National Framework
for Universal Child and Family Health Services

July 2011








Vision, objectives and principles for universal child and family health services for all Australian children aged zero to eight years

Australian Health Ministers' Advisory Council

Australian Government
Department of Health and Ageing

Tasmania

Government of South Australia
SA Health

ACT Health

NSW Government Health

State Government Victoria
Department of Education and Early Childhood Development

Government of Western Australia
Department of Health

Proudly supported by
Northern Territory Government

Toward Q Tomorrow's Queensland | Queensland Government

Acknowledgements

The National Framework for Universal Child and Family Health Services has been prepared by the National Child Health and Wellbeing subcommittee of the Australian Population Health Development Principal Committee of the Australian Health Ministers' Conference (AHMC).

The Child Health and Well Subcommittee would like to thank the project team led by Professor Virginia Schmied from the University of Western Sydney for preparing the final draft of the Framework and The Allen Consulting Group for their work in preparing the initial draft of the Framework. We also are appreciative of the time that many practitioners, service managers and jurisdictional representatives gave to participate in consultations and provide feedback on drafts of this document.

The Project Team

Dr Virginia Schmied
Professor, School of Nursing and Midwifery, University of Western Sydney,
Adjunct Professor, School of Nursing, Midwifery and Health, University of Technology, Sydney

Dr Sue Kruske
Associate Professor, Maternal, Child and Family Health, Graduate School of Health Studies,
Charles Darwin University

Dr Lesley Barclay
Professor and Director, Northern Rivers University Department of Rural Health, University of Sydney

Dr Cathrine Fowler
Professor for Tresillian Chair in Child and Family Health, Faculty of Nursing,
Midwifery & Health, University of Technology, Sydney

Project Advisers

Dr Caroline Homer
Professor, Centre for Midwifery, Child and Family Health, University of Technology, Sydney

Dr Lynn Kemp
Associate Professor and Director, Centre for Health Equity Training Research and Evaluation
University of NSW

Project Officers

Ms Elaine Burns, Ms Sue Harvey, Ms Lindy Danvers



Table of Contents

Table of Contents cont.



Executive Summary

The National Framework for Universal Child and Family Health Services (the Framework) articulates a vision, objectives and principles for universal child and family health services for all Australian children aged zero to eight years and their families.

The Framework provides a structure to strengthen (and in some cases build) effective services to ensure all Australian children and their families benefit from free, quality universal child and family health services. It is intended that a national Framework will deliver a number of benefits including:

- promoting the availability and the role of universal child and family health services to parents, the community as well as health, education and welfare professionals;
- promoting consistency of service across jurisdictions;
- providing a contemporary evidence base for service improvement; and
- progress towards national performance monitoring and the compilation of national population health data for the purposes of comparison across jurisdictions and subpopulations.

The Framework does not seek to prescribe service delivery or restrict flexibility in delivering innovative services to meet the needs of communities. Rather, it provides suggestions and support for evidence-based practice. Evidence-based practice is described through 'core service elements' to guide a consistent approach applicable to all jurisdictions.

Universal child and family health services, together with high quality antenatal services, provide the first stage of the universal service system to support human development in Australia. Along with early childhood education and schooling, universal child and family health services aspire to support optimal health and development to give children the best opportunity to succeed in life and learning.

The focus of this document is on the universal health service platform that delivers a set of services to all children and families. This population health approach facilitates the systematic identification of children and families who require further assessment, intervention, referral and/or support. Universal child and family health services work alongside targeted or specialist and intensive services for vulnerable families or for those children where a health or development need is identified.

In recognition of the importance of the early years of life in influencing the health and development of children, the services outlined in the Framework monitor progress and promote health, development and wellbeing during critical periods in a child's life. This includes recognising the importance of optimal health and wellbeing of parents and other primary carers and ensuring optimal maternal physical and mental health as well as a focus on developing father-inclusive services. Universal child and family health services also contribute to the health of the population through health promotion and preventive health initiatives such as immunisation programs, breastfeeding promotion, child safety and parenting support.

Development of the Framework has been informed by a review of relevant national and international child and family health service frameworks, the research evidence for universal service provision, and a two staged consultation process with approximately 400 stakeholders across all Australian jurisdictions.

The following table (Table 1) provides a summary of the Framework and outlines the vision, objectives, principles, core service elements and outcomes of the Framework for Universal Child and Family Health Services. This is expanded upon in detail in Section 3 of this document. Section 2 provides the background and context to the development of the Framework. Section 4 provides an overview of the elements of an effective child and family health service system required to underpin universal child and family health services. Sections 5 and 6 discuss the outcome measures, performance monitoring and considers implementation issues for the Framework.

Table 1: National Framework for Universal Child and Family Health Services

National Framework for Universal Child and Family Health Services

VISION

All Australian children benefit from quality universal child and family health services that support their optimal health, development and wellbeing

OBJECTIVES

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.

PRINCIPLES

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 it. 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 is innovative and is informed by and is responsive to the social determinants of health, paying particular attention to the needs of Aboriginal and Torres Strait Islander children, families and communities.
- 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 focusing on strengths and building 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 promotes better outcomes for children and families.

National Framework for Universal Child and Family Health Services

THE ROLE OF UNIVERSAL CHILD AND FAMILY HEALTH SERVICES

Universal child and family health services work in partnership with families and in collaboration with other services to:

- Promote the parent/child relationship.
- Promote parental social and emotional wellbeing with detection of social and emotional distress and mental health problems known to impact on parenting (e.g. Post Natal Depression).
- Conduct developmental surveillance and health monitoring of children from birth to eight years of age.
- Deliver health promotion activities including primary prevention strategies (e.g. immunisation), health education (e.g. SIDS prevention), anticipatory guidance (infant's tired signs), parenting skill development (toddler behaviour) and provide support for parents (reassurance, normalisation of child behaviour).
- Respond to identified needs by providing short or long-term interventions appropriate to the service context, and/or timely and appropriate referral to other services.
- Participate in community capacity building activities in response to local needs such as parenting groups or local projects focused on child and family-friendly communities.
- Work collaboratively with other professionals and services to ensure children transition to school with the basic skills for life and learning

CORE SERVICE ELEMENTS

Developmental surveillance and health monitoring

- Monitoring physical, social and emotional and cognitive development.
- Physical health, growth monitoring, oral health.
- Vision and hearing assessment.
- Assessment of family psychosocial risk and protective factors.

Health Promotion

- Prevention of disease, illness and injury.
- Health education and anticipatory guidance.
- Support for mothers, fathers and carers.
- Community capacity building.

Early identification of family need

- Identify the factors known to increase the likelihood of a child experiencing poorer health, development and wellbeing outcomes.
- Work with parents, families and communities to build strengths and address needs.
- Facilitate and coordinate where appropriate, support across multiple services.

Responding to Identified need

- Information, advice and assistance.
- Brief practice-based interventions.
- Referral for further assessment and diagnosis.
- Referral or invitation for further support within universal health services.
- Referral for additional or enhanced targeted services.
- Respond appropriately to child protection concerns.

PERFORMANCE INDICATORS

Proportion of children participating in UCFHS consultations at key contact points who receive:

- initial contact within 2 weeks of the birth
- contact at 6-8 months of age
- health check prior to school entry (3 to 4 years)
- a vision screen between the ages of 3.5 to 4.5 years

Proportion of families who receive follow-up care from UCFHS Parent satisfaction measure*:

Proportion of parents who report:

- feeling engaged with the service;
- feeling that providers listened carefully to their needs/ concerns and their needs and those of their child are met;
- feel supported as competent parents;
- feeling that advice was explained in a way that was understood;
- their child's needs for referral to services were attended to;
- they were offered a new parents' group or linked to support; and
- they received information on: breastfeeding, reading with child, safe sleeping, teeth cleaning, nutrition and healthy eating, smoking cessation (if required), child-led play, establishing warm and nurturing relationships parent/carer/ child (if needed).

MEDIUM-TERM OUTCOMES**

- Increase in the proportion of children exclusively breastfed to four months.
- Increase in the proportion of children who are fully immunised at age two years.
- Increase in healthy weight of preschool-aged children.
- Increase in primary school children who have no dental caries (decayed, missing and filled teeth dmft/DMFT).
- Increase in proportion of children who are identified early and receive attention to child health and developmental needs.
- Increase in proportion of children experiencing a positive transition to primary school.
- Increase in families with identified needs who are receiving social support.

LONG-TERM OUTCOMES**

- Reduction in infant mortality.
- Reduction in death from avoidable injuries.
- Increase in the proportion of children who attend early childhood education in the two years prior to school entry.
- Reduction in the number of children who are the subject of substantiations of child abuse and neglect.
- Improved social and emotional wellbeing of Australian children and families.

Footnotes

* Parent satisfaction measure may be undertaken at local level to inform quality service improvements.

** The medium- and long-term indicators are linked to the current (December 2010) National Headline Indicators for Children's Health, Development and Wellbeing[1] .

1. Introduction

The National Framework for Universal Child and Family Health Services (the Framework) outlines the core services that all Australian children and families should receive at no financial cost to themselves, regardless of where they live, and how and where they access their health care. The Framework focuses on universal health services available to all children and their families from birth to eight years, but emphasises the provision of additional, targeted or specialist and intensive services for families with additional needs or for those children where a health or development need has been identified.

Early childhood represents a period of immense change and development and the health and wellbeing of the mother, father or primary carer[1] is recognised as integral to the health and wellbeing of the child. During this critical transition time, Australian women and men report feeling unprepared for parenthood, [2, 3] lack confidence in their parenting skills and there is a high occurrence of parental stress, postnatal distress and depression (both women and men) in the short and long term after birth [4-6].

Universal child and family health services are uniquely placed to support families, enhance parenting and monitor health and developmental progress during critical periods in a child's life. Ongoing developmental surveillance offers opportunities to positively impact upon the growth and development of children through health and developmental promotion as well as early identification and intervention [7]. Universal child and family health services are also ideally situated to identify parental health issues, and can provide advice and support and/or appropriate referral.

There are many examples of high quality, evidence-based universal child and family health services across Australia and many children will already be receiving these core services. Some children and families, including those most in need, may not access the full range or quality of services. The Framework does not seek to prescribe specific service delivery mechanisms or restrict flexibility in delivering innovative services to meet the needs of communities. Rather, the Framework articulates a vision, objectives and principles for a solid platform of universal child and family health services and provides suggestions and support for evidence-based practice. Evidence-based practice is described through 'core service elements' to guide a consistent approach applicable to all jurisdictions.

[1] From this point forward in the document, the term parent will be used to represent mothers, fathers and other carers unless the content is related specifically to mothers or fathers.



2. Background

It is important to understand the context of the development and implementation of a universal framework for child and family health services. Providing universal services for young children and their families is appropriate in terms of offering the whole population health and developmental promotion, early identification and early intervention. This section outlines the key understandings that underpin the Framework.

2.1 The health of Australia's children

In Australia, the overall health, development and wellbeing of children is high on many indicators. Childhood mortality rates have halved over the last two decades, the incidence of vaccine-preventable diseases has been reduced since the introduction of immunisation (92% of two-year-olds being fully vaccinated in 2004) and the proportion of households with young children in which a household member smoked inside the house has decreased over the past decade [8].

It is concerning however, that despite this seemingly healthier society, increasing numbers of Australian children and young people are displaying worsening or poor outcomes in a number of complex and chronic conditions that have emerged as the challenging morbidities of the 21st century. For example, rates of diabetes, eating disorders, behaviour problems, depression, anxiety, suicide and child protection notifications are increasing [9].

A recent review and analysis of the health and wellbeing of Australia's children, the 'ARACY Report Card', indicates that the health and safety of Australian children, particularly Aboriginal and Torres Strait Islander children[2], does not compare favourably with many other countries [10]. Compared with their non-Indigenous Australian counterparts, Indigenous children are two to three times more likely to die in the first 12 months of life, are more likely to be stillborn, to be born pre-term, to have low birth weight, nearly 30 times more likely to suffer from nutritional anaemia and malnutrition up to four years of age, are at a much higher risk of suffering from infectious and parasitic diseases and to be cared for by adults, who are also at higher risk of premature death and serious illness, than other Australian adults [11].

The national Framework for universal child and family health services is designed to meet the needs of all Australian children and must be informed by the emergent research, policy and service context.

[2] Throughout this document Aboriginal and Torres Strait Islander peoples will be referred to as such unless a direct quote from another source uses different terminology.

2.2 The importance of the early years

In recent years, accelerating bodies of evidence from many disciplines including neuro-science, molecular biology, developmental psychology, and social ecology have demonstrated that the period from conception through the early years of a child's life provide the foundation for lifelong physical, social and emotional wellbeing. Key points emerging from this evidence are as follows:

- Research demonstrates that the developing brain is not just genetically determined but contingent on the complex interplay between genes and the environment and that the brain develops most rapidly from conception to about 5-6 years of age [12].
- Early experiences and interactions contribute to brain 'wiring' or structure and capacities. Nurturing, responsive relationships build healthy brain architecture that provides a strong foundation for learning, behaviour and health [12, 13].
- When protective relationships are not provided, elevated levels of stress disrupt brain architecture [12, 13].
- Biological events during fetal and early life predispose a child to an elevated risk of physical and mental health problems as an adult [14-18]. Studies indicate for example, that adults who had low birth weight are at increased risk of coronary heart disease, diabetes, hypertension and stroke in adulthood [14-18]. Importantly however, these relationships can be modified by positive patterns of postnatal growth [19].
- Socioecological perspectives [20] emphasise the importance of understanding the multiple influences on child development. These include the most immediate influence of family, through to peers, school and neighbourhood, as well as, the social and institutional context in which the child lives.
- The health of the mother, father and other primary carers is crucial for optimising the health and wellbeing of children [21].
- Neighbourhoods and communities are also important and studies indicate that socioemotional and learning outcomes of children are influenced by the neighbourhood they grow up in [22].
- There are also strong indications that social changes over recent decades have impacted on maternal wellbeing and have altered family functioning [23]. For example, changes in family composition, alterations in workforce participation particularly for women, and an increasing number of families with complex needs may have resulted in the weakening of protective factors and an increase in risks for children [23].

It is important that support is accessible for all children and their families throughout a child's development including across key transitions. This is particularly true for vulnerable families. Transition periods such as becoming a parent, early infancy, the toddler years and starting preschool or school represent critical developmental stages for children and families. Each involves multiple social, cognitive, physical and emotional changes. The success of each of these transitions depends on a complex interplay of family, health, legal, cultural, neighbourhood, educational and other influences. Failure to make successful transitions puts children at increased risk for poor outcomes in the present and the future [24-29].

There is a strong economic argument for supporting children and families early. Known benefits accrue to the whole society, through enhanced human capital and capability, increased productivity, greater social inclusion and reduced public expenditure in health, welfare and crime, related to disadvantage over the life course [23]. Much cited benefit-cost ratios from the US suggest that for every dollar invested in services for preschool age children, there will be a $2 to $2.60 return to society [30]. Nobel laureate and economist, Professor James Heckman calculates that taking into account crime savings, education savings, welfare savings and increased taxes due to higher earnings, the economic return is between 15-17% for every dollar [31].

2.3 Australia's child and family health service system

A population approach

Internationally there is strong support for a population approach to child health and development. The landmark Canadian Early Years Study states that:

> *Societies and governments have an obligation to the future to devise systems that ensure effective parenting, support good early child development [32].*

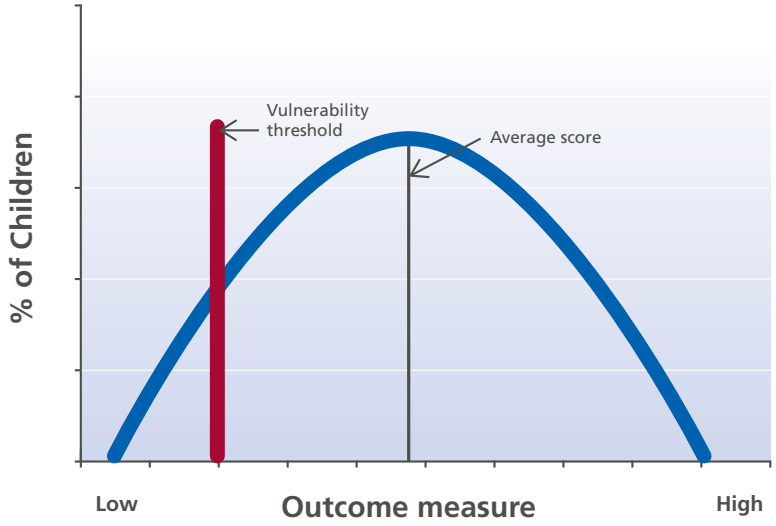
The expectation underpinning this statement is that all children have equal opportunity for optimal growth and development in the early years accessed through a ***universal*** platform of services [33]. In Australia for example, universal services include health services (antenatal care, child and family health services), school education and in some jurisdictions, early childhood education and care. The World Health Organization (WHO) [34] also argues that:

> *Health-care systems contribute most to improving health and health equity where the institutions and services are organised around the principle of universal coverage ... and where the system as a whole is organised around Primary Health Care (p.96).*

A population approach seeks community mobilisation directed towards achieving population-wide change in social norms and structures that directly benefit health and wellbeing. It seeks to influence individual behaviours and lifestyles indirectly by changing social norms and social support [33]. Universal population approaches also seek to direct services appropriately to families in response to their needs, and has been most recently articulated in the concept of 'progressive universalism' [35] which is premised upon support for all, with more support for those who need it most.

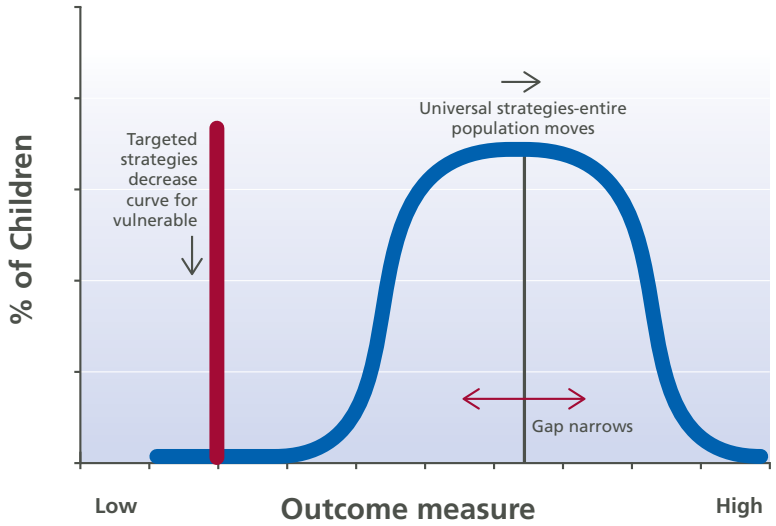
When health services are available to all children and families in the population (that is, are universal) the range of developmental outcomes narrows and more children approximate the average, that is, more children attain normal development. In contrast, the targeting of additional services and supports for children at or below the vulnerability threshold for normal development leads to a decrease in the number of children not attaining normal development. Figures 1 and 2 illustrate the benefits gained from a population approach to services supporting child health and development [36].

Figure 1:



Source: adapted by the AEDI National Support Centre

Figure 2:





A system of universal, targeted, secondary and specialist services

Australia has a well-accepted system of free, **universal health services** based on the principles of primary health care[3] to meet the needs of pregnant women, children and families at multiple contact points. Midwives provide care at no cost across pregnancy, birth and the postnatal period for up to six weeks after birth in some models of care. Child and family health nurses[4] (CFHN) provide services for families and children from birth to school entry and in some jurisdictions will provide services in the antenatal period and beyond school entry to the age of 12. General practitioners (GPs) also provide significant primary care services for children and families however, these are often at a financial cost to families (see Figure 4) [37]. 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% of families are able to access universal services.

Targeted services focus on children and families or communities who have additional needs or increased likelihood of poor health or developmental outcomes limiting opportunities to reach their full potential. Such children and families may include: refugee and culturally and linguistically diverse families, families where drug and alcohol use is a problem and children in out-of-home care. Importantly, targeted services and supports work to reduce inequalities in outcomes between groups of children. Such services are often provided from within the universal 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: extended home visiting programs, outreach programs in disadvantaged communities, day stay services and supported playgroup programs.

Secondary level services: Secondary level health services also form part of targeted services and usually fall outside the scope of practice of the universal health providers. Examples of secondary level services include allied health intervention programs, developmental disability and inclusion support services and parenting or family relationships programs. General practitioners play a significant role in both accepting and making appropriate referrals. Approximately, 30% of families are expected to require secondary level services (see Figure 3).

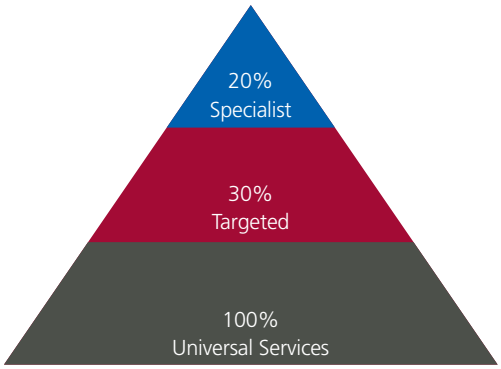
Specialist or intensive tertiary services and supports are individually tailored responses to a particular child and family situation that often requires high levels of expertise. For example, specialist allied health and medical services, paediatric care, mental health, drug and alcohol treatment services or child protection support including adoption and fostering (Adapted from [23, p.19]). Only 20% of families will require tertiary level care, as demonstrated in Figure 3.

The relationship between universal, targeted and specialist services is outlined in Figure 3.

[3] In theory, the principles of primary health care underpin the work of universal child and family health services although in practice, primary health care strategies are not always well articulated or visible and are often confused with primary care.

[4] Known as Maternal and Child Health Nurses in Victoria.

Figure 3: Levels of intervention for child health and development [36].



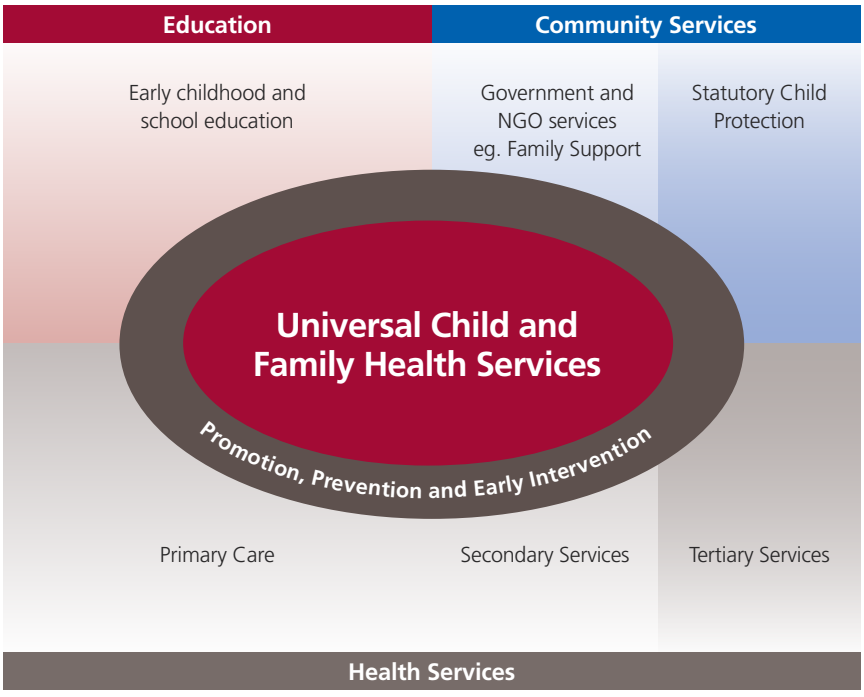
Toward an integrated approach to service delivery

Australia currently has a complex and multi-layered system of funding, service provision regulation and policy development involving a range of government and non-government stakeholders supporting children and their families. While there are examples of high-quality, innovative service provision; inconsistency across jurisdictions and fragmentation of services across professional groups and service sectors means many children and families, particularly those who are most disadvantaged, do not receive the services they need [38, 39].

Better coordinated and integrated approaches to service models and collaborative ways of working are increasingly being recognised both nationally and internationally as the optimal way of meeting the needs of children and families. Partnership and collaboration across professions and traditional service boundaries and coordination of service delivery results in: enhanced access to services; improved health outcomes; a wider choice for consumers; and, a reduction in the use of inappropriate or unnecessary services [40-42].

Universal child and family health services play a critical role in articulating with all elements of a coordinated child and family service system. This integrated approach to looking at how the service system can best meet the needs of children and families is illustrated in Figure 4. The intersections with community services, education and the rest of the healthcare system are critical elements if the service system is to deliver better outcomes for children.

Figure 4: Child and family service system: an integrated approach





2.4 The current policy environment

There are a number of policy and strategic reform areas that are directly relevant to the health and development of all children.

Under the auspices of the Council of Australian Governments (COAG), several current reforms have informed the development of the Framework for Universal Child and Family Health Services.

The Framework is most strongly aligned with the vision articulated by COAG in the ***'Investing in the Early Years: A National Early Childhood Development Strategy'*** [23] which states that by 2020:

> *'All children have the best start in life to create a better future for themselves and for the nation'*

The ***National Early Childhood Development Strategy*** outlines how Australia's early childhood development system will engage with and respond to the needs of children and their families to provide Australia's young children with the best possible start in life. The strategy aims to link the role of communities, non-government organisations and all governments in shaping children's early childhood development.

The ***National Health and Hospital Reform Report*** [39] also addresses the importance of a healthy start to life and the central role of prevention and early intervention into every aspect of the Australian health system. The right mix of universal and targeted services for all children and families is emphasised, most particularly for children and families with the highest levels of need such as Aboriginal and Torres Strait Islander children and families.

In addition, there are a number of related policy areas.

The ***National Preventative Health Strategy – 'Australia the Healthiest Country by 2020'*** identifies the importance of effective prevention strategies for obesity, tobacco and alcohol use during pregnancy and the early years of life. Key strategies include: early identification of family risk and need starting in the antenatal period; response to need in pregnancy, early years and through parent support; monitoring of child health, development and wellbeing, as well as service redevelopment and workforce training to meet maternal and childhood needs .

The ***National Disability Strategy***, due for release in 2010-11 after endorsement by the Council of Australian Governments, will provide a national framework to drive future reforms in mainstream systems and the disability service system for people with disability, their families and carers.

Universal child and family health services in Australia also have a key role to play in the COAG strategy – the ***National Framework for Protecting Australian's Children, 'Protecting Children is Everyone's Business'*** [43]. This strategy emphasises the need to take a public health approach to the care and protection of children, young people and their families. Under a public health model or population health approach, priority is placed on having universal supports available for all families (such as, health and education). More intensive prevention interventions are provided to those families that need additional assistance with a focus on early intervention. Tertiary child protection services are a last resort, and the least desirable option for families and governments. The Common Approach to Assessment, Referral and Support (CAARS) has been developed within this strategy.

Given the importance of the antenatal period in influencing a child's start to life, the Framework for universal child and family health services also seeks to articulate with the national antenatal care guidelines, and the Australian Government's reform of maternity services.

In Australia, child and family health services are primarily delivered by State and Territory Governments. However, there are a number of policies and programs for which the Australian Government takes responsibility that focus on the wellbeing of children as well as the early identification, prevention and management of health conditions, and consequently may have an impact on child health (see Table 2).

Table 2: Current Australian Government programs focused on health and wellbeing of children

- Funding the Medical Benefits Schedule (MBS), the Pharmaceutical Benefits Schedule (PBS), an Aboriginal and Torres Strait Islander specific primary health care rebate.
- Funding states and territories through the National Healthcare Agreement (NHA), which now goes beyond hospitals and covers public health, prevention and the interactions of the hospital system with the primary, aged and community-based care systems.
- Council of Australian Governments' (COAG) National Partnership Agreement on Preventive Health includes interventions that will be implemented in settings such as preschools, schools, workplaces and communities to help individuals modify their lifestyles in order to reduce the risk of chronic disease.
- National Immunisation Program (NIP) aims to increase coverage of children against 16 vaccine preventable diseases including measles, mumps, rubella and poliomyelitis.
- COAG National Partnership Agreement on Indigenous Early Childhood Development, which includes funding to increase antenatal care in early pregnancy for Aboriginal and Torres Strait Islander women (particularly those under 20) and for teenage sexual and reproductive health; and funding to improve access for Indigenous children and their families in selected areas to integrated services offering early learning, childcare and family support, and access to maternal and child health services.
- Indigenous-specific funding targeting maternal and child health e.g. Healthy for Life.
- Australian Nurse-Family Partnership Program, which provides comprehensive, nurse-led home visiting services for Indigenous families to improve pregnancy outcomes by helping women engage in good preventative health practices and support parents to improve child health and development.
- Healthy Kids Check for all four-year-olds, which includes basic eyesight examination. Parents also receive a copy of the Get Set 4 Life – habits for healthy kids Guide, which provides practical information about healthy living habits.
- Funding through State and Territory Governments, Divisions of General Practice and beyondblue under the National Perinatal Depression Initiative-focused on improving prevention and early detection of antenatal and postnatal depression and providing better support and treatment for expectant and new mothers experiencing depression.
- COAG Mental Health Early Intervention Services for Parents, Children and Young People initiative, which includes the KidsMatter Early Childhood and KidsMatter Primary initiatives for mental health promotion, prevention and early intervention in long day care centres, preschools and primary schools.

Section 3 outlines the Framework and provides the structure health services need to ensure that all children and families have access to suitably resourced, well-supported professionals to ensure each child will achieve his or her optimal potential.



3. The National Framework for Universal Child and Family Health Services

3.1 Purpose of the Framework

The National Framework for Universal Child and Family Health Services provides a structure to strengthen (and in some cases build) effective services to ensure all Australian children and their families benefit from quality universal child and family health services. It is intended that a national Framework will deliver a number of benefits including:

- promoting the availability and the role of universal child and family health services to parents, the community as well as health, education and welfare professionals;
- promoting consistency of service across jurisdictions;
- providing a contemporary evidence base for service improvement; and
- progress towards national performance monitoring and the compilation of national population health data for the purposes of comparison across jurisdictions and subpopulations.

3.2 Approach to development of the Framework

The National Framework for Universal Child and Family Health Services has been informed by a review of International child and family health service frameworks and the research evidence for universal service provision, together with a two-staged consultation process comprising approximately 400 stakeholders across all Australian jurisdictions. Consultation participants came from metropolitan, regional, rural and remote locations and included a range of: service providers (CFHNs, paediatricians, general practitioners, allied health professionals (social workers, speech therapists, occupational therapists, dental therapists), early childhood education specialists and service managers, policy advisers, program managers: and representatives from six professional associations (for example, representatives from the Australian Association of Maternal Child and Family Health Nurses (AAMCFHN), Child and Family Health Nurses Association NSW, Inc. (CAFHNA), and the Australian Confederation of Paediatric and Child Health Nurses (ACPCHN). Written submissions and email correspondence was also received (see Appendix 2 for detail of consultation methodology and key findings).

3.3 Vision

The vision, objectives and principles of the Framework are outlined below and illustrate the ecological nature of universal child and family health services where the focus is on the child in the context of the family, community and health and other services.

All Australian children benefit from quality universal child and family health services that support their optimal health, development and wellbeing.

3.4 Objectives

The vision is achieved through eight objectives for universal child and family health services:

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.

3.5 Principles

Access

- Services are universally available, are free and are appropriate, and accessible for all children and families *and articulate where possible with other children's services*
- Services are delivered flexibly how and where the family needs these. 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 is innovative and is informed by and is responsive to the social determinants of health, paying particular attention to the needs of Aboriginal and Torres Strait Islander children, families and communities.
- 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 focusing on strengths and capacity building.
- The central role and expertise of families in influencing and supporting the health, wellbeing and development of children is recognised and parents are enabled and strengthened 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 socio-economic 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 actively ameliorate the poorer health and wellbeing of Aboriginal and Torres Strait Islander children, families and communities.
- Services reflect the best evidence or harness practice wisdom where evidence is not available.
- Continuous improvement and evaluation of services promotes better outcomes for children and families.

3.6 The role of universal child and family health services

Universal child and family health services work in partnership with families and in collaboration with other services to:

- Promote the parent/child relationship.
- Promote parental social and emotional wellbeing with detection of social and emotional distress and mental health problems known to impact on parenting (e.g. Post Natal Depression).
- Conduct developmental surveillance and health monitoring of children birth to eight years years of age.
- Deliver health promotion activities including primary prevention strategies (e.g. immunisation), health education (e.g. SIDS prevention), anticipatory guidance (infant's tired signs), parenting skill development (toddler behaviour) and provide support for parents (reassurance, normalisation of child behaviour).
- Respond to identified needs by providing short- or long-term interventions appropriate to the service context, and/or timely and appropriate referral to other services.
- Participate in community capacity building activities in response to local needs such as parenting groups or local projects focused on child and family-friendly communities.
- Work collaboratively with other professionals and services to ensure children transition to school with the basic skills for life and learning.

3.7 Health and developmental monitoring: Critical periods and key ages for recommended periodic contact with children and families

Universal child and family health services are delivered through a schedule of periodic contacts with children between birth and school entry in most jurisdictions in Australia and also in many countries around the world. The timing of these key visits have been designed to coincide with critical periods in development, to maximise the opportunity for parental guidance, and to support developmental surveillance and health monitoring. In addition to the scheduled periodic contact times, universal child and family health services offer brief or targeted interventions to children and families with identified needs in order to address issues early and often prevent further referrals. It is well understood that the efficacy of targeting families with greater need (i.e. closing the disadvantage gap) will be reliant on the strength of the universal service base [44].

These schedules of contact exist internationally (Bright Futures, USA; National Service Framework for Children, Young People and Maternity Services, UK; Well Child Framework, New Zealand) for monitoring of the 'well child'. Although there is no clear evidence as to a particular minimum or maximum number of contacts (or the exact timing of contacts), all frameworks include regular and relatively frequent assessment in the early years in order to provide the opportunity for parents to discuss any concerns leading to the early identification of issues that can either be addressed or further referred [45]. All Australian states and territories recognise the benefits of regular scheduled contact with families. This is in line with medical associations and governments internationally who consistently recommend that all children receive periodic universal developmental surveillance, particularly in the years before children start school [45].

Principles for the delivery of well child care

Core contact times are therefore based on a series of principles including:

- critical periods of child development – recognising development is rapid during the early years, particularly the first 12 months, and therefore early interventions during this period are more economical and effective
- alignment to immunisation schedules to encourage participation in both programs
- opportunities to identify families at risk and offer timely family support services
- opportunities for targeted anticipatory guidance, provision of age-specific health information and relevant health promotion activities and
- aligning contacts with memorable events such as the child's birthday (particularly over 18 months of age).

In particular offering more frequent contacts in the first 12 months:

- Facilitates the development of a relationship between the family and services. A relationship based on trust and continuity of care is important to engage parents in services, to respond appropriately to parental concerns and to work together towards a common goal.
- Facilitates timely support for parents as they learn to recognise and accommodate the frequent transitions in infant development.
- Promotes parental peer support and community networking either on an individual or group basis.
- Links parents with both formal and informal community-based services and supports.



Flexible options

Opportunistic contact with children and families will also occur at immunisation and general practitioner visits when episodic illness and other concerns arise. Families, who are confident in their parenting ability because they have gained experience caring for other children, may choose to access child and family health services solely for immunisation. It is therefore important for immunisation service providers (CFHNs, GPs and others) to opportunistically discuss any other relevant information at this contact or encourage participation in the universal service where this is beyond their scope of practice (e.g. Practice Nurse).

Flexibility is central to providing universal child and family health services which are responsive to the needs of families. While families are encouraged to access services at key ages and developmental stages, this should not preclude access to services for assessment and support at any other time. Although somewhat challenging, it is in fact this flexibility that will ensure that universal services are able to more effectively target families who may have greater needs.

3.7.1 Core contact recommendations

Antenatal contact

Contact with the child and family health service during the antenatal period provides the opportunity to inform families about the services available after birth. The purpose of antenatal contact by CFHN is not to replace or duplicate services provided by maternity providers such as midwives but to increase early engagement by developing a rapport with families and providing health information [46]. Antenatal contact also improves transition of care between maternity services and child and family health nursing [47] and has been shown to improve service participation for children and families living in disadvantaged communities [46]. It has also been reported that contact between maternity service providers and child and family health services in the antenatal period helps to improve communication, build collaboration and reduce gaps in services [47].

The National Indigenous Health Equality Council has identified in its 2010 publication of *Child Mortality Targets: Analysis and Recommendations*, that Aboriginal and Torres Strait Islander mothers are accessing antenatal services later in pregnancy and less frequently. Increased access to antenatal care by Aboriginal and Torres Strait Islander women is important as they are at higher risk of giving birth to low birth weight babies. It is also important that universal health service providers such as CFHN work closely with Aboriginal Controlled Health Organisations and with specific Aboriginal and Torres Strait Islander mother and baby programs to increase engagement in universal child and family health services.

Initial universal contact

The initial contact with universal child and family health services occurs ideally within 1-2 weeks following birth. This should be, where possible and desired by the family, offered as a home visit by the CFHN [48]. Home visiting in this context is part of a universal approach to outreach and ensures that the service is able to contact all families of newborn children and connect them with the service. Families who choose not to accept a home visit should be offered other options for support such as, an appointment at a community health centre or review by a GP. It is also acknowledged that home visiting services are not always available or appropriate, particularly in remote Aboriginal and Torres Strait Islander communities.

The home visit has a number of intuitive and anecdotal benefits:

- It provides a familiar environment for the parent, enhancing their participation and control of the interaction with the health service.
- It is convenient for parents with a newborn infant, which may be more acceptable to parents.

- It provides an opportunity for the CFHN to undertake a more comprehensive assessment by observing family interactions and to support parents in providing a nurturing and safe home environment. This also assists in the provision of information to parents that is tailored to their individual needs and may identify issues that require follow-up or referral.

Contact with families in the first 1-2 weeks of their infant's life provides an opportunity to support parents as they develop a relationship with their infant emphasising infant capacities for learning and communication. This contact also facilitates support for and promotion of breastfeeding, response to any parental concerns for example, feeding and settling, physical examination of the newborn, and orientates the family to relevant support services in their local community.

Health and development monitoring contacts

The ongoing scheduled visits should subscribe to the principles of universal child and family health services and provide opportunities to assess the growing child as evidenced by the sequential achievement of developmental milestones and early identification of children who require further monitoring and/or referral. These scheduled visits also provide the opportunity for anticipatory guidance for expected changes in development over the next few months, and identification of maternal physical health issues and assessment of maternal (or paternal) psychosocial issues including mental health. Detection of problems and ongoing engagement with the service is enhanced if the care is provided by a known professional in a 'continuity of carer' model.

Health and developmental opportunities.

Up to the age of 6 months neuro-developmental pathways that influence social and emotional development are being laid down, particularly in response to maternal-infant attachment. Together with support for breastfeeding, the promotion of children's social and emotional development and parental physical, emotional and mental health are core to this stage of development. Opportunities to promote a healthy home environment (e.g. smoke-free, child safe) that promotes language and communication are also central elements of assessment and health promotion at this time.

Between six and 18 months of age there is rapid development of the infant's motor, language and cognitive skills, (including social and non-verbal skills). Delays in communication and language development are often evident by 18 months and mild motor delays that were undetected earlier may be more apparent at 18 months of age. In addition, symptoms of autism are often first identified at the 18-month assessment [49].

Ongoing contacts between two years and five years enable continued surveillance of the child's growth and development over the period of development that many parental concerns are likely to emerge [50]. Early detection of physical, social and emotional developmental concerns and intervention allows a smoother transition to school and minimises the impact of health issues on learning.

3.8 Core elements of universal health services for children and families

This section outlines the core elements of the health services that all children and families should receive in the period from birth to eight years. There are four core service elements:

- health and developmental surveillance;
- health promotion;
- early identification of family need and risk; and
- responding to identified need.

Within each of the core service elements there are services and activities to guide implementation.



3.8.1 Developmental surveillance and health monitoring

A key function of universal child and family health services is to monitor child health, development and wellbeing, identify early disability and delay, or health issues (both physical and socioemotional) and support the developing parent and infant (young child) relationship. A schedule of contact visits with families (see Section 3.7) provides the opportunity to monitor child health, development and promote wellbeing through clinical observation, and assessment. The use of standardised, evidence-based assessment tools assists in the early identification of issues.

Developmental surveillance and health monitoring are fundamental components of the universal child and family health service. The National Health and Medical Research Council (NHMRC) review of evidence on child health screening and surveillance identified some of the difficulties surrounding the use of the term 'surveillance' [51, p.21]. The term can be misinterpreted by parents and families as representing health professional 'checking up on' parenting approaches or 'judging' their abilities [51, p.21].

Developmental surveillance is defined by the NHMRC as the process of:

> *'eliciting and attending to parents' concerns, making accurate and informative longitudinal observations on children, obtaining a relevant developmental history and promoting development'. [51 p, 22].*

In this context, surveillance, whilst initiated by health professionals, is conducted in partnership with parents and families [51, p.21]. Surveillance occurs at two levels of the health system both in the form of individual (clinical and parental) surveillance and also population monitoring at the public health level [51, p.22].

Surveillance of child development allows for the early identification of children with developmental delay, and provision of early intervention services. There is strong evidence that early intervention for these children can significantly improve developmental outcomes [31, 52]. Developmental delay and disability may develop before identification, however, it may be possible in some cases, particularly high risk groups, to prevent the formation of, or decrease the extent of, the delay or disability. For children who may have increased needs due to poverty or other social disadvantage, there is the potential for preventing developmental delay and disability if effective intervention is provided [52].

Physical health

Physical health checks are included in the assessment of the child at varying frequencies to identify health issues and problems that would benefit from early intervention or treatment. A full physical assessment would include examination and assessment of the child, for example; head shape and size, eyes, mouth, skin colour and texture and body shape.

Physical examinations (including vision, hearing, and language assessment) also provide an opportunity for health professionals to observe the child's behaviour, (assessing social and emotional development), observe parents' interaction with the child, reassure parents by normalising behaviour, identify delays and provide anticipatory guidance. Physical examinations may also indicate signs and symptoms of child abuse or neglect. A secondary outcome of the physical examination is the opportunity provided by the examination for the health professional to model appropriate and responsive handling and interaction with the child.

Vision and hearing

Vision and hearing are vital for the optimal development and wellbeing of children. Vision and hearing loss affects both physical and psychosocial areas of development such as language, motor skills and parent/infant interaction. Early identification of any vision or hearing deficit is therefore a priority for universal child and family health services. Targeted services are also required to provide support where an increased need or risk factor has been identified (for example, *Aboriginal and Torres Strait Islander programs* targeting ear health including otitis media). The ongoing review of risk factors and questions at key contact points prompt discussion with parents regarding any concerns they have about their child's vision, hearing or other areas of development.

The National Children's Vision Screening Project [53] recommended:

- All Australian children be offered vision screening in the year prior to commencing formal school. The most appropriate age for visual acuity testing is when a child is four years old (with a range from 3.5 to 5 years of age).
- The red reflex check be carried out on all newborns as part of a universal health- check.
- An eye-health professional (optometrist, orthoptist, ophthalmologist) is responsible for further evaluation where indicated by the primary screen.
- Children considered at increased risk (including those born prematurely, with disabilities or children living in remote Indigenous communities) require an in-depth assessment even if they have participated in the universal screening program.

The Sheridan-Gardiner vision screening tool is considered the gold standard tool for use with children aged four years and over, whilst the LEA symbols tool is appropriate for vision surveillance of younger children [53, p.28]. Identification of impaired colour vision is not currently recommended [51] (see Appendix 3 for description of vision screening tools).

Universal Newborn Hearing Screening is now accepted as best practice and should be conducted in the early neonatal period before discharge from hospital to identify any significant sensorineural hearing loss. Distraction testing between seven and nine months is no longer recommended due to lack of evidence to support the practice [48]. All caregivers should be asked if they have any concerns regarding their infant's hearing at each key contact visit.

In addition, for Aboriginal and Torres Strait Islander populations with a high prevalence of otitis media, surveillance and management for conductive hearing loss needs to expand beyond the neonatal period. Early identification is important because optimal speech and language development may result if intervention commences early. This can minimise the need for ongoing special education.

Oral health

Good oral health throughout infancy and early childhood contributes to better health in adulthood. Studies have demonstrated an association between oral infections and conditions, such as diabetes, cardiovascular disease, stroke, and adverse pregnancy outcomes [54]. Early childhood caries (ECC) is a serious dental condition occurring during the preschool years of a child's life when developing primary (baby) teeth are especially vulnerable. It can be a serious condition often requiring hospitalisation and dental treatment in an operating theatre under general anaesthesia. The pain, psychological trauma, health risks, and costs associated with restoration of carious teeth for children affected by ECC can be substantial, yet it is mostly preventable [55].



Assessment of oral health should be integrated into the general assessment of health at key periodic contact points and opportunistically. A visual check of the health of the mouth for dental disease by a child and family health professional raises parental awareness and provides the opportunity for anticipatory guidance, education and referral for further assessment and treatment. The 'Lift the Lip' campaign is an example of such a program.

There is good evidence to support water fluoridation in the reduction of dental caries [56].In communities where there is a lack of naturally occurring or artificially added fluoride in the water, parents should be encouraged to use fluoride toothpaste [57]. The use of oral fluoride supplements are no longer recommended [57].

Growth monitoring

Growth is considered to be the "most sensitive index of health' including the "nutritional and emotional environment of a child" [58, p.230]. Growth monitoring (weight and height) is routine practice in all Australian jurisdictions. Monitoring and accurately identifying individual children who are not growing normally is important, as is having population data about rates of inadequate growth [59].

Weighing activities of infant and young child are valued by carers and are considered an incentive for the parent to bring the child to the child health centre and provide an opportunity for raising other concerns.

It is important that child and family health service professionals provide accurate information to parents regarding growth to limit anxiety and reduce the risk of obesity from overfeeding. The World Health Organization (WHO) growth charts [60] are the most contemporaneous growth charts available and provide an indication of growth of an infant exclusively breastfeeding for the first six months of life and after the introduction of solid foods. These growth charts will be considered as part of the implementation of the 'National Breastfeeding Strategy' [61] and the Australian Government's review of the 'Dietary Guidelines for Children and Adolescents in Australia'.

Aboriginal and Torres Strait children continue to be the most disadvantaged population group in Australia. Underweight and growth faltering is a problem in some Aboriginal families, particularly in rural and remote areas where high rates of growth faltering in the first few years of life are documented [59]. The accurate and early identification of overweight and obesity is also considered important because of the prevalence of obesity, early onset of type 2 diabetes and other chronic diseases.

Many Aboriginal and Torres Strait children also have difficulty accessing comprehensive universal child and family health services. Universal child and family health services must incorporate strategies that provide Aboriginal families with high quality, culturally safe care.

This care should include additional screening and assessment to Aboriginal and Torres Strait Islander families in communities that demonstrate higher prevalence rates of the following conditions:

- Regular otoscopy: Aboriginal children have high rates of otitis media with resulting hearing loss and potential language and speech delays.
- More frequent weight and length/height measurements if under or over nutrition is an issue.
- Regular screening for anaemia from four months of age.
- Deworming programs in communities where parasites are problematic.
- Skin checks and prompt and low threshold for the treatment of skin sores [62].

Tools for Physical Development Monitoring

Development monitoring and assessment should comprise a combination of techniques — practitioners are expected to be able to recognise the full range of normal development, but the use of tools to guide clinical judgement is also recommended for universal application. Several studies have found developmental monitoring without the use of tools to be inadequate and ineffective in detecting lower range developmental delay [63]. The use of validated screening and assessment tools is therefore recommended.

The following tools have been validated and are currently available and appropriate for use in Australia for general developmental monitoring.

Table 3: Validated tools for general developmental monitoring

Validated Screening Tool	Age	Elicitation
Parents' Evaluation of Developmental Status (PEDS) [51, 64]	0 to 8 years	Parent report
Ages and Stages Questionnaire (ASQ) [51]	3 to 60 months	Parent report
Brigance Screens [51]	21 to 90 months	Parent report or direct elicitation
Child Development Inventory (CDI) [65]	3 to 72 months	Parent report

Further information about these tools can be found in Appendix 3.

Socioemotional and cognitive development

According to National Scientific Council on the Developing Child [66 p, 2]

> *The core features of emotional development [in children] include the ability to identify and understand one's own feelings, to accurately read and comprehend emotional states in others, to manage strong emotions and their expression in a constructive manner, to regulate one's own behaviour, to develop empathy for others and to establish and sustain relationships.*

Monitoring a child's socioemotional development, supporting the parent/child developing relationship and promoting welfare and readiness to learn through play are a key function of the child and family health service. This involves promoting and monitoring:

- infant/child–parent/carer interaction;
- parent/child relationships–physical availability, emotional warmth, responsiveness and stability;
- child behaviour, social and emotional health; and
- normalising behaviours and assisting parents to have realistic expectations and understanding of their child's behaviour.



By normalising childhood behaviour and giving information on the social and emotional needs of children, parents are better prepared to support their child's development in a way that is meaningful. Furthermore, by identifying those children who are having problems with emotional or social behaviours, early intervention can have significant and long-term effects not only for the child and his or her family but in some cases for the wider community and society.

Observation and parent questions are widely used techniques for monitoring socioemotional wellbeing and are most effective when relationships of trust are developed between the parent and the health professional. Use of parent evaluation tools can provide a useful basis to provide anticipatory guidance with parents' to reflect a partnership approach.

There are evidence-based tools available for assessment of parenting interactions and child behaviour that are appropriate for use in a universal child and family health setting (see Appendix 3). Services are encouraged to consider these tools as part of a suite of strategies to monitor child socioemotional wellbeing.

Language and literacy

Most children develop language skills to communicate in their first language naturally. However, the ability to understand their language in a written form requires assistance that begins long before commencement of school at five years of age. Literacy is dependent on the home environment and the opportunity to develop emergent literary skills in the first years of life is critical [67]. Universal child and family health services are well placed to promote literacy development activities and education with parents, caregivers and communities.

Table 4: Validated tools for monitoring child socioemotional wellbeing

Tool	Age	Domain
Ages and Stages: Social Emotional Questionnaire [51]	1 month to 5 years	Child behaviour and emotional health
Parents' Evaluation of Developmental Status (PEDS) [51, 64]	0 to 8 years	Socioemotional developmental concerns
Neonatal Behavioural Assessment Scale [68]	0 to 2 months	Parent/child attachment
Strengths and Difficulties Questionnaire [69]	4 to 12 years	Child behaviour and emotional health
Paediatric Symptom Checklist	4 to 18 years	Child behaviour and emotional health
NCAST Parent Child Interaction Assessment Scales (Feeding and Teaching) [70]	Feeding 0 to 12 months Teaching 0 to 36 months	Carer-child interaction (sensitivity to cues; response to infant distress; provision of social emotion and cognitive growth fostering activities; clarity of infant cues; responsiveness to caregiver).
Brigance Screens [51]	0 to 7 years	Social and emotional disorders
Modified Checklist for Autism in Toddlers (M-CHAT)	16 to 30 months	Autism

Further information about these tools can be found in Appendix 3.

3.8.2 Health Promotion

The following definition of health promotion is from the World Health Organization's Ottawa Charter for Health Promotion [71]:

> *The process of enabling people to increase control over and improve their health.It involves the population as a whole in the context of their everyday lives, rather than focusing on people at risk for specific diseases, and is directed toward action on the determinants or causes of health.*

Universal child and family health services have the opportunity to conduct a range of evidence-based health promotion strategies that aim to encourage families to create attitudes, behaviours and environments to promote optimal health for children.

There are many ways in which health promotion is delivered in a universal child and family health service and these may include:

- the provision of information to parents through written or audio-visual resources;
- a discussion between the worker and the family, or demonstration of a health- promoting behaviour;
- role modelling through specifically set up groups and through experiences of other parents; and
- community awareness activities.

There are four core service elements related to health promotion:

1. prevention of disease, injury and illness;
2. health education, anticipatory guidance and parenting skill development;
3. support that builds confidence and is reassuring for mothers, fathers and carers; and
4. community capacity building.

Prevention of disease, injury and illness

Prevention of disease is a core component of child and family health service provision. The combination of monitoring of child and family health whilst conducting preventative health activities provides opportunities for early intervention and detection and the prevention of ill-health. Disease-prevention activities include: immunisation, promotion of breastfeeding and nutrition, information about SIDS and co-sleeping, oral health surveillance, and safety and injury prevention, for example, road safety.

Table 5: Examples of effective health promotion activities for child and family health

- Promoting breastfeeding
- Promoting child and family nutrition
- SIDS prevention and education [72]
- Injury prevention [73]
- Promoting physical activity
- Smoking cessation programs such as 'quit' activities and 'brief interventions'
- Promoting early literacy [63, 73]



Health education, anticipatory guidance and parenting skill development

Health education, anticipatory guidance and parenting skill development are interrelated components of health promotion. These components may occur during individual contact with parents and carers, or in a group setting [74, 75]. The benefits of a group delivery include peer support and cost-effective use of resources.

The World Health Organization (1998) defines health education as 'consciously constructed opportunities for learning, involving some form of communication designed to improve *health literacy*, including improving knowledge, and developing *life skills* which are conductive to individual and *community health*'.

Health education is not only concerned with the communication of information, but also with fostering the motivation, skills and confidence (self-efficacy) necessary to take action to improve *health*.

For example, health education by child and family health services includes providing structured breastfeeding support. Systematic reviews in the Cochrane Library have identified the importance of support to the success of breastfeeding [76] with both peer and professional support shown to be effective in increasing breastfeeding rates during the first two months following birth. Child and family health nurses are regularly involved in interventions providing structured breastfeeding support to mothers [77].

Universal child and family health services provide structured anticipatory guidance about a child's development and behaviour. Anticipatory guidance gives parents practical information about 'what to expect' in the child's behaviour, growth and development in the immediate and longer term. It provides parents with the knowledge they need to provide positive experiences and environments for their child and reduces the anxiety for new parents. For example, universal child and family health services are well positioned to actively influence parents and carers to undertake activities that promote literacy development [67].

Furthermore, through play, children practise and master the necessary skills needed for later childhood and adult life [78]. Parents and carers play an important role in the facilitation of play as they respond to and promote the interactions of their child. Child and family health services can promote play as the 'work' of infants and young children and necessary for the development of language, symbolic thinking, problem solving, social skills, and motor skills.

Anticipatory guidance may also be provided for the mother's health and wellbeing. Common anticipatory guidance topics based on the review of state and territory frameworks are provided in Table 6.

Table 6: Health education and anticipatory guidance topics

- physical needs of the infant/young child information and skills development – feeding, bathing, clothing, skin care
- normal infant and child sleep expectations and settling management
- nutrition – breastfeeding, introducing a healthy diet, weaning
- oral health education [79]
- emotional needs of the infant – mother/child interaction, attachment, early brain development
- normal behaviour and behaviour management – tantrums, self-comforting behaviour, separation anxiety, toilet training
- activities to support development – speech and language, early introduction to books, movement and activity [73, 80]
- developmentally appropriate play activities
- child safety
- preparing for preschool and school

Parent recall of health promotion and anticipatory guidance decreases with increasing numbers of topics set for each discussion. One study found that when more than nine topics were discussed at any one session, parent recall decreased significantly [81]. Services may determine health promotion education strategies beyond the core health promotion topics above to reflect the needs of the community, or their practice wisdom. However, some targeting of messages at each contact is likely to improve the effectiveness of the activities. It is important that clinicians develop the skill of recognising 'teachable moments' [82], or times when parents are keyed into an issue and express interest and are therefore receptive to input.

Support for mothers, fathers and carers

Parents value appropriate support to assist in building confidence across key transition points such as transition to parenthood [83] and transition to school [84].

Maternal health

The health of the mother (or primary carer) is integral to the health and wellbeing of the child and family. Many women report feeling unprepared for the transition to motherhood [85-87], lack confidence in their parenting skills and there is a high occurrence of parental stress, postnatal distress and depression in the short and long term after birth [27, 88, 89]. Physical recovery from birth may take 9-12 months and women report health problems including bowel problems, urinary incontinence, perineal pain, backache and exhaustion [90-92]. Some women also experience difficulties with breastfeeding in the early postnatal period, such as pain and nipple damage, inadequate milk supply and mastitis.

These health problems affect the quality of a woman's life and may impact on her relationships [92]. The universal child and family health service is ideally situated to identify any physical health issues and offer appropriate advice and referral for women.

Perinatal mental health problems are known to impact significantly on the woman [24, 93], her infant and family [88]. The relationship between an infant and their primary caregiver is significantly affected by maternal depression and can negatively influence the child's long-term mental and physical health [94]. Periodic contact with child and family health services provides an important opportunity to ask a mother, father and/or other primary carers about their own social and emotional wellbeing and to identify risk for and/or detect possible depression or related disorders. Services can then offer support and appropriate early intervention or referral [4]. The (draft) Clinical Practice Guidelines [95] recommend the Edinburgh Postnatal Depression Scale (EPDS) be used by health professionals as an *initial step* in screening all women for possible depression in the ante and postnatal period.

Engaging fathers

Child and family health services can further promote the wellbeing of children by harnessing the full potential of fathers to contribute to the wellbeing of children and families.

'Father-inclusive' practice occurs when the needs and perspectives of fathers are incorporated into the planning, development and delivery of services. For services aiming to support families, bringing fathers into everyday activities is a crucial part of inclusive practice.

One example of a national parenting initiative for fathers is the **Strong Fathers, Strong Families** program for Aboriginal and Torres Strait Islander men. This program is providing antenatal programs specifically for males to support them in preparing for fatherhood; community and group activities and strategies that promote positive, healthy, active fatherhood and grandfatherhood, and the involvement of males in the early development of their children and grandchildren; health promotion information that promotes new fatherhood and grandfatherhood as a motivating factor for self care; and referral and support to attend local parenting, health and related services (e.g. reproductive health, family wellbeing, counselling, peer support groups) as needed.



Table 7: Principles of Father-Inclusive Practice [96]

Principle 1. Father Awareness: Services develop an understanding of the role and impact of fathers including separated fathers, father figures and stepfathers

Principle 2. Respect for Fathers: Services engage with fathers as partners with respect for their experience, gifts and capacities as fathers.

Principle 3. Equity and Access: All fathers have equal and fair access to the support provided by high quality family services regardless of income, employment status, special educational needs or ethnic/ language background.

Principle 4. Father Strengths: A strengths-based approach recognises fathers' aspirations for their children's wellbeing and the experience, knowledge and skills that they contribute to this wellbeing.

Principle 5. Practitioners' Strengths: The existing skills, knowledge and special qualities of the staff for working with fathers are acknowledged.

Principle 6. Advocacy and Empowerment: Services aim to empower fathers to develop their capacity rather than focus on interventions that try to prevent them from doing harm.

Principle 7. Partnership with fathers: Services aim to work in partnership with fathers and their families to build on their knowledge, skills and abilities and to help fathers enhance their positive roles with their children and as part of families.

Principle 8. Recruitment and Training: Appropriate training, credentialling and professional support for staff is a foundation for quality father-inclusive service provision.

Principle 9. Research and Evaluation: Research and evaluation of services should specifically measure father engagement and outcomes relating to this engagement.

Facilitating peer support

Child and family health services provide support for mothers, fathers and carers across key transition points in the early childhood period. For example, CFHNs may facilitate both 'preparations for parenthood' and 'new parents' groups to address their needs during this transition period. Research suggests increased levels of social support and parenting confidence and high levels of satisfaction amongst parents who attend new parents' groups facilitated by CFHNs [97-99]. Facilitated peer support groups appear to be successful in de-emphasising the power and expertise of the professional [99]. These groups often become self-sustaining social networks providing important support for parents [98].

Community capacity building

Community capacity building is an essential health promotion activity crucial to the achievement of the objectives of the Framework. Capacity building has been broadly defined as encompassing:

- empowerment of individuals and groups within defined 'communities';
- development of skills, knowledge, and confidence;
- increased social connections and relationships;
- responsive service delivery and policy based in community-identified needsand solutions;
- audible community voices;
- community involvement;
- responsive and accountable decision makers;
- resource mobilisation for communities in need; and
- community acceptance of programs because they have been involved in development [100].

Capacity building for health promotion can occur with individuals, groups, organisations and communities and includes three core aspects: adequate infrastructure and resources in order to build capacity in individuals and communities, the establishment and maintenance of partnerships and networks are key to ensuring developed programs are sustainable and finally, organisations and communities must develop a 'problem solving' approach to health improvement strategies [100]. Universal child and family health services play a key role in community capacity building via activities such as community workshops, health promotion and education activities, collaboration between government and non-government organisations and community agencies such as the Australian Breastfeeding Association and early education and care services.

3.8.3 Early identification of family need and risk

There is widespread agreement on the role of universal child and family health services in identifying health needs within the family in order to provide families with support as early as possible. This reflects the evidence about the complex interaction of risk and protective factors that influence a child's health, wellbeing and development and an acknowledgement of the social determinants of health. All universal child and family health services should have a system in place for early identification to:

- identify the factors known to increase the likelihood of a child experiencing poorer health, development and wellbeing outcomes in later childhood and adult life or factors which protect a child from poor outcomes;
- work with parents, families and communities to address health and development needs and minimise the impact of parent, child, family and community risk factors;
- identify the factors indicative of child abuse and neglect and refer or report appropriately; and
- facilitate support for children and families across multiple services (for example, health, education, housing).

Under the auspices of the COAG, a recommended Common Approach to Assessment, Referral and Support (CAARS) in Australia was developed in 2009 [43]. In addition, there are a number of psychosocial or family assessment tools used in pregnancy and in the early postpartum period to identify family need early. Few of these tools have been validated. As noted above, most protocols include the EPDS and this is recommended in the current draft Clinical Guidelines for perinatal mental health [92]. Austin et al [101] reported that the Pregnancy Risk Questionnaire (PRQ) was more reliable than previously reported tools in the antenatal prediction of postnatal depression, allowing identification of high and low risk groups. However, further work is needed to test the positive predictive value of a risk assessment tools.



3.8.4 Responding to identified needs

Where universal child and family health services identify a health or developmental issue or a support need, the service should provide an appropriate pathway for response. The appropriate response pathway will depend on the nature or acuity of the identified need or issue and the capacity of the service context from which the universal child and family health service is being delivered. Possible pathways are:

- advice and assistance as part of routine clinical practice (for example, advice about settling techniques or teeth cleaning);
- providing a brief structured practice-based intervention within the existing universal contact schedule (for example, smoking cessation, non-directive counselling for postnatal distress);
- referral for further assessment – within child and family health service, to a primary care service such as GPs or to a diagnostic and assessment service (not within a child and family health service);
- referral or invitation to an enhanced or targeted program delivered by the child and family health service; for example sustained nurse home-visiting programs and,
- referral to targeted or specialist/intensive service outside of the universal child and family health services (for example speech pathologist, medical specialist, or intensive family support).

Universal child and family health services and the service system within which they are embedded, should have the capacity to deliver the full range of responses described above, and have processes in place to identify which response is appropriate.

The universal child and family health service may also provide targeted interventions in response to an identified population need. For example, services can effectively respond to the high levels of anaemia in Aboriginal infants in remote or rural settings by monitoring and implementing prevention strategies and by effective treatment of infants with or at risk of developing anaemia. Population-based universal intervention may be brief practice-based interventions that can be delivered within the existing core schedule (for example, oral health) or they may be provided in addition to the core schedule of contacts (for example, peer support groups for breastfeeding).

Table 8 presents some examples of responses that could appropriately be provided from the universal child and family health service platform including:

- brief practice-based interventions that could be delivered universally as part of the core contacts based on population need;
- brief interventions that could be delivered by child and family health services in response to the identified needs of a family;
- primary prevention strategies that could be delivered from a universal platform but not as part of a core contact; and
- targeted interventions, for example, interventions that are delivered within the universal health service but are beyond the universal core contacts for example additional support for breastfeeding. In some services these are referred to as ‘enhanced’ services.

Appendix 4 provides a more detailed description of the responses and interventions listed in Table 8.

Table 8: Interventions in core and other contacts

CORE CONTACTS		OUTSIDE CORE CONTACTS	
Brief universal interventions in response to population needs	**Brief targeted interventions in response to identified needs**	**Universal interventions in response to population need**	**Targeted interventions in response to identified need**
Breastfeeding promotion [102] Reach out and Read [103] Lift the Lip (prevention of early childhood caries)	Sleep interventions [104] Smoking cessation [105] Breastfeeding support [102]	New parents' groups Peer support for breastfeeding [106] Parents as teachers [107] Positive Parenting Program (Triple P) [108]	Circle of Security [109, 110] Incredible years Positive Parenting Program[111] Positive Parenting Program (Triple P) [108] Sustained Nurse Home Visiting – Nurse-Family Partnership [112, 113] Miller Early Childhood Sustained Home-visiting (MECSH)[114] Baby Happiness Understanding Giving (Baby HUGS) [29] Parents Under Pressure [115-117]

Further information on programs and interventions is in Appendix 4. Also refer to, the Allen Consulting Group [118] for more detail on evidence-based interventions.

Child protection and mandatory reporting

The universal child and family health service must recognise, respond and refer any suspected cases of child abuse (physical, sexual or emotional) and neglect, in all forms, and/or the presence of domestic violence. It is essential that child and family health professionals adhere to their respective state/territory-based child protection legislation, policies and processes. In the majority of jurisdictions it is a mandatory requirement that child abuse and neglect are reported to the statutory child protection authorities.



4. An Effective Service System for the Provision of Universal Child and Family Health Services

An effective universal child and family health service system necessitates:

- a competent workforce, with specialist knowledge and skills, who receive ongoing education and support including clinical supervision;
- service infrastructure including information and data collection and analysis systems to support service planning, delivery and evaluation and continuity of care;
- clear referral pathways with targeted and intensive support services including primary, secondary and tertiary medical services;
- interagency and inter-professional collaboration beyond health services;
- appropriate levels of funding and human resources;
- continuing evaluation and performance review; and
- a research base.

To be effective this system of services requires a shared vision for the health and wellbeing of children and families and a coordinated and collaborative multidisciplinary approach. Universal child and family health services are therefore ideally embedded in an integrated, multisectoral service system that includes government and non-government services across health, early childhood education and care and school education, family and social services. There is increasing evidence that integrated and collaborative models are more effective in promoting optimal child development, ameliorating family risk factors and enhancing child and family wellbeing [119].

Universal child and family health services work in collaboration with and are supported by a network of primary, secondary and tertiary health services (see Figure 4, Section 2). Higher levels of collaboration and clear service pathways will ensure that universal service providers facilitate access for families to more specialised support when that is required. A range of approaches are used to facilitate coordination and collaboration. These include liaison positions, multidisciplinary teams, co-location of services and care coordination or case management approaches [120].

Universal child and family health services also work across traditional organisational boundaries and collaborate with education, social and family support services. Integrated and collaborative models bring benefits including reduced complexity navigating the system (e.g. a single point of entry which reduces the need for multiple assessments), more timely service delivery and provision of continuity of care across transition times, decreases the likelihood of families 'falling through the cracks'. This approach ensures opportunities to provide additional support, advice, assistance, and referral can be identified and realised [119].

4.1 Competencies

To provide a universal child and family health service, professionals must have the relevant knowledge, skills and attitudes to work with adults and children in a preventative, as well as a clinical context. They also need the skills and capacity to work in partnership with families, including Aboriginal and Torres Strait Islander families. They must be competent in identification and assessment of health issues, delivering health information, guidance and decision making. All members of the team providing universal child and family health services require core or generic competencies to work with children and families in line with the principles identified in section 3.5.

Competencies are defined as 'the knowledge, skills, behaviour and characteristics required to carry out an activity (or a combination of activities) in a particular environment or organisational context, in a way that leads to effective and enhanced organisational performance' [121 p, 68].

Competencies that support effective universal child and family health practice must **complement, not replace**, existing statements relating to specific workforce competencies. Specifically they should assist in inter-professional learning and collaboration. Professional competencies and standards produced by regulatory authorities and professional colleges will continue to guide the practice of individual disciplines and articulate with broader service-based competencies.

All nurses and midwives work under the Australian Nursing and Midwifery Council (ANMC) national standards for regulation of nursing and midwifery. Currently there are no nationally endorsed competencies for CFHN though state-based competencies exist in NSW, Victoria and South Australia and others have adopted these competencies (see Appendix 5).

Core competencies for all professionals who work with children and families in Australia have been developed and are currently being finalised. Some suggested competency domains that should apply to all professionals working within the universal child and family service sector are provided in Table 9.

Table 9: Potential competency domains

Example of potential competency domains:

- Child-health focus within the context of the family and community.
- A focus on parental (mother/father) wellbeing and family functioning.
- Partnership with families.
- Primary health care approach.
- Knowledge of continuum of health to illness for children.
- Knowledge of child development (physical, emotional, social and cognitive).
- Collaboration across services.
- Professional body of knowledge.
- Ethics and legislation.
- Commitment to performance improvement and evaluation.



4.2 Workforce

The child and family health and wellbeing workforce in Australia currently incorporates a range of professionals, but in particular, CFHNs and GPs. The core function and activities of child and family health services are outlined in Section 3 of this document.

The Framework recognises the key role of the CFHN in delivering universal child and family health services. Child and family health nurses are registered nurses with postgraduate qualifications and experience in child and family health nursing[5]. Child and family health nurses work in various settings and tiers, including: primary (e.g. home visits, centre-based consultations, telephone 'helplines', parenting groups); secondary and targeted services (e.g. day stay units; sustained health home-visiting programs, culturally-specific programs) and tertiary or intensive service models, including residential health services and children's hospitals.

Similarly, general practitioners are a valued and well-utilised resource for many families with young children. Given the number of visits children and families make to the GP, it is vital they provide anticipatory guidance and preventive care activities. The Royal Australian College of General Practitioners (RACGP) [122] recommends the opportunistic assessment of 'hearing, vision, language development, communication and family functioning in the first two years and surveillance of development, emerging behavioural or emotional problems and family dysfunction in the preschool years'. General Practitioners are also encouraged to ask about school progress, anticipate or look for emerging behavioural or emotional problems in children 6-13 years of age [122, p.21].

Aboriginal Community Controlled Health Services (ACCHS) provide culturally responsive, comprehensive primary health care services for children and families. Aboriginal Health Workers (AHWs) play a key role in child and family health services, particularly in ACCHS and rural and remote areas. Other Aboriginal workers who support children and their families include Aboriginal Health Education Officers (NSW), Indigenous Health Workers (Torres Strait), Strong Women Workers (NT, WA) and community-based workers (NT), and Aboriginal Maternal and Infant Care practitioners (SA).

There are other mainstream health professionals and groups who also contribute to the health and wellbeing of children and families and undertake aspects of the core service elements outlined in Section 3 of the Framework. These include: midwives, practice nurses, school nurses, mental health nurses, drug and alcohol counsellors, psychologists, paediatricians, paediatric dentists, psychiatrists, social workers, speech therapists, occupational therapists, physiotherapists, dietitians and pharmacy nurses. Together these professionals form a tiered team of primary, secondary and tertiary level health care that support the child's health within the context of family and community.

Increasingly, universal child and family health services collaborate with many other service providers outside the health sector including child care workers, early childhood educators, and Non-Government Organisations (NGOs) such as Good Beginnings Australia, Benevolent Society who provide family and parenting support and volunteers such as Australian Breastfeeding Association counsellors and the Playgroup Association of Australia.

There are significant issues in establishing and maintaining a skilled workforce; particularly in rural and remote areas including Aboriginal and Torres Strait Islander communities. Attention to training, qualifications, cultural competencies, supply issues, staff support and mentoring, professional status, work conditions, interdisciplinary practice and leadership are necessary elements in building a capable child and family health workforce.

[5] Many CFHNs also have midwifery qualifications. Midwifery is compulsory for Maternal Child Health Nurses in Victoria.

5. Outcomes and Performance Monitoring

Effective universal child and family health services can influence a range of health, development and wellbeing outcomes of Australian children and their families. Determining the specific outcomes services impact upon is difficult, given the universal nature of service delivery and the range of other factors that affect outcomes.

Selected National Headline Indicators for Children's Health, Development and Wellbeing that most closely relate to the outcomes sought by universal child and family health services have been adopted in the Framework as provisional outcome measures.

The Headline Indicators [1] are a set of national, jurisdictionally-agreed priority areas for children's health development and wellbeing with accompanying indicators that are reported by the Australian Institute of Health and Welfare biannually and every four years in the publication. *A Picture of Australia's Children*. These indicators and the associated Headline Indicator data collection system, provide a starting point to measure the impact of the Framework.

Table 10: Outcome measures for universal child and family health services

Priority area	Headline Indicator
Infant mortality	Mortality rate for infants less than one year of age
Breastfeeding	Proportion of infants exclusively breastfed at four months of age
Immunisation	Proportion of children on the Australian Childhood Immunisation Register who are fully immunised at two years of age
Overweight and obesity	Proportion of children whose BMI score is above the international cut-off points for 'overweight' and 'obese' for their age and sex
Dental health	Mean number of decayed, missing or filled teeth (*dmft*/DMFT) among primary school children
Social and emotional wellbeing	No indicator identified
Injuries	Aged-specific death rates from all injuries for children aged 0-4, 5-9 and 10-14 years
Attending early childhood education and care programs	Proportion of children attending an early educational program in the two years prior to beginning school
Transition to primary school	Proportion of children entering school with basic skills for life and learning
Child abuse and neglect	Rate of children aged 0-12 who were the subject of child protection substantiation in a given year
Family social network	No indicator identified



The selected outcome measures are high level outcomes and conceptualised at a population level. It is not suggested that there is a direct causal effect between services provided by universal child and family health services and the selected Headline Indicators. However, when measured and monitored over time these indicators will provide information about the health and wellbeing of Australian children and families and whether outcomes are improving over time. Increasing the availability of comparable outcome data at the population level has the potential to also inform service planning, coordination and delivery at the local level.

Some of the selected Headline Indicators in Table 10 are more closely or proximally related to the work of universal child and family health services. The following have been identified as medium term indicators of the Framework:

- Increase in the proportion of children exclusively breastfed to four months.
- Increase in the proportion of children who are fully immunised at age two years.
- Increase in healthy weight of preschool-aged children.
- Increase in children who have no dental caries *(dmft/DMFT)*
- Increase in proportion of children who are identified early and receive attention to child health, developmental and wellbeing needs.
- Increase in proportion of children experiencing a positive transition to primary school (that is if children with developmental needs are identified and addressed early they are more likely to experience a positive transition).
- Increase in families with identified needs who are receiving social support.

Other selected Headline Indicators are related in a distal way that is, universal child and family health services are only one of many factors likely to influence these child and family outcomes in the long term. The following outcomes have been identified as long-term outcomes of the Framework:

- Reduction in infant mortality.
- Reduction in death from avoidable injuries.
- Increase in the proportion of children who attend early childhood education for one to two years prior to school entry.
- Reduction in the number of children who are the subject of substantiations of child abuse and neglect.
- Improved social and emotional wellbeing of Australian children and families.

The program logic outlined in Figure 5 identifies the expected outcomes of the Framework for universal child and family health services and displays the relationship between services processes, outputs, performance and proximal and distal outcomes.

5.1 Performance indicators

Given the myriad of factors (other services, community and social determinants) that influence child and family health outcomes outlined, it is important to measure service performance directly.

This Framework (the National Framework for Universal Child and Family Health Services) is a national service framework (rather than a system-wide framework) and service-oriented outcomes and measures are required to enable national performance monitoring.

Service-oriented outcomes and indicators for universal child and family health services will allow service performance to be measured, by first establishing benchmarks of current performance. Benchmarks will also assist in developing an understanding of the level of change required in each jurisdiction to achieve a truly universal service for all children in line with the vision of this national framework.

Performance indicators can be defined as 'statistics or other units of information which reflect, directly or indirectly, the extent to which an anticipated outcome is achieved or the quality of the processes leading to that outcome' [123]. Outcomes and quality of processes can be difficult to measure, so indicators are not necessarily accurate measures of them. Nevertheless, performance indicators can provide useful information to guide decision making.

Reporting on the short- to medium-term outcomes will provide some information about how effective the service is. In addition, proposed service performance indicators have been developed based on a number of criteria outlined in the National Health Performance Framework (see Program Logic, Figure 5). These criteria include determining that services are accessible, appropriate and responsive. For example, through the use of a robust parent satisfaction survey it may be possible to determine the relevance of the service for children and families and whether this service is provided in a way that is safe (does no harm) and takes account of individual needs, maintains dignity, is timely and facilitates access to social support networks [123]. The parent satisfaction measure is intended for use by local services to inform quality improvement activities. It is not intended that these data would be collected nationally and aggregated. Further it is important to determine the capacity of the workforce to provide the service based on skills and knowledge, the ability to provide coordinated care or service across programs, practitioners, organisations and levels over time [123]. Finally, services must be sustainable and innovative and respond to emerging needs. Table 11 outlines proposed service performance indicators for universal child and family health services:



Table 11: Proposed service performance indicators

Proportion of children participating in UCFHS consultations at key contact points who:

- receive the initial contact within two weeks of the birth
- receive a health check from UCFHS at 6-8 months of age
- receive a health check prior to school entry (3-4 years)
- receive a vision screen between the ages of 3.5-4.5 years.

Proportion of families who received appropriate follow-up care from the Universal Child and Family Health Service.

Parent satisfaction measure*

Proportion of parents who report:

- feeling engaged with the service
- feeling that providers listened carefully to their needs/concerns and their needs and those of their child are met
- feel supported as competent parents
- feeling that advice was explained in a way that was understood
- Proportion of first-time parents who are offered a new parents' group and/or are linked to other community support services for parents
- Their child's needs for referral to services have been attended to by UCFHS
- they received information as appropriate/needed on:
  - safe sleeping
  - breastfeeding
  - establishing warm and nurturing relationships
  - postnatal depression
  - reading with child
  - child-led play,
  - teeth cleaning,
  - nutrition and healthy eating
  - smoking cessation (if required).

Notes
* Parent satisfaction measure may be undertaken at local level to inform quality service improvements.

Figure 5 – Universal Child and Family Health Services – Program Logic

Inputs

Infrastructure
- Accessible facilities
- Information and data systems
- Materials and Tools

Services
- Universal child and family health services
- Primary/ secondary & targeted support services

Workforce
- Qualified and competent health professionals
- Ongoing education and support
- Adequate supply of health professionals

Process

UCFHS make contact with each family (phone HV clinic).
UCFHS build relationships with parents.
Parents not receiving service receive follow-up.

Parents who don't attend are followed up.
(Parents are engaged with a UCFHS).

Parent strengths and needs elicited

UCFHS provide appropriate age & stage consultations

Information / advice provided

Linked to support services

Identify / recommend additional services

Practice-based intervention provided

Assisted Referral

Self-referral

Referral & followed up

Primary/secondary community service need identified

Outputs

Developmental surveillance & health monitoring
- Physical health (Vision & hearing, Oral health, Growth monitoring)
- Physical, social emotional & cognitive development
- Identification of parental health needs

Health Promotion
- Prevention of disease, illness & injury
- Health education, anticipatory guidance
- Provision of parenting information & advice
- Support for parents
- Community capacity-building

Identification of family support needs

Responding to identified need

Referral or provision of service information

Performance Measures

Proportion of children participating in UCFHS consults at key contacts points
- the initial contact within two weeks of the birth
- at 6-8 months of age
- the 4- yr- old health check prior to school entry
- vision screen

Proportion of families who received follow-up care from UCFHS

Parent satisfaction measure

Incl. % of parents who report:

Feeling engaged with the service

Feeling that providers listened carefully to their needs/concerns

Feeling their needs and those of their child are met

Offered a new parents' group/linked to community supports

Received information on health promotion topics as appropriate

Medium term Outcomes

Increase in the proportion of children exclusively breastfed to four months

Increase (or no reduction) in the % of children who are fully immunised at age two

Increase in healthy weight of preschool aged children

Increase in children who have no dental caries (dmft/DMFT)

Early identification and attention to child health needs

Positive transition to primary school (children with developmental needs identified and addressed early are more likely to experience a positive transition)

Longer term Outcomes

Reduction in infant mortality

Reduction in death from avoidable injuries

Increase in the proportion who attend early childhood education in the two years prior to school entry

Reduction in the number of children who are the subject of substantiations of child abuse and neglect

Improved social and emotional wellbeing of Australian children and families



6. Implementing the Framework for Universal Child and Family Health Services

For many decades all Australian states and territories have provided universal services for children and families. Participants in the consultations conducted to develop the Framework acknowledged the value of implementing a national framework for child and family health services. However, service system and workforce constraints were identified as significant challenges that have resulted in some inconsistency and potential fragmentation of universal child and family health services across Australia.

Barriers to accessing services include availability of services, lack of awareness of the service, cultural appropriateness, lack of trust, cost, language, distance from the service and lack of transport.

Challenges in implementing a national framework:

- Perceived lack of awareness among the public as well as other service providers about child and family health services, the purpose and accessibility as well as the importance of taking a population approach to well child health.
- Workforce shortages in most jurisdictions in Australia. This was of particular concern in rural and remote locations across Australia and outer metropolitan areas in some jurisdictions.
- Inconsistency in the baseline education/qualifications of the child and family workforce.
- 'Professional Territory/Boundaries' were reported to be a barrier to effective collaboration. For example, in the early postnatal period midwives, CFHNs and general practitioners may all be providing care and this may result in tension between professional groups.
- Limited mechanisms for sharing information and linking data about children and families across professions, services and government agencies and this hinders effective communication and collaboration.

The current context of health reform in Australia however, provides an important opportunity to implement a national framework for universal child and family health services.

Strategies and opportunities to implement the framework include:

- Provide mechanisms for universal child and family health services to be located alongside other early childhood education, care and development services.
- Work with stakeholders to establish locally-relevant referral pathways for children and families.
- Develop mechanisms to ensure collaboration between universal child and family health service providers such as CFHNs and GPs is supported with clear service pathways to ensure that GPs and CFHNs facilitate access for families to more specialised support when that is required.
- Build partnerships with non-government organisations to increase continuity of support for families and communities.
- Develop core or generic national competency standards for all professionals who work with children and families.
- Develop minimum standards of education and a nationally consistent set of competency standards for CFHNs.
- Deliver relevant training and education for professionals providing child and family services particularly identifying opportunities for interprofessional learning.
- Build/strengthen the capacity in the child and family health workforce particularly in leadership and interdisciplinary practice.
- Establish information technology systems to support collaboration and communication of information between universal child and family health services and other professionals and services, including the potential to develop an electronic national child personal health record.
- Work towards a comprehensive national minimum data set and a national data collecting system to enhance reporting on service performance and child and family outcomes.

7. Conclusion

Children and families in Australia will benefit from an evidence-based platform of universal child and family health services. A national framework for universal child and family health services will deliver a number of benefits including: promoting consistency of service across jurisdictions; providing a contemporary evidence base for service improvement and progressing towards national performance monitoring; and, the compilation of national population health data for the purposes of comparison across jurisdictions and sub-populations.

The Framework does not seek to prescribe specific service delivery mechanisms or restrict flexibility in delivering innovative services to meet the needs of communities. Rather, the Framework articulates a vision, objectives and principles for a solid platform of universal child and family health services and provides suggestions and support for evidence-based practice.



References

1. Victorian Government Department of Human Services. Headline indicators for children's health, development and wellbeing. 2006 [cited 2010 10 December]; Available from: http://www.eduweb.vic.gov.au/edulibrary/public/earlychildhood/development/headlinerrptfull.pdf.

2. Mercer, R.T. Nursing support of the process of becoming a mother. Journal of Obstetric, Gynecologic, and Neonatal Nursing, 2006. **35**(5): p. 649-651.

3. Nyström, K. and K. Öhrling, Parenthood experiences during the child's first year: Literature review. Journal of Advanced Nursing, 2004. **46**(3): p. 319-330.

4. beyondblue. Draft Clinical practice guidelines for depression and related disorders - anxiety, bipolar disorder and puerperal psychosis - in the perinatal period/. Public consultation. 2010; (cited 10 March 2010) Available from: http://www.beyondblue.org.au/index.aspx/module/forms/vcoe/page/index.aspx?link_id=6.1248.

5. Dennis, C.-L., Ross LE, Grigoriadis S. Psychosocial and psychological interventions for treating antenatal depression. Cochrane Database of Systematic Reviews, 2007(3).

6. McMahon, C., B. Barnett, B., N. Kowalenko, and C. Tennant, Maternal attachment state of mind moderates the impact of postnatal depression on infant attachment. Journal of Child Psychology and Psychiatry, 2006. **47**(7): p. 660-669.

7. Dworkin, P., 2003 C. Anderson Aldrich award lecture: enhancing developmental services in child health supervision--an idea whose time has truly arrived. Pediatrics, 2004. **114**:: p. 827-31.

8. Australian Institute of Health and Welfare, A picture of Australia's children: selected highlights, A. Government, Editor. 2005, Australian Institute of Health and Welfare.

9. Australian Institute of Health and Welfare, A picture of Australia's children: selected highlights, A. Government, Editor. 2008, Australian Institute of Health and Welfare.

10. UNICEF and The Allen Consulting Group, Report Card The Wellbeing of Young Australians. 2008. http://www.aracy.org.au/cmsdocuments/ARACY_Update_2008_03.pdf

11. Australian Medical Association, AMA report card 2008: Ending the cycle of vulnerability: the health of Indigenous children. Australian Indigenous Health Bulletin, 2008. **8**(4): p. 179-185.

12. Center on the Developing Child. A science-based framework for early childhood policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children. 2007; (cited November 16 2010) Available http://developingchild.harvard.edu/index.php/library/reports_and_working_papers/policy_framework/

13. Shonkoff, J.P., W.T. Boyce, and B.S. McEwen. Neuroscience, molecular biology, and the childhood roots of health disparities: Building a New Framework for Health Promotion and Disease Prevention. JAMA, 2009. **301**(21): p. 2252-2259.

14. Barker, D.J.P., The developmental origins of adult disease. Journal of the American College of Nutrition, 2004. 23(6 SUPPL.).

15. Barker, D.J.P., The origins of the developmental origins theory. Journal of Internal Medicine, 2007. **261**(5): p. 412-417.

16. Barker, D.J.P. and S.P. Bagby, Developmental antecedents of cardiovascular disease: A historical perspective. Journal of the American Society of Nephrology, 2005. **16**(9): p. 2537-2544.

17. Barker, D.J.P., et al., Maternal and social origins of hypertension. Hypertension, 2007. **50**(3): p. 565-571.

18. Phenekos, C., Influence of fetal body weight on metabolic complications in adult life: Review of the evidence. Journal of Pediatric Endocrinology and Metabolism, 2001. **14**(SUPPL. 5): p. 1361-1363.

19. Hemachandra, A.H., et al., Birth weight, postnatal growth, and risk for high blood pressure at 7 years of age: Results from the Collaborative Perinatal Project. Pediatrics, 2007. **119**(6): p..e1264-1270.

20. Bronfenbrenner, U., Ecological models of human development. In International Encyclopaedia of Education,3. 2nd ed. 1994, Oxford:: Elsevier.

21. Stanley, F., M. Prior, and S. Richardson, Children of the lucky country? How Australian society has turned its back on children and why children matter. 2005: Pan MacMillan, South Yarra, Victoria.

22. Edwards, B., Does it take a village? Family Matters, 2005. **72**: p. 36-43.

23. Council of Australian Governments, Investing in the Early Years – A National Early Childhood Development Strategy. 2009, Commonwealth of Australia 2009.

24. Buist, A.E., D. Elwood., J. Brooks., J. Milgrom., B. Hayes., A. Sved-Williams, B. Barnett., J. Karatas., and J.Bilszta, National program for depression associated with childbirth: the Australian experience. Best Practice and Research Clinical Obstetrics and Gynaecology, 2007. 21(2): p. 193-206.

25. Dockett, S. and B. Perry. 'Successful transition programs from prior-to-school to school for Aboriginal and Torres Strait Islander children. 2007; Available from: http://www.curriculum.edu.au/verve/_resources/ATSI_Successful_Transition_programs_Report_Dec_2007.pdf.

26. MacArthur, C., H.R. Winter., and D. Bick, Re-designed community postnatal care trial. British Journal of Midwifery, 2005. **13**(5): p. 319-324.

27. McMahon, C., B. Barnett, B., N. Kowalenko, and C. Tennant, Maternal attachment state of mind moderates the impact of postnatal depression on infant attachment. Journal of Child Psychology and Psychiatry and Allied Disciplines, 2006. **47**(7): p. 660-669.

28. Milgrom, J., Mother-infant interactions in postpartum depression: an early intervention program. The Australian Journal of Advanced Nursing : a quarterly publication of the Royal Australian Nursing Federation, 1994. **11**(4): p. 29-38.

29. Milgrom, J., J. Ericksen., R.M. McCarthy, and A.M. Gemmill, Stressful impact of depression on early mother-infant relations. Stress and health, 2006. **22**(4): p. 229-238.

30. Kilburn, M. and L. Karoly. The Economics of Early Childhood Policy: What the Dismal Science Has to Say About Investing in Children 2008; Available from: http://www.rand.org/pubs/occasional_papers/OP227/.

31. Heckman, J.J., The Economics of Investing in Early Childhood., in The Niftey Conference. 2006: University of New South Wales, Sydney,

32. McCain, M. and J. Mustard, eds. Reversing the real brain drain: early years study, final report. 1999, Ontario Children's Secretariat: Toronto.

33. Hertzman, C. and F. Mustard, A healthy early childhood = A healthy adult life., in Founders Network Report (Canadian Institute for Advanced Research) 1. 1997, Canadian Institute for Advanced Research.

34. World Health Organization. Closing the gap in a generation: Health equity through action on the social determinants of health. 2008; Available from: http://www.who.int/social_determinants/thecommission/finalreport/en/index.html.



35. Nutbeam, D., E. Harris, and M. Wise, Theory in a Nutshell: A Practical Guide to Health Promotion Theories. 3rd ed. 2010, Sydney: McGraw-Hill.

36. Hertzman, C. and C. Power, Child development as a determinant of health across the life course. Current Paediatrics, 2004. **14**(5): p. 438-443.

37. Britt H., G.C. Miller, S. Knox,J. Charles, Y. Pan and J. Henderson, General practice activity in Australia 2004-05. 2005, Australian Institute of Health and Welfare: Canberra.

38. Hirst, C. Re-Birthing. Report of the Review of Maternity Services in Queensland. 2005 [cited 2007 7th July]; Available from: http://www.health.qld.gov.au/publications/corporate/maternity_report2005/MaternityReview_FullDoc.pdf

39. National Health and Hospitals Reform Commission, Commonwealth of Australia: Canberra., A Healthier Future For All Australians – Final Report. 2009, Commonwealth of Australia.

40. Leutz, W.N., Five laws for integrating medical and social services: Lessons from the United States and the United Kingdom. Milbank Quarterly March 1999;77(1):77-110.

41. Axelsson, R. and S.B. Axelsson, Integration and collaboration in public health-a conceptual framework. International Journal of Health Planning and Management, 2006. **21**(1): p. 75-88.

42. Rodríguez, C. and C. des Rivières-Pigeon, A literature review on integrated perinatal care. International Journal of Integrated Care, 2007. **7**: p. e28.

43. Council of Australian Governments, Protecting Children is Everyone's Business: National Framework for Protecting Australia's Children 2009–2020. 2009, Council of Australian Governments.

44. Marmot, M., S. Friel, R. Bell, T.A.J. Houweling, Closing the gap in a generation: health equity through action on the social determinants of health 2088. The Lancet **372**(9650): p. 1661-1669.

45. Kuo, A.A., M. Inkelas, ,D.S. Lotstein, K.M. Samson, L. Edward, M.D. Schor, and N. Halfon, Rethinking well-child care in the United States: an international comparison. Pediatrics, 2006. **118**(4): p. 1692-1702.

46. Kardamanidis, K., L. Kemp, and V. Schmied, Uncovering psychosocial needs: perspectives of Australian child and family health nurses in a sustained home visiting trial. Contemporary Nurse, 2009. **33**(1): p. 50-58.

47. Homer, C.S.E., K. Henry, V. Schmied, L. Kemp, N.Leap, and C. Briggs,'It looks good on paper': Transitions of care between midwives and child and family health nurses in New South Wales. Women and Birth, 2009. **22**(2): p. 64-72.

48. NSW Health. Families NSW: Supporting Families Early package. 2009; Available from: http://trove.nla.gov.au/work/28886393?selectedversion=NBD44666713.

49. American Academy of Pediatrics, A.A.P., Identifying Infants and Young Children with Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening. Pediatrics, 2006. **118**(1): p. 405-420.

50. Goldfeld, S. Good beginnings for young children and families: a feasibility study. 2004 [cited 2010 13th December]; Available from: http://www.rch.org.au/emplibrary/ccch/PEDSwodonga.pdf.

51. National Health and Medical Research Council, Child Health Screening and Surveillance: a critical review of the evidence. 2002, National Health and Medical Research Council: Canberra.

52. National Scientific Council on the Developing Child. The Science of Early Childhood Development. 2007; Available from: http://developingchild.net/pubs/persp/pdf/Science_Early_Childhood_Development.pdf.

53. Centre for Community Child Health. national children's vision Screening project. 2008; Available from: http://www.rch.org.au/emplibrary/ccch/DiscussPaper_VisionScreenProject.pdf.

54. Lieff, S., Boggess, KA. et al., The oral conditions and pregnancy study: periodontal status of a cohort of pregnant women.", Journal of Periodontol Research 2004. **71**(1).

55. NSW Health. Early childhood oral health guidelines 2009; Available from: http://www.health.nsw.gov.au/policies/GL/2009/GL2009_017.html.

56. Australian Institute of Health and Welfare, Water fluoridation and children's dental health: The Child Dental Health Survey, Australia 2002, in Dental statistics and research series no. 36 2007, Australian Institute of Health and Welfare: Canberra.

57. NSW Health. Early childhood oral health guidelines for oral health professionals. 2007 [cited 2010 16th September]; Available from: http://www.health.nsw.gov.au/pubs/2007/pdf/healthy_mouth.pdf.

58. Hull, D. and D. Johnstone, eds. Essential Paediatrics 4th Edition. 4th ed. 2002, Churchhill Livingstone.

59. Northern Territory Department of Health and Families, Child growth charts in the Northern Territory: A discussion paper. 2008, Department of Health and Families: Darwin.

60. WHO Multicentre Growth Reference Study Group. WHO Child Growth Standards: Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: Methods and development, 2006 [cited 2010 16th September]; Available from: http://www.who.int/childgrowth/standards/Technical_report.pdf.

61. Department of Health and Ageing. The Australian national breastfeeding strategy 2010 - 2015. 2009; (cited June 16 2010); Available from: http://www.health.gov.au/internet/main/publishing.nsf/Content/49F80E887F1E2257CA2576A10077F73F/$File/Breastfeeding_strat1015.pdf.

62. Central Australian Rural Practitioners Association, Standard treatment manual. 5th ed. 2009, Alice Springs: Central Australia Rural Practitioners Association.

63. Regalado, M. and N. Halfon, Primary care services promoting optimal child development From birth to age 3 Years. Archives of Pediatrics & Adolescent Medicine, 2001. **155**: p. 1311-1322.

64. Centre for Community Child Health The Royal Children's Hospital (CCH), Introduction to: Parents' Evaluation of Developmental Status, Centre for Community Child Health The Royal Children's Hospital, Editor. 2003: Parkville.

65. Behaviour Science Systems Inc. Child Development Inventory - for toddlers and preschoolers. 2008 [cited 2010 February 20th]; Available from: , http://aappolicy.aappublications.org/cgi/content/full/pediatrics;108/1/192

66. National Scientific Council on the Developing Child. Children's' emotional development is built into the architecture of their brain: Working Paper 2. 2004; (cited 2010 17th September) Available from: http://nccic.acf.hhs.gov/poptopics/brain.html

67. Centre for Community Child Health. Literacy Promotion: Practice resource. 2006 [cited 2010 17th September]; Available from: http://raisingchildren.net.au/verve/_resources/Literacy_promotion.pdf.

68. Brazelton Centre. The Neonatal Behavioural Assessment Scale. 2009 [cited 2009 December 21st]; Available from: www.brazelton.org.uk,.



69. Coombs, T., Australian mental health outcomes and classification network, Strengths and Difficulties Questionnaire training manual, N.I.o. Psychiatry, Editor. 2005: Sydney.

70. NCAST Avenue. 2007; Available from: http://ncast.org/.

71. World Health Organisation. Ottawa Charter on health promotion. 1986; cited 2010 May 17th) Available from: http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf.

72. Ponsonby, A.L., T. Dwyer, S.V. Kasl, J.A.,Cochrane, and N.M. Newman, An assessment of the impact of public health activities to reduce the prevalence of the prone sleeping position during infancy: the Tasmanian Cohort Study. Preventative Medicine, 1994. **23**(3): p. 402-408.

73. Nelson, C., L. Wissow, and T. Cheng, Effectiveness of anticipatory guidance: recent developments. Current Opinion in Pediatrics, 2003. **15**(6): p. 630-635.

74. McGartland, M. and P. Hammond, Group Processes and the Development of Interpersonal Skills. Australian Journal of Primary Health Care, 1996. **2**(2): p. 1996.

75. Wass, A., Health promotion in context: Primary health care and the new public health movement. In Wass A. Promoting health: The Primary Health Care Approach. 2000, Sydney: Harcourt.

76. Britton, C., F.M. McCormick, M.J. Renfrew, A. Wade, S.E. King, Support for Breastfeeding Mothers (Review). The Cochrane Collaboration, 2007(2).

77. Kruske, S., V. Schmied, and M. Cook, The Earlybird gets the breast milk: findings from an evaluation of combined professional and peer support groups to improve breastfeeding duration in the first eight weeks after birth. Maternal and Child Nutrition, 2007. **3**: p. 108-119.

78. Berk, L., Infants, children and adolescents. 2005, Pearson Education Inc.: Boston.

79. Sanchez, O. and N. Childers, Anticipatory guidance in infant oral health: Rationale and Recommendations. American Family Physician, 2000. **61**, (113-120): p. 123-4.

80. Regalado, M. and N. Halfon, Primary Care Services: promoting optimal child development from birth to three years. 2002, The Commonwealth Fund.(cited 2011 January 31st) Available from http://www.commonwealthfund.org/Content/Performance-Snapshots/Health-Promotion-Counseling-and--Assessment/Preventive-and-Developmental-Services-for-Young-Children.aspx

81. Barkin, S.L., B. Scheindlin,B, C. Brown, E. Ip, S. Finch, and R.C. Wasserman, Anticipatory guidance topics: Are more better? Ambulatory Pediatrics, 2005. **5**(6): p. 372-376.

82. Foley, G., Introduction: The state of adult education and learning, in Dimensions of adult learning: Adult education and teaching in a global era., G. Foley, Editor. 2006, McGraw-Hill: : Maidenhead, UK.

83. Fowler, C. and A. Lee, Knowing how to know: questioning 'knowledge transfer' as a model for knowing and learning in health. Studies in Continuing Education, 2007. **29**(2): p. 181-193.

84. Dockett, S., et al., Researching with families: Ethical issues and situations. Contemporary Issues in Early Childhood, 2009. **10**(4): p. 353-365.

85. Barclay, L., L. Everitt, F. Rogan., V. Schmied. and A. Whylie, Becoming a mother -- an analysis of women's experience of early motherhood. Journal of Advanced Nursing, 1997. **25**(4): p. 719-28.

86. Mercer, R.T. and L.O. Walker, A review of nursing interventions to foster becoming a mother. JOGNN, 2006. **35**(5): p. 568-582.

87. Nystrom, K. and K. Ohrling, Parenthood experiences during the child's first year: literature review. Journal of Advanced Nursing, 2004. **46**(3): p. 319-30.

88. Dennis, C.L. and E. Hodnett, Psychosocial and psychological interventions for treating postpartum depression. Cochrane Database of Systematic Reviews, 2007(4).

89. Paulson, J.F., S. Dauber, and J.A. Leiferman, Individual and combined effects of postpartum depression in mothers and fathers on parenting behavior. Pediatrics, 2006. **118**(2): p. 659-668.

90. Bick, D., Strategies to reduce postnatal psychological morbidity: the role of midwifery services. Disease Management & Health Outcomes., 2003. **11**(1): p. 11-20.

91. Brown, S. and J. Lumley, Maternal health after childbirth: results of an Australian population based survey. British Journal of Obstetrics and Gynaecology, 1998. **105**: p. 156-161.

92. Thompson, J.F., C.L. Roberts, M. Currie, and D.A. Ellwood. Prevalence and persistence of health problems after childbirth: Associations with parity and method of birth. Birth, 2002. **29**(2): p. 83-94.

93. Austin, M.-P., S. Kildea, and E. Sullivan, Maternal Mortality and Psychiatric Morbidity in the Perinatal Period: Challenges and Opportunities for Prevention in the Australian Setting. Medical Journal of Australia, 2007. **186**(7): p. 364-367.

94. NSW Health. Families NSW supporting families early package. 2009; Available from: http://www.sfe.nswiop.nsw.edu.au/.

95. beyondblue. draft Clinical practice guidelines for depression and related disorders - anxiety, bipolar disorder and puerperal psychosis - in the perinatal period. 2010; Available from: http://www.beyondblue.org.au/index.aspx?link_id=6.1246.

96. Family Action Centre. Father Inclusive Practice Forum 2005 [cited 2010 17th September]; Available from: http://www.newcastle.edu.au/research-centre/fac/research/fathers/involving-fathers/the-principles.html

97. Hanna, B., G. Edgecombe, C. Jackson, and S Newman, The importance of first time parent groups for new parents. Nursing and Health Sciences, 2002. **4**(4): p. 209-214.

98. Scott, D., S. Brady, and P. Glynn, New mother groups as a social network intervention: Consumer and maternal and child health nurse perspectives. Australian Journal of Advanced Nursing, 2001. **18**(4): p. 23-29.

99. Kruske, S., V. Schmied., I. Sutton. and J. O'Hare, Mothers' experiences of facilitated peer support groups and individual child health nursing support: a comparative evaluation. Journal of Perinatal Education., 2004. **13**(3): p. 31-8.

100. NSW Health Department. A framework for building capacity to improve health. 2001 [cited 2010 14 February]; Available from: http://www.health.nsw.gov.au/pubs/2001/pdf/framework_improve.pdf.

101. Austin, M.P., D. Hadzi-Pavlovic, K. Saint, G. Parker, Antenatal screening for the prediction of postnatal depression: Validation of a psychosocial Pregnancy Risk Questionnaire. Acta Psychiatrica Scandinavica, 2005. **112**(4): p. 310-317.

102. Britton, C., F.M. McCormick, M.J. Renfrew, A. Wade, S.E. King, Support for breastfeeding mothers. Cochrane Database of Systematic Reviews, 2009(4).

103. Klass, P., Reach Out and Read: Literacy promotion in pediatrics,, The Beginnings' Early Learning Summit for the Northwest Region, Editor. 2002: Idaho.

104. Hiscock, H., L.Bayer, A. Gold, O. Hampton, C. Ukoumunne, and M. Wake, Improving infant sleep and maternal mental health: A cluster randomised trial. Archives of Disease in Childhood, 2007. **92**(11): p. 952-958.



105. Priest, N. R. Roseby, E. Waters, A. Polnay A, R. Campbell, N. Spencer, P. Webster, and Ferguson-Thorne. Family and carer smoking control programmes for reducing children's exposure to environmental tobacco smoke. Cochrane Database of Systematic Reviews, 2008(4 Art. No.: CD001746).

106. Dennis, C.L., E. Hodnett, R. Gallop, and B. Chalmers, The effect of peer support on breast-feeding duration among primiparous women: A randomized controlled trial. Canadian Medical Association Journal, 2002. **166**(1): p. 21-28.

107. Wagner, M., D. Spiker, and M.I. Linn, The effectiveness of the parents as teachers program with low-income parents and children. Topics in Early Childhood Special Education, 2002. **22**(2): p. 67-81.

108. Sanders, M.R., Adopting a public health approach to the delivery of evidence-based parenting interventions. Pour une approche de santé publique dans les programmes de soutien parental factuels, 2010. **51**(1): p. 17-30.

109. Hoffman, K., R. Marvin, G. Cooper, and B. Powell, Changing Toddlers' and Preschoolers' Attachment Classifications: The Circle of Security Intervention. Journal of Consulting and Clinical Psychology., 2006. **64**(6): p. 1017-1026. .

