers and ensure the development of appropriate services, programs and health promotion resources.

**Strategic Priority 7  Comprehensive Evidence**

Creation of a statewide ear disease information repository through:
- agreement across relevant agencies and regions to contribute to collection and sharing of de-identified data, including minimum data set requirements;
- the development of a standardised ear disease minimum data set by an appointed technical advisory group (involving clinicians, practitioners and IT systems representatives); and
- development of appropriate governance arrangements to manage the repository.
Appendix A

The WA Child Ear Health Strategy has been informed by and is aligned with many of the findings, recommendations, principles and guidelines contained within the following documents.

At a State level:
- Otitis Media Model of Care (2013)
- WA Aboriginal Health and Wellbeing Framework 2015–2030
- WA Health Aboriginal Workforce Strategy 2014–2024
- WA Health Strategic Intent 2015-2020
- WAPHA Position Paper: Aboriginal & Torres Strait Islander Health
- our footprints: A Traveller’s Guide to the COAG Implementation Process in Western Australia
- WA Country Health Service Aboriginal Employment Strategy 2014-2018
- Western Australian Health Promotion Strategic Framework 2012–2016

At a national level:
- Recommendations for Clinical Care Guidelines on the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations (updated 2010)
- Aboriginal and Torres Strait Islander Health Performance Framework 2014 Report
- National Aboriginal and Torres Strait Islander Health Plan 2013-2023
- COAG National Indigenous Reform Agreement (Closing the Gap) Service delivery principles for programs and services for Indigenous Australians
- Ear disease in Aboriginal and Torres Strait Islander children. Resource sheet no. 35 produced by the Closing the Gap Clearinghouse November 2014
The WA Child Ear Health Strategy has been developed through a collaborative partnership between the following organisations: