









ACKNOWLEDGEMENTS

WQPHN Child and Family Health Framework draws on the regional framework developed by Maari Ma Health in Far Western NSW, *Improving Development and Well-being for Aboriginal Children and Young People in the Far West of NSW,* as well as two national documents – the *National Framework for Health Services for Aboriginal and Torres Strait Islander Children and Families* and the *National Framework for Universal Child and Family Health Services* – and was prepared in consultation with commissioned service providers in the Western Queensland Primary Health Network.

Cover image courtesy of MICCRH, JCU.

CONTENTS

INTRODU	CTION		02
	About	the Framework	05
BACKGRO	DUND		06
	1.1	Strategic Plan 2016–2020	07
	1.2	Commissioning for Better Health	07
	1.3	Mental Health, Suicide Prevention, Alcohol and Other Drug Services Regional Plan 2017-2020	08
	1.4	The Western Queensland Health Care Home	09
IMPORTA	NCE OF	THE EARLY YEARS	10
	2.1	Critical factors for child health	11
	2.2	Impact of adversity during the early years	13
	2.3	Social determinants of health	16
UNIVERSA	AL AND	TARGET SERVICES	18
	3.1	Universal and primary health care services	19
	3.2	Secondary level services	19
	3.3	Specialist or intensive tertiary services	19
	3.4	Supporting an integrated child and family health service	20
	3.5	Core service elements of a primary child and family health service	21
PROFILE A	AND PR	ORITIES	24
	4.1	Child and family health profile	25
	4.2	Child and family health commissioning priorities	29
CHILD AN	ID FAM	ILY HEALTH SERVICES FRAMEWORK	30
	5.1	Objectives	31
	5.2	Principles	31
	5.3	Key initiatives for improved health and social outcomes from a prevention and early intervention perspective 0-8 years	33
	5.4	Early intervention, prevention and health promotion 0-8 years	36
	5.5	Child and family health outcomes 0-8 years	38
BIBLIOGR	APHY		40

INTRODUCTION



INTRODUCTION

There are approximately 8,494 children aged 0-8 years in Western Queensland, many living in the region's remote and isolated communities. Approximately 1,026 will be born next year and another 1,941 will start school at the beginning of 2019.

Like other children living in remote areas of Australia, many Western Queensland children will experience challenges and learning difficulties in their early years.

The findings of the Western Queensland Health Needs Assessment emphasises child and maternal health as a population health priority. Communities in Western Queensland are experiencing greater health vulnerabilities, and these are contributing to poorer childhood development outcomes.

There is a need to integrate and configure health services in Western Queensland around the unique needs of children and families through a place-based, collective approach.

The Western Queensland Child and Family Health Framework is an evidence-informed, contemporary guide for the development and adoption of universal child and family health services in Western Queensland. The Framework centres around critical development milestones with a focus on the first 3,000 days and supports the securing of culturally safe health services for Aboriginal and Torres Strait Islander children.

WQPHN's aim is to provide a Framework to guide the commissioning of patient-centred, joined-up care in direct response to the Health Needs Assessment, and to craft new pathways of support around the issues unique to Western Queensland communities.

The planning architecture presented is inclusive of local provider networks and recognises that through a shared spirit of collaboration and willingness, the region can adapt to achieve the whole of population outcomes. Similarly, new approaches that incorporate cultural identity and focus on continuity across the life-span, can underpin wellbeing outcomes for children and their families.

On behalf of the Board, I would like to thank primary health care partner organisations for their contribution to the development of the Framework as well as the WQPHN Clinical and Consumer Advisory Councils and the Regional Chapters. I would also like to acknowledge and thank the Maari Ma Health Aboriginal Health Corporation for sharing their key learnings, intellectual property and experiences in Far Western NSW which have informed the development of the Western Queensland Child and Family Health Framework.

WQPHN is looking forward to children in Western Queensland experiencing a more proactive, systematic model of care – a shared intelligence across a network that empowers families and improves access to timely child and family health service support.

Stuart Gordon

Chief Executive Officer

Bollon

Dirranbandi

ABOUT THE FRAMEWORK

The Western Queensland Primary Health Network (WQPHN) Child and Family Health Framework is an overarching document intended to guide, in partnership with families and communities, the local development and implementation of services to meet the needs of children and families in the Western Queensland region. It also provides a basis for WQPHN decision making on the child and family health services it commissions, and serves as a guide for WQPHN and its partners in responding to the increasingly complex social, cultural, environmental and health needs of children and their families.

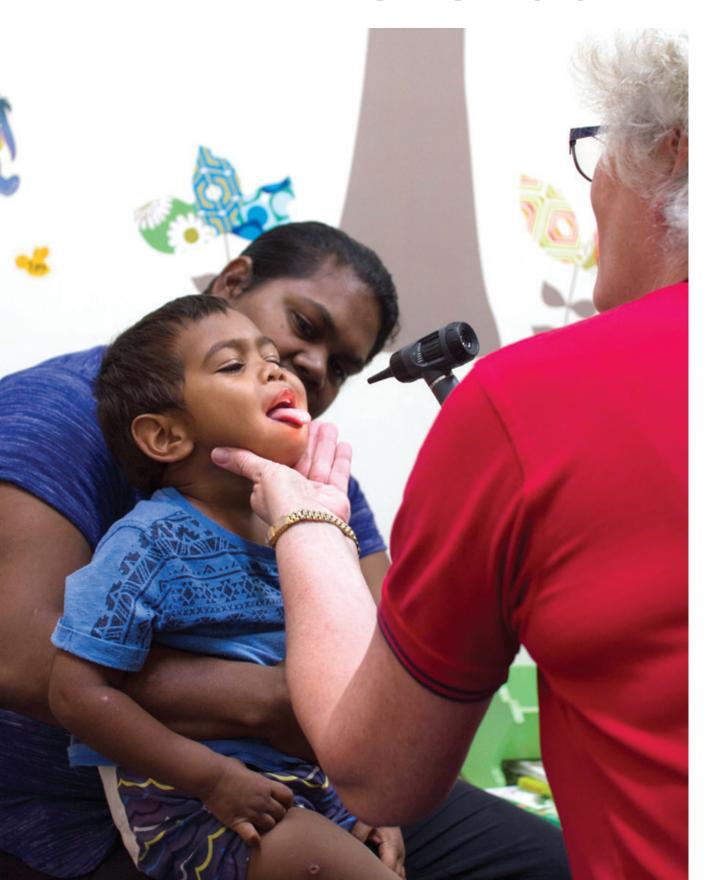
The Framework acknowledges and draws on key national documents and other frameworks related to child and family health services:

- National Framework for Universal Child and Family Health Services articulates a vision, objectives and principles for universal child and family health services for all Australian children aged 0–8 years and their families;
- National Framework for Child and Family Health Services focuses on the provision of secondary and tertiary child health and family services for Australian children aged 0–8 years and their families, who have identified additional needs;
- National Framework for Health Services for Aboriginal and Torres Strait Islander Children and Families – outlines how a more holistic approach to health and wellbeing, that draws on the strengths of Aboriginal and Torres Strait Islander peoples and cultures, informs high quality, evidence-based child and family health services are delivered to Aboriginal and Torres Strait Islander people;
- National Strategic Framework for Rural and Remote Health recognises the unique challenges of providing health care in rural and remote Australia and the importance to all Australians of providing timely access to quality and safe health care services, no matter where they live;
- Healthy Safe and Thriving: National Strategic Framework for Child and Youth Health identifies the key strategic priorities for child and youth health in Australia for the next 10 years;
- Protecting Children is Everyone's Business: National Framework for Protecting Australia's Children 2009–2020 supports the need for a strong and responsive network of child and family services to ensure the safety and wellbeing of Australia's children, and attain a substantial and sustained reduction in the levels of child abuse over time: and
- National Aboriginal and Torres Strait Islander Health Plan 2013–2023 describes a vision, principles and priorities for tackling Aboriginal and Torres Strait Islander disadvantage, and for closing the health gap between Aboriginal and Torres Strait Islander and other Australians.

Of particular consequence to WQPHN is that each of the frameworks acknowledge the significant disparities between Aboriginal and Torres Strait Islander and other Australian children and their families in relation to health outcomes, including life expectancy at birth, birth-weight, child hospitalisation, youth trauma and rates of chronic disease.

This Framework serves as a guide for WQPHN policy and program design, and for the development and implementation of services, in responding to the health needs of all children and their families. It specifically recognises that the current child and family health service system in Western Queensland does not equitably meet the needs and aspirations of Aboriginal and Torres Strait Islander children and their families living in the region. For this reason, and the fact the region has a significantly high Aboriginal and Torres Strait Islander population, the Framework should be viewed as complementing the *National Framework for Health Services for Aboriginal and Torres Strait Islander Children and Families*, and we would recommend the two documents be read in unison.

BACKGROUND



1.1 STRATEGIC PLAN 2016-2020

The WQPHN Strategic Plan provides the 'lens' through which the organisation views the future, and guides all of our organisational activity. It presents a carefully considered response to the region's health needs and current services.

Firstly, it asserts our commitment to working alongside our partners to integrate the Western Queensland health system, break down silos of care, and firmly focus on outcomes for consumers.



Secondly, it emphasises the need to collaborate, and to co-design solutions with service providers, clinicians and consumers to deliver integrated models of care. Thirdly, it reinforces an undertaking to improve access to culturally safe services for our Aboriginal and Torres Strait Islander residents. Finally, it identifies chronic and complex conditions and child and maternal health as its two biggest priorities.

The Strategic Plan recommended the development of a 'region-wide and whole of system plan for maternal and child health and wellbeing that focused on getting the best start in life'. This Child and Family Health Framework is that blueprint.

While the national frameworks are designed to meet the needs of all Australian children, this Framework is aimed at identifying ways in which specific health services in the WQPHN might be better commissioned to meet the specific needs and expectations of our children, their families and the communities in which they live.

1.2 COMMISSIONING FOR BETTER HEALTH



WQPHN's Commissioning for Better Health is an eight-point plan about how we intend to commission services differently in the future.

Traditional commissioning in Australia has tended to focus on funding individual organisations based on activity. Our experience tell us that in Western Queensland this approach has inadvertently both contributed to fragmentation in the way that care is delivered, and created barriers to the development of integrated services and patient-centred models of care.

Furthermore, our findings demonstrate a fragile service environment and highlights the need for a cautious, but sustained reshaping

of the primary care market with an emphasis on partnerships, service provider engagement, capability development and joint accountability.

The new commissioning approach aims to support an easy-to-navigate, well-connected system of care, with closer-to-home services as part of a wider supportive regional and State-wide network of providers. It pictures more digitally enabled services hard-wired into an enhanced General Practice service environment.

Commissioning for Better Health identifies seven Health Localities – based on services, funding, demographic and cultural considerations – as a practical means to plan and develop new services. These Health Localities will be the basis for the commissioning of new child and family health services as part of this Framework (see Figure 1).

1.3 MENTAL HEALTH, SUICIDE PREVENTION, ALCOHOL AND OTHER DRUG SERVICES REGIONAL PLAN 2017-2020

The Mental Health, Suicide Prevention, Alcohol and Other Drug Services Regional Plan 2017-2020 has been developed to provide the vision and direction for mental health, suicide prevention and alcohol and other drug services in Western Queensland in the future – a direction which is centred on comprehensive primary health care and the Western Queensland Health Care Home. The aim is to build healthy communities, families and individuals and to support their wellbeing by having an integrated Western Queensland health system with primary care at its core.



A high proportion of children in Western Queensland are at risk of developing mental health, alcohol and other drug problems due to the high incidence of chronic disease in adults, poor social determinants in rural and remote areas and early childhood neglect and abuse. Preventing harm during childhood and building resilience among our children and young people will be instrumental to their future health and wellbeing. The Child and Family Health Framework seeks to create a healthy environment early in life for children to grow and thrive.

Mental health prevention strategies to build resilience in children have been incorporated into the Child and Family Health Framework. The schedule of regular child health checks in the early years built into the child and family model are designed to build relationships with families and their capacity to manage, but also to identify any potential mental health issues early. Strategies such as attending play groups and early literacy programs will help build resilience as part of the comprehensive primary health care approach. Referral pathways have been developed under the child and family health models to facilitate access to specialist family support and mental health clinicians to assist problems including postnatal depression, parenting, behaviours management or growth and development issues.



1.4 THE WESTERN QUEENSLAND HEALTH CARE HOME

WQPHN recognises the Health Care Home Model of Care as the primary enabler to comprehensive primary health care in our communities. As such, a key focus of our work and investment is the development of a Health Care Home capability through supporting General Practice at the heart of a comprehensive primary health care system focused on whole of population health outcomes.

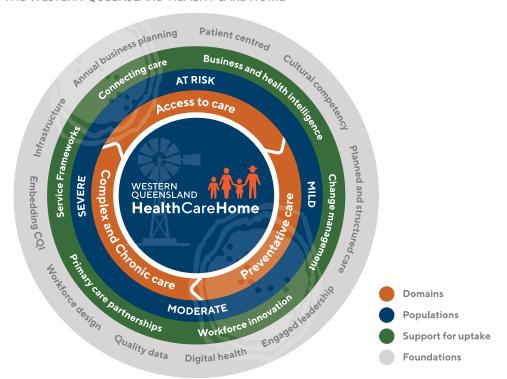


FIGURE 2 THE WESTERN QUEENSLAND HEALTH CARE HOME

In doing so, children and their families will have a continuing relationship with a GP, or another clinical lead in their general practice and will be better connected to a multidisciplinary team made up of practice staff and other clinical and social services within their local community. Looking beyond the immediate 'home-base', children and their families will also have access to other regional and specialist child and family health services as needed. Importantly, within this integrated system of care all service providers are well connected, sharing health intelligence and encouraging coherent patient treatment milestones and health care pathways.

Patient enrolment is a critical component of the Health Care Home Model of Care. Enrolment promotes a more stable and continuous relationship between a child/family and their GP and the extended team, which in turn supports more comprehensive primary care. Patient enrolment also enhances continuity and coordination of care for children with more chronic or complex conditions, improves the management of patient information across the clinical service network, and facilitates more comprehensive child health surveillance and screening through the use of a patient register and recall system for the routine child health checks.

Supporting General Practice and other child and family health services in their readiness, uptake and adoption of Health Care Home initiatives that support more integrated care and improved system capability, lies at the heart of WQPHN commissioning activities. However, the roll out of the Health Care Home Model of Care across almost one million square kilometres has practical considerations that will require a place-based approach to guide investment, effort and accountability to communities of common interest.

IMPORTANCE OF THE EARLY YEARS



There is considerable evidence demonstrating the importance of the period from conception through to the early years of a child's life in providing strong foundations for life-long physical and mental health, and social and emotional wellbeing.

2.1 CRITICAL FACTORS FOR CHILD HEALTH

Early childhood experiences, starting in pregnancy with foetal development and continuing through infancy, childhood and adolescence, shape these outcomes throughout the lifespan.

Early childhood is a critical stage at which the foundation for future health and wellbeing is established.

The following factors shape this foundation:

- 1. Maternal health and behaviours such as attendance at antenatal care, breastfeeding, physical and mental health, tobacco use, consumption of alcohol or other drugs and nutrition. Antenatal care may be especially important for Aboriginal and Torres Strait Islander women, as they are at a higher risk of delivering low birth-weight babies and of prematurity. They also have greater exposure to other risk factors such as anaemia, poor nutrition, hypertension, diabetes, genital and urinary tract infections, alcohol misuse, and tobacco smoking.
- 2. Brain development from conception, the first three years of a child's life are critical to brain development, as several neural systems necessary for adult functioning are formed. These include auditory and visual perception, mastery of motor skills, language development, and self-regulation and control. The brains of newborns are approximately 25 per cent developed, and by the age of three are close to 80 per cent developed. With respect to the development of the ability to think and to regulate emotions and bodily functions, the quality of the early sensory stimulation they receive is of utmost importance.
- **3. Relationships with carer(s)** which are important for emotional regulation, impulse control and protection against the negative effects of stressful life events. Secure attachments and bonding, characterised by high-quality carer-child interactions, help to mitigate against the effects of adverse situations.
- **4. Family and social environment** this has a significant effect on brain development, with normal development requiring a high level of sustained stimulation (e.g. being spoken or read to, engaging in play, community involvement).
- **5. Good nutrition in infancy and early childhood** supports healthy development (including brain development), growth and functioning.

FIGURE 3 CRITICAL FACTORS FOR CHILD HEALTH



Research has demonstrated that programs initiated both during pregnancy and in the first years of life are more successful at improving core developmental outcomes. The benefits of prevention and early intervention for children and their families are well documented.

2.2 IMPACT OF ADVERSITY DURING THE EARLY YEARS

There is strong evidence that early experiences have life-long effects that impact on later achievements, social adjustments, mental and physical health, and longevity.

Conceptually, there are a number of ways that one can assess the effects of adversity on the early years. Currently, research has defined three mechanisms during these years that have been shown to have long-term effects on health and wellbeing during childhood and adult life:

- 1. biological embedding
- 2. the process of accumulation or risk
- 3. developmental escalations of risk over time.

1. BIOLOGICAL EMBEDDING

It has been well documented that prenatal and early childhood experiences can influence physiological and neurological development. This is thought to be related to epigenetic changes – that is, changes in gene function without changes in the DNA sequencing of the nitrogen bases – that occur as a result of the mothers' and infants' interactions with the environment. Epigenetic changes can also be inherited and contribute to the transmission of illnesses such as cardiovascular disease, diabetes and mental health conditions across generations.

MRI (magnetic resonance imaging) examinations of the brains of 6-12 year old children have revealed that those who grew up in poverty had smaller volumes of white matter, cortical grey matter and a reduced volume of the amygdala (controls moods, emotions, depression, anxiety) and hippocampus (responsible for short-term memory). The changes explained, in part, the cognitive and behavioural and emotional problems related to poverty and stress. These effects, however, were mediated by caregivers and stressful life events: in other words, supportive caregiving and a lack of stressful experiences appeared to be protective against these MRI changes. This demonstrates that the early plasticity of the brain, which allows it to develop so rapidly in a positive manner, also makes the brain susceptible to negative influences and experiences.

Postnatally, biological embedding affects younger children more than older children. Those exposed early to family, social and environmental stressors – such as poverty, abuse, neglect and poor nutrition – experience an increased risk of common metabolic disease (diabetes), cardiovascular disease, mental illness and immune impairment later in adult life.

Equally important, it is now clear that modification of the identified risks in pregnancy and during the early years, can successfully reduce the subsequent risks of many of these health problems.

Children with low birth-weights or significant growth impairment during infancy remain biologically different throughout their lives, and have double the risk of heart disease, a six-fold increase in the risk of diabetes, and are 18 times more likely to develop metabolic syndrome (elevated triglycerides, low HDL cholesterol, elevated blood sugar, hypertension). Babies born prematurely, especially before 32 weeks, are at greater risk of non-infectious respiratory disease, neonatal jaundice, epilepsy, cerebral palsy, visual, cognitive and other developmental impairments, and are more likely to suffer from depression later in life.

2. THE PROCESS OF ACCUMULATION OF RISKS

The cumulative effects of adverse experiences during childhood, and the toxic stress they can cause, influence every aspect of health and wellbeing into adult life. This leads to maladaptive physiological responses that increase the risk of disease. Childhood poverty may actually 'reset' the immune system resulting in impaired immune function and, consequently, increased rates of infectious and chronic diseases, metabolic syndrome and cardiovascular disease.

High levels of maternal nurturance during early childhood in families of low socio-economic status (SES) have been shown to reduce the risk of metabolic disease in adulthood.

The Adverse Childhood Experience Study in the USA has shown that exposure in early childhood to certain events – e.g. emotional, physical and/or sexual abuse, emotional and/or physical neglect, violent treatment of a family member, living in a household with someone abusing drugs or alcohol, living with someone with a mental illness, parental separation or divorce, or having a household member incarcerated – has a dose-dependent relationship on subsequent risks to those children's physical and mental health, even extending well into adulthood.

As the number of adverse childhood experiences increased, the risk for severe health problems also increased and impacted strongly on health-related behaviours and outcomes during childhood and adolescence. These included early initiation into smoking, sexual activity, adolescent pregnancies, illicit drug use and suicide attempts.

3. DEVELOPMENTAL ESCALATIONS OF RISK OVER TIME

An adverse exposure or experience at one stage of the life-course often influences the probability of others later in life, as well as the associated poor health and developmental outcomes. This escalation has a detrimental effect on numerous health, social and lifestyle outcomes throughout childhood into adulthood.

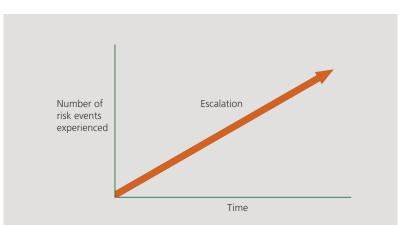


FIGURE 4 ESCALATION OF POOR PERSONAL HEALTH AND SOCIAL OUTCOMES

Source: WQPHN health intelligence portal 2016



2.3 SOCIAL DETERMINANTS OF HEALTH

There are many ways of conceptually categorising influences on health outcomes and the social determinants of health. One such categorisation describes three main influences on the health outcomes of individuals and populations:

- Upstream determinants these include broad influences such as the state of the global and national economy, government policies on wages, income distribution, taxes, equality/inequality, investment in public services, health and education, housing and a sustainable environment. These are referred to as the social determinants of health;
- Midstream determinants these include, culture and cultural practices, family influences, psychosocial issues, health-related lifestyle and other behaviours, and the structure of the health system; and
- Downstream determinants these include one's genetic makeup, physiological systems and biological functioning.



Upstream factors that have a positive effect on health outcomes include prosperous and stable economies, absence of wars, government policies that contribute to high incomes, fair income distribution, educational and social equalities, full employment, job security, adequate and appropriate housing, strong community social capital, absence of marginalisation based on class, race, sex, gender, culture or religion, and a sustainable environment. The upstream determinants significantly affect the midstream ones, which then together affect the downstream determinants, thereby increasing the risk of poor physical and emotional health.

Research indicates that there is a gradient for practically all health outcomes as one progresses from low to high socio-economic status (SES). Infant mortality, prematurity, low birth-weight babies, total mortality and chronic disease rates are significantly greater among lower SES populations than among high SES populations. In 2016, life expectancy at birth for Australians overall was 82 years, with 85 years for the wealthiest fifth and 81 years for the poorest fifth. However, for the most disadvantaged group, Aboriginal and Torres Strait Islanders, it is 72 years.

It has been estimated that 60–70 per cent of the health of a population is determined not by traditional health services, nor by one's biological functioning, but the upstream or social determinants of health. Health services alone contribute approximately 25–30 per cent, and genetic make-up and biology approximately 15 per cent to the overall health of a population. It has been demonstrated that children in the first eight years of life are particularly sensitive to the influences of the social determinants of health.

Low income and low education status are strongly associated with increased risky lifestyle behaviours such as smoking, lack of exercise, poor diet and substance abuse, which in turn predispose people to obesity, diabetes, cardiovascular disease and mental health problems.

Poor or inadequate housing and homelessness also significantly increase the risk of most health and social problems throughout the lifespan. For example, children living in sub-standard housing conditions, who experience overcrowding and frequent moves, have a 25 per cent greater risk of ill health and disability, including asthma, behavioural and mental health problems, depression, teenage pregnancy and illicit drug use. Therefore, to improve health outcomes and to reduce the health inequalities and inequities of a community or population, health services need to influence, and work collaboratively with, all other government and non-government agencies and the communities they serve.

UNIVERSAL AND TARGET SERVICES



WQPHN proposes to adopt a health systems framework as described in the National Framework for Universal Child and Family Health Services. This system comprises a structure of universal/primary, targeted/secondary and specialist/tertiary services based on the principles of primary health care to meet the needs of pregnant women, children and families at multiple contact points.

This Framework focuses predominantly on universal primary health care services and, in part, targeted and secondary services. However, specialist and tertiary services, which would include hospital services, are beyond its scope.

3.1 UNIVERSAL AND PRIMARY HEALTH CARE SERVICES

Universal child and family health services focus on increasing protective factors and reducing risks that impact on children's health and wellbeing, and provide early identification and referral for children and families who may require targeted, secondary or tertiary specialist services. It is expected that 100 per cent of families are able to access universal services. Midwives provide care at no cost across the pregnancy, birth and postnatal period for up to six weeks after birth. Child and family health nurses provide services for families and children from birth to school entry. GPs also provide significant primary care services for children and families.

Targeted services focus on children and families who have additional needs, or an increased likelihood of poor health or developmental outcomes, that limit their opportunities to reach their full potential. They also work to reduce inequalities in outcomes between groups of children. Such services are often provided from within the universal child and family health service platform and aim to minimise the effect of risk factors for children and to build protective factors and resilience.

Proactive outreach by universal health service professionals to encourage engagement with universal services is one form of targeted support. Other forms include sustained, intensive home visiting programs, outreach programs in disadvantaged communities, day stay services and supported playgroup programs.

3.2 SECONDARY LEVEL SERVICES

Secondary level health services also form part of targeted services and usually fall outside the scope of practice of the universal child and family health providers. Examples of secondary level services include allied health intervention programs, developmental disability and inclusion support services, and parenting or family relationships programs. GPs play a significant role in both accepting and making appropriate referrals. Approximately 30 per cent of families are expected to require secondary level services.

3.3 SPECIALIST OR INTENSIVE TERTIARY SERVICES

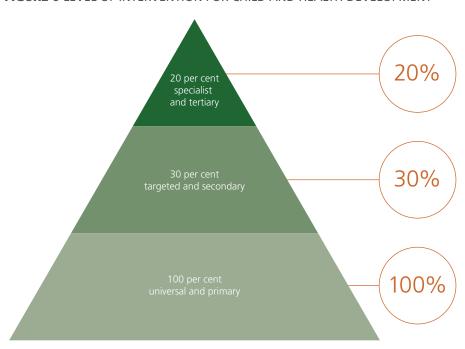
Specialist and tertiary level services are individually tailored responses to a particular child and family situation that often requires high levels of expertise. For example, specialist allied health and medical services, paediatric care, mental health, drug and alcohol treatment services, or child protection support including adoption and fostering. Generally, only 20 per cent of families will require tertiary level care.

3.4 SUPPORTING AN INTEGRATED CHILD AND FAMILY HEALTH SERVICE

The role of health services in the WQPHN is twofold:

- 1. Healthy Start Programs. These ensure universal comprehensive primary health care services, as outlined in the next section, include traditional clinical services for antenatal, delivery, postnatal and early childhood from 0–8 years of age.
- 2. Early Years Programs. These entail health services advising, advocating and working collaboratively with non-health services that significantly impact on child health outcomes. This includes advising State and Federal governments and non-government agencies on policies affecting child and family health outcomes, and advocating for the funding of relevant services and programs. These would include sustained nurse home visiting, parenting and early literacy programs, and early education and care such as pre-school and transition-to-school programs.

FIGURE 6 LEVEL OF INTERVENTION FOR CHILD AND HEALTH DEVELOPMENT



Source: Australian Health Ministers' Advisory Council (AHMAC) 2011, National Framework for Universal Child and Family Health Services: July 2011, AHMAC, Canberra.

3.5 CORE SERVICE ELEMENTS OF A PRIMARY CHILD AND FAMILY HEALTH SERVICE

The National Framework for Health Services for Aboriginal and Torres Strait Islander Children and Families has described the service elements by stages of child development starting from preconception, then maternity care (including antenatal, delivery and postnatal), 0–3 years, 3–5 years and 5–8 years. Although written with an Aboriginal and Torres Strait Islander focus, the service elements are generalisable to all children and families.

PRE-CONCEPTION

Ensuring that women are healthy prior to conceiving has the potential to improve the long-term health outcomes for children significantly. It is also important to equip men and women of child-bearing age, including young people, with strategies to address sexual and reproductive health needs that are appropriate to their individual circumstances.

To this end, preparation for pregnancy and advice to young people about sexual and reproductive health, through school-based and community programs, can improve engagement with health services in the antenatal period and provide opportunities for health promotion and prevention strategies to be implemented. In addition, supporting the health and wellbeing of potential parents by ensuring that health services are easily accessible, flexible, affordable, relevant and responsive to the needs of young people will contribute to addressing risk factors associated with poorer outcomes.

MATERNITY CARE

A primary goal of all maternity services should be to ensure that women are engaged early in their pregnancy and receive the optimal level and type of care according to their individual needs. Initial assessment is important for identifying needs and risk factors to ensure that women receive appropriate clinical care as well as other relevant supports.

Maternity services should focus on identifying and addressing key risk factors – including smoking, alcohol consumption, mental health and maternal nutrition – recognising that doing so necessitates an assessment of their underlying determinants, such as housing, financial security and family context. Services should also provide continuity of care and carer, but if local factors preclude this, they should at a minimum enable continuity of care to be available throughout the antenatal periods to minimise the number of care givers that women meet throughout their pregnancies.

When possible, these community-based midwifery services should attempt to extend the continuity of carer to include intrapartum and postnatal periods. Appropriate support through periods of transition is essential. Approaches need to be in place to ensure smooth transitions for women from community-based midwifery services to hospital birthing services and back again, followed shortly thereafter by transition from maternity to child and family health services.

0–2 years



Breastfeeding has positive effects on the nutritional, physical and psychological wellbeing of infants and, where environmental conditions may be less than ideal, provides optimum protection against infection and under-nutrition. The period from birth to three years of age is critical for brain development and is also a time with significant opportunities for prevention and early intervention activities to impact on health, development and wellbeing outcomes. Service responses should include:

- systematic universal health and developmental checks and monitoring, including clear pathways for follow-up and management of any adverse findings
- anticipatory guidance and health education
- referral to specialist services and follow-up as required
- intensive support services for vulnerable families
- parenting support programs
- support for parents, caregivers and families in providing secure and healthy home environments
- responsive early childhood development and stimulation (e.g. supported playgroups, book distribution programs).





By the age of three, the brain is largely developed. After this age it is more difficult for children to take advantage of learning environments at pre-school and school if they have not had an optimal home environment. Access to high-quality pre-school programs helps children to build on the foundations laid down in the period from birth to three. Health services should also build on the programs set up for younger children, including ongoing regular health checks.



In the period from six to eight years of age, children are generally engaged in formal schooling. During this time health services should aim to maintain engagement both with children and families and with the schools, which provide a valuable avenue for the implementation of health promotion and service delivery programs.



PROFILE AND PRIORITIES



4.1 CHILD AND FAMILY HEALTH PROFILE

WQPHN is the fourth largest Primary Health Network in Australia. It has a geographic area covering 956,375 square kilometres, more than half of the Queensland land mass, but with only 71,787 people, it has the smallest and most sparse population.

The region is predominantly classified as remote with families living in Western Queensland unable to access a range of health services close to home that are available to families living in or close to urban parts of the State. This means longer journeys for children and their families to access health care, which often disrupts home life, as well as an unfavourable reliance on fly-in, fly-out specialist and other health services.

Providing services to these very remote areas is predominantly the responsibility of the region's three Hospital and Health Services (HHSs) and four Aboriginal and Islander Community Controlled Health Services (AICCHSs). Private General Practices are scattered throughout the region, with the largest group in Mount Isa, but over the past decade, privately owned General Practice has been in decline. The majority, 52.5 per cent of Practices, are either managed by the HHSs (46 per cent) or AICCHS (6.5 per cent). Furthermore, the bulk of universal child and family health services in the region are delivered by the HHSs, AICCHSs and nongovernment organisations such as the Royal Flying Doctor Service.

The region has a high Aboriginal and Torres Strait Islander population – 20 per cent compared to a national average of five per cent. Some regions far exceed this, with the Lower Gulf Aboriginal and Torres Strait Islander population at 67 per cent and the Western Corridor at 27 per cent. Western Queensland also features a younger population with 23 per cent aged less than 15 years compared to a State proportion of 20 per cent. Other notable characteristics include:

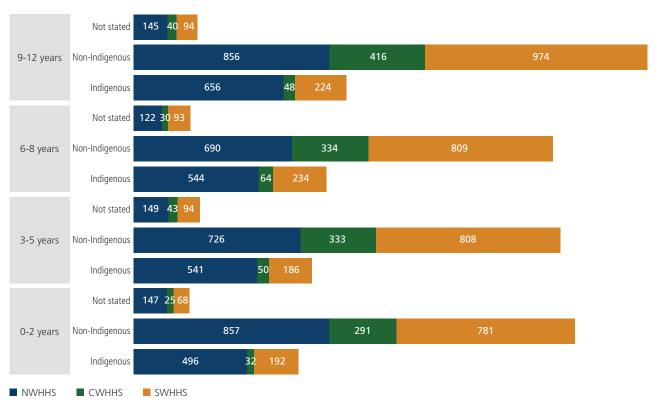
- 50 per cent of all children in Western Queensland live in the North West region, followed by about 40 per cent in the South West and a little more than 10 per cent in the Central West region
- Around 40 per cent of all children live in the Mount Isa and surrounds locality alone, a similar figure to the entire South West region
- About 66 per cent of Western Queensland's Aboriginal and Torres Strait Islander children live in the North-West region and are evenly split between the Lower Gulf and Mount Isa and surrounds localities. More Aboriginal and Torres Strait Islander children live in each of these localities than the whole of the South West region, which has about one-quarter of the Aboriginal and Torres Strait Islander child population, while the Central West region has less than 10 per cent
- Within the South West region close to half of the Aboriginal and Torres Strait Islander child population live in the Far South West locality.

TABLE 1 PROFILE OF CHILDREN AND YOUNG PEOPLE LIVING IN WESTERN QUEENSLAND BY LOCAL GOVERNMENT AREA (LGA)

		0-2 years		3-5 years		6-8 years			9-12 years				
		Indigenous	Non-Indigenous	Not stated									
Burke	Lower	3	-	3	13	-	-	5	-	3	10	3	3
Carpentaria	Gulf	43	34	3	55	37	4	54	24	7	56	37	13
Doomadgee		111	-	4	116	-	-	111	-	-	135	5	-
Mornington		51	5	-	70	4	3	84	3	-	103	-	-
	Total	208	39	10	254	41	7	254	27	10	304	45	16
Boulia (North)	Mt Isa and	2	2	-	3	2	-	5	-	-	4	4	5
Cloncurry	surrounds	29	96	15	37	63	25	53	71	22	50	67	12
McKinlay		-	34	8	-	19	3	-	28	-	7	29	-
Mount Isa		257	686	114	247	601	114	232	564	90	291	711	112
	Total	288	818	137	287	685	142	290	663	112	352	811	129
Barcoo	Western	-	3	-	-	3	-	-	7	-	8	8	-
Boulia (South)	Corridor	2	1	-	2	1	-	3	-	-	2	2	4
Diamantina		-	4	-	3	15	-	3	6	-	-	9	-
	Total	2	8	-	5	19	-	6	13	-	10	19	4
Barcaldine	Central	12	94	7	18	87	8	25	112	3	13	128	12
Blackall-Tambo	West	-	55	6	6	72	15	10	68	11	3	72	-
Longreach		12	107	12	17	119	13	19	120	16	17	152	24
Winton		6	27	-	4	36	7	4	21	-	5	45	-
	Total	30	283	25	45	314	43	58	321	30	38	397	36
Bulloo	Far South	3	13	-	-	11	-	-	10	-	-	16	-
Murweh	West	44	150	9	36	140	7	49	126	19	36	164	9
Paroo		34	30	-	36	38	5	41	27	6	43	20	3
Quilpie		13	18	-	14	15	-	15	32	-	7	35	-
	Total	94	211	9	86	204	12	105	195	25	86	235	12
Maranoa	Maranoa	63	443	47	60	477	72	65	472	49	69	562	53
Balonne	Balonne	35	127	12	40	127	10	64	142	19	69	177	29
WQPHN	Total	720	1,929	240	777	1,867	286	842	1,833	245	928	2,246	279

Source: WQPHN health intelligence portal 2016

FIGURE 7 PROFILE OF CHILDREN AND YOUNG PEOPLE LIVING IN WESTERN QUEENSLAND BY HHS REGION



Source: WQPHN health intelligence portal 2016

There are higher number of babies born in the region than in Queensland overall (2.08), with the difference most marked in the North West (2.80) and South West (2.77) HHSs. Some of this difference can be explained by the greater number of Aboriginal and Torres Strait Islander mothers in the Western Queensland, given that Indigenous women have higher fertility rates than other Australian women.

TABLE 2 COMPARISON OF CHILDREN IN WESTERN QUEENSLAND VS REST OF QUEENSLAND

		Indigenous	Non-Indigenous	Not stated
0-2 years	Western	720	1,929	240
3-5 years		777	1,867	286
6-8 years	Queensland	842	1,833	245
9-12 years		928	2,246	279
0-2 years		12,002	148,568	10,087
3-5 years	Rest of	12,646	158,667	10,453
6-8 years	Queensland	12,900	164,955	10,430
9-12 years		16,473	213,136	13,005

Source: WQPHN health intelligence portal 2016

WQPHN Health Needs Assessment shows that children in Western Queensland, and in particular Aboriginal and Torres Strait Islander children, face large disparities in measured health outcomes. For instance, compared with the rest of Queensland:

- Aboriginal and Torres Strait Islander mothers and infants in the North West and South West, and non-Indigenous mothers and infants in the Central West, had more perinatal risks, such as low maternal age, fewer antenatal visits, higher rates of smoking during pregnancy and not breast feeding;
- Aboriginal and Torres Strait Islander mothers in the North West had a higher proportion of low birth-weight babies;
- WQPHN had apparent higher rates of infant and child mortality, most noticeably in the North West followed by the South West;
- WQPHN children had a poorer health, learning, development, safety and wellbeing profile, as
 determined by the Australian Early Development Census, with the North West and South West
 showing the worst results. For instance, in the Lower Gulf region 46 per cent of children had two
 or more domains classified as vulnerable compared to a State average of 14 per cent;
- North West and some communities in the Central West had a greater proportion of children at risk of abuse and/or neglect; and
- WQPHN generally had higher childhood immunisation rates.

Some of these differences can be explained by the greater proportion of Aboriginal and Torres Strait Islander mothers and children in the region, especially in the North West and South West.

4.2 CHILD AND FAMILY HEALTH COMMISSIONING PRIORITIES

WQPHN is committed to ensuring that all young children in Western Queensland have access to high-quality services that enhance their health and wellbeing outcomes and the environments in which they are raised. We know that children who have healthy childhoods are more prepared to learn and less likely to experience health issues as they grow.

WQPHN will work towards improving young children's health and wellbeing by commissioning services and supporting system enablers that:

1. Build the child and family health service system around General Practice and comprehensive primary health care

WQPHN will prioritise child and family health service developments that clinically integrate public sector primary, secondary and tertiary child and family health services with General Practice, actively support and collaborate with Aboriginal Community Controlled Health Services in the governance, design and implementation of services, promote wellbeing and illness prevention as well as the management of existing health problems, and consider the social determinants of health in service design and implementation.

2. Utilise a multidisciplinary, collaborative, team-based approach

WQPHN will prioritise child and family health service developments that are multidisciplinary and formalise a collaborative, team-based approach. To this end, we will support projects that articulate the roles of each health professional in the team, ratify clear clinical referral pathways and feedback mechanisms, demonstrate effective means to facilitate regular communication and information sharing and enable ongoing participation in inter-professional case management, education and training.

3. Build a skilled and culturally competent child and family health workforce

WQPHN will support child and family health service developments that build and maintain a culturally competent workforce. This will include training for staff on the impacts of colonisation, racism and intergenerational trauma. This training will guide and inform service delivery, and facilitate culturally safe communication and the appropriate employment of Aboriginal and Torres Strait Islander staff.

4. Ensure continuity of care

WQPHN will support child and family health service developments that aim to break down barriers between services, reduce the number of different service providers and support effective clinical networks for referral and transition across services.

5. Support flexible service delivery

WQPHN will support child and family health service developments that both draw on the best available evidence and data collection, and are designed and tested to ensure a responsive and evolving service system through continuous quality improvement.

6. Encourage integrated, place-based approaches based around the WQPHN's seven Health Localities

WQPHN will support child and family health service developments that are founded on strong and effective partnerships between health services in a Health Locality. This includes public sector primary, secondary and tertiary child and family health services, mainstream General Practices, Aboriginal Community Controlled Health Services, the Royal Flying Doctor Service, other non-government organisations, and other services including education, early childhood and social support.

CHILD AND FAMILY HEALTH SERVICES FRAMEWORK



5.1 OBJECTIVES

To improve the health and wellbeing of children and families in the region, WQPHN has chosen to adopt the same objectives as the National Framework for Health Services for Aboriginal and Torres Strait Islander Children and Families. These objectives are as follows:

- 1. To promote health, wellbeing and development in children and families.
- 2. To enhance the confidence and capabilities of parents, families and carers in the parenting role, and promote the relationship between the parent/carer and the child.
- 3. To engage with parents and carers in the early identification of their children's physical, developmental, social and emotional needs, and enable access to timely and appropriate interventions and supports.
- 4. To support parents and carers in meeting their own and their children's needs during key transition times especially at birth and the transition to school.
- 5. To provide early support to families with identified needs.
- 6. To promote population health through preventing avoidable illness, injury and disease.
- 7. To enhance community capacity to provide support to parents, carers and families.
- 8. To work collaboratively with other services to support children, parents, carers and communities.

5.2 PRINCIPLES

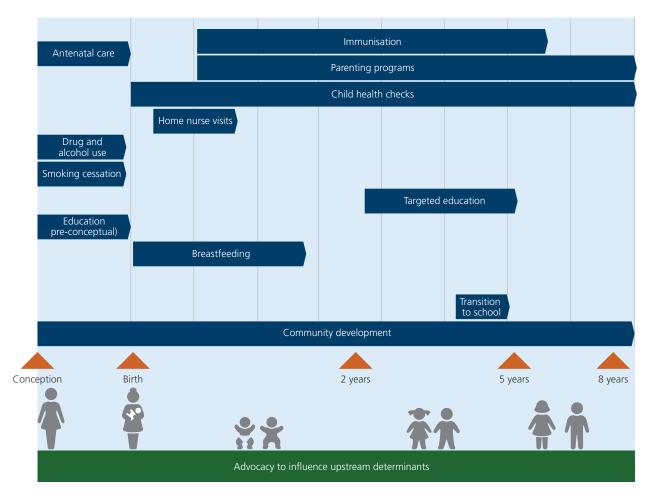
Early brain development research indicates that there is a window of opportunity in the first eight years of life, particularly the first three years, in which to optimise child development. In order to influence a child's determinants of development and wellbeing, all organisations working with children and the community need to be more collaborative rather than operating only within their own boundaries.

Similarly, the following set of principles have been adopted from the *National Framework for Health Services for Aboriginal and Torres Strait Islander Children and Families* to guide the development of strategies to improve child development and wellbeing.

Nationally and internationally there has been an increased focus on child development and wellbeing from a primary prevention, promotion and early intervention perspective. The strategies in Figure 2 are drawn from national and international research as being key, from a prevention, promotion and early intervention perspective, to improving child development and wellbeing and increasing resilience.

Although for some of the strategies there will be predominantly one lead agency, most involve multisectoral collaboration. These best buys are a combination of universal health services and early years strategies (those not directly related to health services, but shown to have had a significant impact on health outcomes, including reductions in chronic disease in adulthood).

FIGURE 8 IMPROVING HEALTH AND SOCIAL OUTCOMES 0-8 YEARS



5.3 KEY INITIATIVES FOR IMPROVED HEALTH AND SOCIAL OUTCOMES FROM A PREVENTION AND EARLY INTERVENTION PERSPECTIVE 0-8 YEARS

1. Antenatal care

This includes smoking cessation and decreasing alcohol and other drug consumption, plus networking and referral between health and non-health services. Thus, antenatal care is also an entry point to many other support services that have the capacity to modify risks and reduce poor health outcomes.

2. Home nurse visits (e.g. Nurse Family Partnership Program)

The effectiveness of nurse home visiting programs, including their positive impact on the lives of parents and children – especially for teenage, first time, unsupported and vulnerable (mediumto high-risk) populations – has been established by credible, high-quality studies. The positive outcomes of such home visiting programs include better use of antenatal care, lower rates of smoking in pregnancy, reduced rates of premature births, higher breastfeeding and immunisation rates, reduced rates of accidental injuries, child abuse and neglect, and behavioural problems among young children. At long-term follow-up among teenagers, there were reduced rates of running away from home, delinquency and substance use, and increased rates of finishing high school. Mothers at long-term follow-up were less reliant on welfare, more likely to be in the workforce and had decreased rates of substance abuse.

Home visiting is best provided as a component of comprehensive services and linked to family support and neighbourhood development strategies.

3. Child health checks

According to evidenced-based guidelines, this includes monitoring growth, developmental assessments, physical examination, screening tests and anticipatory guidance (e.g. Sudden Infant Death Syndrome or SIDS prevention, feeding, sleeping, crying, managing common child behaviour issues, safety, etc.). These checks require a multidisciplinary approach that includes midwives, child and family nurses, Aboriginal health workers, GPs, dieticians, dental workers, speech pathologists, physiotherapists, occupational health therapists, and paediatricians.

4. Breastfeeding

The benefits of breastfeeding, particularly for at least the first six months, have been well established and are associated with, among other positive outcomes, higher cognitive scores in children, lower rates of SIDS, recurrent and chronic otitis media, respiratory infection and gastroenteritis, and improved bonding between infant and mother.

5. Immunisation

The benefits of immunisation have been well documented.

6. Pre-school programs

Two well-evaluated programs include the Abecedarian and Perry Preschool programs. Follow-up of the Perry cohort to age 40 years has revealed significantly reduced rates of crime, arrests and involvement with the law, higher rates of high school completion, higher earnings, fewer mental health problems, less use of social services and a greater likelihood of being in a stable relationship. Other programs have also been associated with both lower teenage pregnancy and substance abuse rates in adolescence. These positive outcomes are thought to be due more to improved emotional and social intelligence than to improved cognitive intelligence. The Abecedarian program has revealed similar results.

7. Transition to school programs

There is good evidence demonstrating that readiness to start school correlates with academic achievement in high school and success in occupations post-schooling, and that an easy transition to primary school is strongly associated with self-rated health at 33 years of age. Although there are no rigorous high-level evaluations of transition programs, both indirect evidence and qualitative evaluations would support such programs, particularly in disadvantaged communities.

Dockett and Perry (2001) have established the following guidelines for effective transition-to-school programs:

- establish positive relationships between the children, parents and educators
- facilitate each child's development as a capable learner
- differentiate between 'orientation-to-school' and 'transition-to-school' programs
- draw upon dedicated funding and resources
- involve a range of stakeholders.

Transition-to-school programs must also be:

- well planned and effectively evaluated
- flexible and responsive
- based on mutual trust and respect
- rely on reciprocal communication among participants
- take into account contextual aspects of community and of individual families and children within that community.

8. Early literacy programs

There is a large body of research on the beneficial health and social outcomes of good early literacy input from birth. Defined in its broadest sense, early literacy comprises aural, verbal, written and communication skills, and is associated with a clear socio-economic gradient.

Programs to enhance early literacy skills include book distribution programs, with or without tips for parents on literacy promotion.

For illiterate or poorly literate communities, group programs exist – such as the Home Interaction Program for Parents and Youngsters or HIPPY program for 4–5 year olds, UK Peers Early Education Partnership (PEEP) and the NSW Support at Home for Early Language and Literacies (SHELLS) – that start soon after birth and continue for 3–5 years. A randomised controlled trial of an eight-week book-sharing program for 14–16 month old babies in a deprived area of South Africa resulted in an equivalent of a 17-point IQ gain and substantially greater gains on measures of sustained attention.

Although not all programs have been rigorously evaluated using randomised control trials, they have been associated with significantly improved literacy outcomes for the children, and improved parenting and social outcomes for parents.

9. Parenting programs

Parenting has been described as one of the most powerful and important determinants of good health and social outcomes for children. There is biological and epidemiological evidence to support this. Neglectful and/or abusive parenting has been shown to be associated with chronically elevated cortisol levels in children resulting in emotional and behavioural problems that can persist into adulthood.

Parenting associated with nurturing, good attachment, bonding and attunement leads to resilience and improved health and wellbeing in children. In addition, the importance of play as a strategy in building relationships between very young children and their parents, and as a foundation for literacy, has been recently documented. Supporting parents with programs to improve attachment, bonding and attunement between caregiver and baby, and family behavioural programs such as Circles of Security, Triple P and others to assist parents to manage both normal developmental and problem behaviours in infants and young children, have been demonstrated to reduce childhood emotional and behavioural problems, oppositional behaviours and conduct disorders.

This is in keeping with research on violence indicating that humans do not learn to become aggressive during adolescence, but learn not to aggress during the pre-school years through a good social environment and 'good enough' parenting.

10. Community development programs

Community development and programs to enhance social capital in communities, in its many shapes and forms, has been used in multiple settings for many years with variable success. Greater social capital in communities has been associated with lower rates of crime, child abuse, and infant and total mortality rates. Development from the 'bottom up', with investment and support for a sustained period of time from the 'top', has been the most successful model.

5.4 EARLY INTERVENTION, PREVENTION AND HEALTH PROMOTION 0-8 YEARS

ACCESS

- Services are universally available, free, appropriate, and accessible for all children and families and articulated, where possible, with other children's services.
- Services are delivered flexibly, how and where the family needs them. Some families will need help to access services.

EQUITY

- Services seek to improve the health of the whole population, as well as reducing inequalities between population groups.
- Universal services work with appropriate targeted responses directed to the families that need them most.
- Service design and delivery are innovative, informed by and responsive to the social determinants of health, paying particular attention to the needs of Aboriginal and Torres Strait Islander children, families and communities, and other marginalised and/or minority disadvantaged groups.
- Services actively ameliorate the poorer health and wellbeing of Aboriginal and Torres Strait Islander children, families and communities.

A FOCUS ON PROMOTION AND PREVENTION

The primacy of health promotion, prevention and early intervention is recognised in service delivery.

WORKING IN PARTNERSHIP WITH FAMILIES

- Services work in partnership with families, developing an ongoing relationship with parents/carers that focuses on strengths and builds capacity.
- The central role and expertise of families in influencing and supporting the health, wellbeing and development of children is recognised and parents are enabled in this role.
- Families and communities participate in service design and delivery.

DIVERSITY

• The diversity of Australian families and communities is valued and services are sensitive and responsive to family, cultural, ethnic and socioeconomic diversity.

COLLABORATION AND CONTINUITY

- Universal child and family health services work in partnership with primary, secondary and tertiary health services and the education, welfare and disability sectors to provide coordinated, multidisciplinary care and integrated service delivery.
- Continuity of care at transition points is 'seamless'.
- Services maximise opportunities for families to develop sustained relationships with health, education, welfare and disability service providers.

EVIDENCE-BASED

- Services reflect the best evidence or harness practice wisdom where evidence is not available.
- Continuous improvement and evaluation of services promote better outcomes for children and families.

HEALTH PROMOTION

- Services and programs that support children and families to be healthy, promote good health practices, and be developed for and with participation of individuals, groups and the whole community.
- Support and advocacy for the social determinants of health, including early learning/literacy strategies, quality childcare and pre-school, adequate housing, parental employment, etc.
- Support for, and involvement in, community-wide events to promote good health practices and engage with the wider community.

5.5 CHILD AND FAMILY HEALTH OUTCOMES 0-8 YEARS

The WQPHN Model of Care, focuses on prevention and early intervention, and describes key elements for antenatal care, childbirth, postnatal care for mother and baby, and families with infants and young children 0–8 years. These include child health surveillance and screening, family and parenting support, secondary child health services and health promotion.

The below are goals/outcomes.

EARLY YEARS (PRE-CONCEPTION TO 8 YEARS)

1. Antenatal care

- All women have access to pre-conception annual health screening.
- All women are offered culturally safe and appropriate antenatal care to commence as close to 10 weeks gestation as possible.
- Antenatal check-ups offered and facilitated at regular intervals throughout pregnancy depending upon the needs of each woman. Antenatal care informed by local perinatal practice guidelines based on a shared care model involving Aboriginal health workers, community midwives, GP obstetrician and hospital specialist obstetrician, and birthing unit midwives staff.
- Antenatal advice and support to include key general health messages on:
 - the risks of smoking while pregnant, smoking cessation and support to effect quitting
 - risks associated with alcohol consumption during pregnancy and foetal alcohol syndrome
 - the importance of adequate nutrition during pregnancy
 - the importance of exclusively breastfeeding their infant.
- All women and their families receive appropriate assessment, early intervention and referral to specialist secondary services for social and emotional wellbeing issues.

2. Child birth

- Child birth occurs in a culturally and clinically safe environment.
- Women are identified early for risks associated with a pregnancy.
- Processes are in place to ensure women assessed as being at high risk can access services
 most appropriate to their needs, and there are clear referral and service provision pathways
 support this.
- Breastfeeding is encouraged and supported from delivery.

3. Postnatal care for mother and baby

- Mothers and babies are offered weekly checks by qualified maternal health workers (Aboriginal health workers, community midwives, GPs) up until 6–8 weeks.
- Follow-up is provided for any post natal problems, monitoring of the mother's emotional and physical wellbeing, and monitoring of the health, growth and development of their infants.

- Home visits are offered to allow assessment of the home environment to help target counselling about safe sleeping practices, breastfeeding and infant nutrition, and child safety.
- All women and their families receive appropriate assessment, early intervention and referral to specialist secondary services for social and emotional wellbeing issues.

4. Child health surveillance and screening

- Infants are offered a schedule of well-specified and clearly detailed health checks from birth, up to the age of eight, by a small team of qualified child health workers (Aboriginal health workers, child and family nurses, GPs).
- Health checks include immunisation, lead and iron status surveillance (where appropriate), developmental assessment, growth monitoring, audiological and vision testing, oral health checks, dedicated GP reviews, brief parenting advice.
- Prevention program incorporates routine annual GP infant health check.
- Care is provided at the most appropriate venue, home versus clinic, with consideration given re access for families.
- Children receive appropriate assessment, early intervention and referral to specialist secondary services for social and emotional wellbeing issues.
- Provision of/referral to GP and secondary services for action on all child health issues requiring consultation or follow-up.

5. Family and parenting support

- Support and education to parents about child development. Promote key parenting messages to parents: talking, playing and reading to babies and children, normal child development, attachment and bonding, managing common infants and toddler behaviours sleep, feeding and nutrition, temper tantrums, oppositional behaviours.
- Accessible services provided to support families with a focus on the learning, development
 and wellbeing of infants and children (e.g. supported playgroup, early literacy programs, the
 HIPPY program).

6. Secondary child health services

- Provision of/referral to secondary services (e.g. paediatrician, ENT specialist, child and adolescent psychiatrist, speech pathologist, social worker, dental).
- Action on all child health issues requiring follow-up is provided.

BIBLIOGRAPHY

Administration for Children, Youth and Families 2000, 'Early Head Start', *Head Start Bulletin: Enhancing Head Start Communication*, 69, Head Start Bureau, Washington, DC.

Alperstein, G., Dyer, C., Burke, H., Kennedy, C. & Davis, B. on behalf of the Far West Aboriginal Child and Youth Development and Well-Being Management Group 2012, Strategic Framework Document: Improving Development and Well-being for Aboriginal Children and Youth in the Far West of NSW, Maari Ma Health Aboriginal Corporation, Broken Hill, NSW.

Armstrong, K. L., Fraser, J. A., Dadds, M. R. & Morris, J. 2000, 'Promoting secure attachment, maternal mood and child health in a vulnerable population: A randomized controlled trial', *Journal of Paediatric Child Health*, 36:555–62.

Australian Health Ministers' Advisory Council (AHMAC) 2011, *National Framework for Universal Child and Family Health Services: July 2011*, AHMAC, Canberra.

Australian Health Ministers' Advisory Council 2015, Healthy, Safe and Thriving: National Strategic Framework for Child and Youth Health: August 2015, AHMAC, Canberra.

Barker, D. 2003, 'The midwife, the coincidence, and the hypothesis', *British Medical Journal*, 327:1428–30.

Burke, H., Cook, M. A. &Weston, R. on behalf of Maari Ma Health Aboriginal Corporation 2005, *Maari Ma Chronic Disease Strategy. 'While prevention is better than cure, control is better than complication'*, Maari Ma Health Aboriginal Corporation, Broken Hill, NSW.

Campbell, F. A., Ramey, C. T., Pungello, E., Sparling, J. & Miller-Johnson, S. 2002, 'Early childhood education: Young adult outcomes for from the Abecedarian Project', *Applied Developmental Science*, 6(1):42–57.

Cant, R. [1997], Interagency Schools as Community Centres Pilot Project: Evaluation, August 1997, NSW Departments of Education and Training, Community Services and Housing, Sydney.

Cook, P. S. 1999, 'Rethinking the early childcare agenda', *Medical Journal of Australia*, 170:29–31.

Cutler, D. M. & Lleras-Muney, A. 2006, Education and Health: Evaluating Theories and Evidence, Working Paper 12352, National Bureau of Economic Research, Cambridge, MA.

Department of Health 2016, National Framework for the Health Services for Aboriginal and Torres Strait Islander Children and Families, Australian Government, Canberra.

Dockett, S. & Perry, B. 2001, Starting school: Effective transitions, *Early Childhood Research & Practice*, 3(2). Available at: http://ecrp.uiuc.edu/v3n2/dockett.html.

Evangelou, M., Brooks, G., Smith, S. & Jennings, D. 2005, *Birth to School Study. A Longitudinal Evaluation of Peers Early Education Partnership 1998–2005*, University of Oxford and University of Sheffield, Oxford.

Felitti, V., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P. & Marks, J. S. 1998, 'Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults', *American Journal of Preventive Medicine*, 14(4):245–58.

Fuchs, V. R. & Reklis, D. 1994, *Mathematical Achievement in Eighth Grade: Interstate and racial differences, Working Paper 4784*, National Bureau of Economic Research, Cambridge, MA.

Ginsburg, K. R. 2007, 'The importance of play in promoting healthy child development and maintaining strong parent-child bonds', *Pediatrics*, 119:182(10).

Gormley, W. T. Jr, Gayer, T. Phillips, D. & Dawson, B. 2005, 'The effects of universal pre-K on cognitive development', *Developmental Psychology*, 41(6):872–84.

Gunnar, M. R., Morison, S. J., Chisholm, K. & Schuder, M. 2001, 'Salivary cortisol levels in children adopted from Romanian orphanages', *Development and Psychopathology*, 7:611–28.

Hertzman, C., Power, C., Matthews, S. & Manor, O. 2001, 'Using an interactive framework of society and lifecourse to explain self-rated health in early adulthood', *Social Sciences and Medicine*, 53:1575–85.

Hoghughi, M. 1998, 'The importance of parenting in child health', *BMJ*, 316:1545–50.

Kitzman, H., Olds, D. L., Henderson, C., Hanks, C., Cole, R., Tatelbaum, R., McConnochie, K. M., Sidora, K., Luckey, D. W., Shaver, D., Engelhardt, K., James, D. & Barnard, K. 1997, 'Effect of prenatal and infancy home visitation by nurses on pregnancy outcomes, childhood injuries and repeated childbearing: A randomized controlled trial', *JAMA*, 278(8):644–52.

Leung, C., Sanders, M. R., Leung, S., Mak, R. & Lau, J. 2003, 'An outcome evaluation of the implementation of the Triple P–Positive Parenting Program in Hong Kong', *Family Process*, Winter 42(4):531–44.

National Health and Medical Research Council (NHMRC) 1996, Promoting the Health of Indigenous Australians: A Review of Infrastructure Support for Aboriginal and Torres Strait Islander Health Advancement. Final Report and Recommendations, Part 2:4, NHMRC, Canberra.

Norrie McCain, M. & Fraser Mustard, J. 1999, *The Early Years Report: Reversing the Real Brain Drain*, The Founders Network, Toronto.

Nossar, V. 2013, 'Health has a postcode', *Medicus*, August 53(7):16–19.

Olds, D., Eckenrode, J., Henderson, C., Kitzman, H., Powers, J., Cole, R., Sidora, K., Morris, P., Pettitt, L. & Luckey, D. 1997, 'Long term effects of home visitation on maternal life course and child abuse and neglect: Fifteen year follow up of a randomized trial', *JAMA*, 278(8):637–43.

Olds, D., Henderson, C., Cole, R., Eckenrode, J., Kitzman, H., Luckey, D., Pettitt, L., Sidora, K., Morris, P. & Powers, J. 1998, 'Long term effects of nurse home visitation on children's criminal and antisocial behaviour: 15 year follow-up of a randomized controlled trial', *JAMA*, 280(14):1238–44.

Raver, C. C. & Zigler, E. F. 1997, 'Social competence: An untapped dimension in evaluating Head Start's success', *Early Childhood Research Quarterly*, 12:363–85.

Reynolds, A. J., Suh-Ruu, O. & Topitzes, J. W. 2004, 'Paths of effects of early childhood intervention on educational attainment and delinquency: A confirmatory analysis of the Chicago Child–Parent Centres', *Child Dev*, 75(5):1299–328.

Schweinhart, L. J., Montie Xiang, J. Z., Barnett, W. S., Belfield, C. R. & Nores, M. 2005, *Lifetime Effects: The High/ Scope Perry Preschool Study through Age 40*, High/ Scope Press, Ypsilanti, MI.

The University of Newcastle [1997], Support at Home for Early Language and Literacies (SHELLS): Evaluation Report 1997–2001, University of Newcastle, Ourimbah.

Tremblay, R. E., Nagin, D. S., Séguin, J. R., Zoccolillo, M., Zelazo, P. D., Boivin, M., Pérusse, D. & Japel, C. 2004, 'Physical aggression during early childhood: Trajectories and predictors', *PEDIATRICS*, 114(1):43–e50.

Turrell, G., Oldenburg, B. F., Mcguffog, I. & Dent, R. 1999, Socioeconomic Determinants of Health: Towards a National Research Program and a Policy and Intervention Agenda, Queensland University of Technology, Brisbane.

US Department of Health and Human Services 2003, Program Performance Measures: For Head Start Programs Serving Infants and Toddlers, Office of Planning, Research and Evaluation, Washington, DC.

Vally, Z., Murray, L., Tomlinson, M. & Cooper, P. J. 2015, 'The impact of dialogic book-sharing training on infant language and attention: A randomised controlled trial in a deprived South African community', *Journal of Psychology and Psychiatry*, 56:865–73.

Watamura, S., Donzella, B., Alwin, J. & Gunnar, M. 2003, 'Morning-to-afternoon increases in cortisol concentrations for infants and toddlers at child care age differences and behavioural correlates', *Child Development*, 74(4):1006–20.

Western Queensland Primary Health Network 2017, Commissioning for Better Health: A Bushman's Guide to Commissioning in Western Queensland, WQPHN, Mt Isa, Qld.

Western Queensland Primary Health Network 2016, Our People, our Partnerships, our Health, Western Queensland Primary Health Network: Strategic Plan 2016–2020, WQPHN, Mt Isa, Qld.

Woolf, S. H., Johnson, R. E., Phillips, R. L. Jnr & Philipsen, M. 2007, 'Giving everyone the health of the educated: An examination of whether social change would save more lives than medical advances', *American Journal of Public Health*, 97(4):679–83.

Turner, Karen MT., Richards, M., Sanders, M.R., 2007, 'Randomised clinical trial of a group parent education programme for Australian Indigenous families', *Journal of Paediatrics and Child Health*, 43(6):429-437.

Western Queensland PHN

07 45731900 admin@wqphn.com.au www.wqphn.com.au 11 Barkly Hwy (PO Box 2791) Mount Isa QLD 4825

June 2018





An Australian Government Initiative







Western Queensland PHN acknowledges the traditional owners of the country on which we work and live and recognises their continuing connection to land, waters and community.

We pay our respect to them and their cultures and to elders past and present.