110. Marvin, R.S. G. Cooper, K. Hoffman, and B. Powell, The Circle of Security project: Attachment-based intervention with caregiver – pre-school child dyads. Attachment and Human Development, 2002. **4**(11): p. 107-124.

111. Webster-Stratton, C. and K.C. Herman, The Impact of Parent Behavior-Management Training on Child Depressive Symptoms. Journal of Counseling Psychology, 2008. **55**(4): p. 473-484.

112. Olds, D.L., The nurse-family partnership: an evidence-based preventative intervention. Infant Mental Health Journal, 2006. **27**(1): p. 5-25.

113. Olds, D.L., Preventing child maltreatment and crime with prenatal and infancy support of parents: The nurse-family partnership. Journal of Scandinavian Studies in Criminology and Crime Prevention, 2008. **9**(SUPPL. 1): p. 2-24.

114. Kemp, L., E. Harris., C. McMahon., S. Matthey., G. Vimpani., T. Anderson., V. Schmied., H. Aslam, and S. Zapart, Child and family outcomes of a long-term nurse home visitation program: a randomised controlled trial. Archives of Disease in Childhood, in press.

115. Dawe, S. and P. Harnett, Reducing potential for child abuse among methadone-maintained parents: Results from a randomized controlled trial. Journal of Substance Abuse Treatment, 2007. **32**(4): p. 381-390.

116. Dawe, S., P.H. Harnett, V. Rendalls, and P. Staiger, Improving family functioning and child outcome in methadone maintained families: The Parents Under Pressure programme. Drug and Alcohol Review, 2003. **22**(3): p. 299-307.

117. Harnett, P.H. and S. Dawe, Reducing child abuse potential in families identified by social services: Implications for assessment and treatment. Brief Treatment and Crisis Intervention, 2008. **8**(3): p. 226-235.

118. Allens Consulting Group, The (draft) national framework for universal child and family health services. 2008, Allens Consulting Group: Sydney.

119. Valentine, K., I. Katz, and M. Griffiths, Early childhood services: models of integration and collaboration. 2007, Australian Research Alliance for Children and Youth.

120. Schmied, V., C. Homer, L. Kemp, C. Fowler, and S. Kruske, The role and nature of universal health services for pregnant women, children and families in Australia. (on behalf of the Collaboration for Research into Universal Health Services for Mothers and Children). 2008.

121. Department of Health & Department for Children Schools and Families (DH & DCSF) The Child Health Promotion Programme — Pregnancy and the first five years of life, . 2008 [cited 2009 14 December]; Available from: www.dcsf.gov.uk/publications/pregnancyandthefirstfiveyears/pdfs/ChildHealth.pdf, .

122. Royal Australian College of General Practitioner. Guidelines for preventive activities in general practice (The Red Book) 2009; 7th Edition:[

123. National Health Performance Committee. National health performance framework. 2001; (cited 2010 February 9th)Available from: http://www.health.qld.gov.au/nathlthrpt/framework.asp.

124. Lea Test Ltd. Home Page. 2008 [cited 2010 April 21st]; Available from: http://www.lea-test.fi/

125. Lester, B. and E. Tronick, 'History and Description of the Neonatal Intensive Care Unit Network Neurobehavioural Scale. Pediatrics, 2004. **113**(3): p. 634-640.

126. Massachusetts General Hospital. Pediatric Symptom Checklist,. n.d. [cited 2009 30 November]; Available from: http://www2.massgeneral.org/allpsych/psc/psc_home.htm

127. Cox, J., Murray, D, Chapman, G., A controlled study of the onset, duration and prevalence of postnatal depression. . Br J Psychiatry, 1993. **163**: p. 27-31.

128. Campbell, A., B. Hayes, and B. Buckby, Aboriginal and Torres Strait Islander women's experience when interacting with the Edinburgh Postnatal Depression Scale: A brief note. Australian Journal of Rural Health, 2008. **16**(3): p. 124-131.

129. Robert Wood Johnson Foundation. Smoke-free families: State of the science Capstone meeting. 2006 [cited 2010 April 20th]; Available from: http://www.rwjf.org/files/publications/other/SmokeFreeFamilies_041207.pdf.

130. Bryanton, J. and C.T. Beck, Postnatal parental education for optimizing infant general health and parent-infant relationships. Cochrane Database of Systematic Reviews, 2010(1).

131. Hiscock, H., L. Bayer, A. Gold, O. Hampton, C. Ukoumunne, and M. Wake Long-term mother and child mental health effects of a population-based infant sleep intervention: Cluster-randomized, controlled trial. Pediatrics, 2008. **122**(3).

132. Wagner, M.M. and S.L. Clayton, The Parents as Teachers program: Results from two demonstrations. Future of Children, 1999. **9**(1): p. 91-115.

133. Kendrick, D., J. Barlow, A. Hampshire, S. Stewart-Brown, and L. Polnay, Parenting interventions for the prevention of unintentional injuries in childhood, in Cochrane Database of Systematic Reviews. 2007.

134. Webster-Stratton, C., M. Jamila Reid, and M. Stoolmiller, Preventing conduct problems and improving school readiness: Evaluation of the Incredible Years Teacher and Child Training Programs in high-risk schools. Journal of Child Psychology and Psychiatry and Allied Disciplines, 2008. **49**(5): p. 471-488.

135. Prinz, R.J., M. R. Sanders, C.J. Shapiro, D.J. Whitaker, and J.R. Lutzker, Population-based prevention of child maltreatment: The U.S. triple P system population trial. Prevention Science, 2009. **10**(1): p. 1-12.

136. Wiggins, T.L., K. Sofronoff, and M.R. Sanders, Pathways triple P-positive parenting program: Effects on parent-child relationships and child behavior problems. Family Process, 2009. **48**(4): p. 517-530.



137. Eckenrode, J., B. Ganzel, C.R. Henderson, E. Smith, D.L. Olds, and J. Powers, Preventing child abuse and neglect with a program of nurse home visitation: the limiting effects of domestic violence.[see comment]. JAMA., 2000. **284**(11): p. 1385-91.

138. Olds, D., J. Eckenrode, R. C. Henderson, H. Kitzman, J. Powers, R. Cole, K. Sidora, P. Morris, L.M. Pettitt, and D. Luckey, Long-term effects of home visitation on maternal life course and child abuse and neglect: Fifteen-year follow-up of a randomized trial. JAMA 1997 29/06/06]; 637-643].

139. Olds, D., R.C. Henderson, R. Chamberlim, and R. Tatelbaum, Preventing child abuse and neglect: A randomized trial of nurse home visitation. Pediatrics, 1986. 78(1): p. 65-78.

140. Milgrom, J., L.M. Negri , A.M. Gemmill, M. McNeil, P.R. Martin A randomized controlled trial of psychological interventions for postnatal depression. British Journal of Clinical Psychology, 2005. **44**(4): p. 529-542.

Appendices

Appendix 1

Abbreviations	
AAMCFHN	Australian Association of Maternal Child and Family Health Nurses
AAP	American Academy of Pediatrics
ACP	Australian College of Physicians (ACP)
ACPCHN	Australian Confederation of Paediatric and Child Health Nurses
AEDI	Australian Early Development Index
AGPN	Australian General Practice Network
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
ANFPP	Australian Nurse Family Partnership Program
AMA	Australian Medical Association
ANMC	Australian Nursing and Midwifery Council
ARACY	Australian Research Alliance for Children and Youth
ASQ	Ages and Stages Questionnaire
ASQ:SE	Ages and Stages Questionnaire Social Emotional
Baby HUGS	Baby Happiness, Understanding, Giving and Sharing Program
BMI	Body Mass Index
CAFHNA	Child and Family Health Nurses Association
CCCH	Centre for Community Child Health
CDC	Centre for Disease Control
CFHN	Child and Family Health Nurses
CHPP	Child Health Promotion Program
CHWS	Child Health and Wellbeing Subcommittee
COAG	Council of Australian Governments
DCSF	Department for Children, Schools and Families
dmft/DMFT	Decayed, missing, filled teeth baby teeth/adult teeth
DoHA	Department of Health and Ageing
DEEWR	Department of Employment, Education and Workplace Relations
ECC	Early Childhood Caries
EPDS	Edinburgh Postnatal Depression Scale
GP	General Practitioner
MCHAT	Modified Checklist for Autism in Toddlers
MECSH	Miller Early Childhood Sustained Home-visiting



Abbreviations

NEWPIN	New Parent Infant Network
NFP	Nurse-Family Partnership program
NGOs	Non-Government Organisations
NBAS	Neonatal Behavioural Assessment Scale
NCAST	Nursing Child Assessment Satellite Training
NHA	National Healthcare Agreement
NHMRC	National Health and Medical Research Council
NHPF	National Health Performance Framework
NIP	National Immunisation Program
NSF	National Service Framework for Children, Young People and Maternity Services (UK)
PBS	Pharmaceutical Benefits Schedule
PEDS	Parents' Evaluation of Developmental Status
PSC	Paediatric Symptom Checklist
RACGP	Royal Australian College of General Practitioners
ROR	Reach Out and Read
SDQ	Strengths and Difficulties Questionnaire
Triple P	Positive Parenting Program
UWS	University of Western Sydney
WCF	Well Child Framework
WHO	World Health Organization

Appendix 2 Stage One and Stage Two Methodology

Stage One

In 2008 the Allen Consulting Group was engaged by the Child Health and Wellbeing Subcommittee to critically review the evidence base underpinning the provision of best practice child and family health services and to develop a draft national framework.

Development of the draft national Framework included four phases:

- **Phase 1:** a review of current national and international child and family health service frameworks.
- **Phase 2:** a literature review to identify the evidence base underpinning universal services including:
  - tools to assist in the early detection of problems and parent engagement;
  - effective primary prevention strategies; and
  - structured interventions that provide a response to identified needs that can be delivered in a universal primary care setting.
- **Phase 3:** stakeholder consultation in each jurisdiction. Participants for the consultations were selected by the Subcommittee member from each jurisdiction and as such varied. Approximately 150 stakeholders were represented in the various consultations and included:
  - child and family health nurses;
  - paediatricians;
  - policy and program managers from government departments with responsibility for health, education, family support and child protection;
  - academics in child and family health nursing; and
  - representatives from the Australian Association of Maternal Child and Family Health Nurses, Child and Family Health Nurses Association NSW, Inc., and the Australian Confederation of Paediatric and Child Health Nurses.
- **Phase 4:** project reporting and development of the draft Framework.



Stage Two

The UWS project team was appointed in November 2009 to seek broader consultation with stakeholders and to prepare the final draft of the Framework.

Two consultation forums were held in each jurisdiction except in Tasmania and ACT where only one forum was held. A face-to-face consultation was held in each capital city and the second consultation was facilitated using either video conferencing facilities or by teleconference to engage professionals working in regional, rural and remote locations. The consultation in Tasmania was conducted via videoconference. A consultation was conducted with policy makers from the Commonwealth Department of Health and Ageing (DoHA) and Department of Employment, Education and Workplace Relations (DEEWR), and one with the National Community Child Health Council (NCCHC).

Professional associations and peak bodies were also invited to participate in consultations or to prepare a written submission. A teleconference was held with the Executive Committee of the Australian Association of Maternal Child and Family health Nurses (AAMCFHN). A face- to-face consultation was undertaken in Sydney with a group of early childhood education professionals representing a range of peak bodies. Written submissions were received from the Australian Medical Association (AMA), Australian General Practice Network (AGPN) and the Australian College of Physicians (ACP). Six written submissions or commentaries were received from child and family health nurses (2) and from paediatricians (4).

Participants in the consultations were provided with a copy of the Stage One (draft) Framework as well as a discussion paper prepared by the Stage Two team that summarised the Stage One document and provided key discussion questions for the consultation. Participants were asked to consider the relevance and comprehensiveness of each component of the Stage One draft Framework and to contribute to the development of potential service performance measures. Participants also discussed the factors that would facilitate implementation in a reasonable time frame and identified issues and challenges which jurisdictions and health professionals may encounter in implementing the Framework.

A total of 259 stakeholders participated in the consultations. These included child and family health nurses, general practitioners, paediatricians, social workers, speech therapists, occupational therapists, dental therapists, early childhood education specialists and service managers, policy advisers, program managers. Further, there were representatives from six professional associations.

All jurisdictions were asked to extend invitations to general practitioners, local government, early childhood professionals and other relevant groups particularly those in early childhood education. Participation from these groups in the consultation forums was limited. Only six individual general practitioners participated in either face-to-face or video/teleconference consultations. The Commonwealth consultation had representation from DEEWR and in the Victorian consultations, there was representation from local government and early childhood education professionals who work in collaborative models of service delivery. Some concern was raised in two consultations that the perspectives of remote area health services were not well captured in the Stage One (draft) Framework. There was also concern that there had been no consultation with Indigenous communities.

In mid-February 2009 a consultation was held with a small group of six representatives from consumer organisations. The participants appreciated the opportunity to meet and discuss the Framework; however, they asked that they not be listed as having contributed to the consultations. They emphasised that more effective participation would be achieved if consumer groups had been involved from the beginning. They welcomed the opportunity to be involved early when implementation of the Framework is planned.

A content analysis of the views of consultation participants, review of recent reports and published literature and response of the CHWS project steering committee have all informed the Stage Two (draft) Final Framework for universal child and family health services.

Appendix 3 Tools to assist in health surveillance and monitoring

Tool	Description
Tools for assessing child development	
Parents' Evaluation of Developmental Status (PEDS)	• For detecting developmental and behavioural problems in children birth to 8 years via parent report. • The 10 item questionnaire facilitates parent and professional communication about development and is designed to be a part of a regular monitoring process [51, 64]. • When used as a screening tool, PEDS requires the use of a secondary screen e.g. ASQ to reduce the chance of unnecessary referral. • The tool covers the following nine domains: global/cognitive; expressive language and articulation; receptive language; fine motor; gross motor; behaviour; social-emotional; self-help and school readiness.
Ages and Stages Questionnaire (ASQ)	• For identifying developmental delays in children aged three months to five years. • The tool is completed by parents and is specifically designed to be incorporated into a child health monitoring program [51]. • The ASQ is also used as a monitoring tool to gauge the development for children at risk of developmental disabilities or delay. • The tool comprises a series of 19 separate questionnaires for different ages grouped by months of age, with 30 items per questionnaire. Each questionnaire includes clear drawings and simple directions to help parents to identify their child's skills[51]. • The ASQ provides developmental information in five key domains: communication; gross motor skills; fine motor skills; problem solving and personal/social skills. • The Ages and Stages Social Emotional Questionnaires (ASQ:SE) can be used as an additional screening tool if a delay is noted in the personal/social skills domain of the ASQ.
Brigance Screens	• For measuring development for children aged birth to seven years of age with a greater focus on academic ability than other screening tests, identifying both gifted children and children with delays [51]. • Brigance Screens use both direct elicitation and observation. Parents can also report on their children's skills [51]. • The Screens consist of seven separate forms, one for each 12-month age range. • The infant version (birth to 11 months) contains 85 items and the toddler version (12 to 23 months) contains 83 items. Children point to pictures upon request and display specified skills. • The infant and toddler Screens cover six domains: fine motor skills; gross motor skills; receptive language; expressive language and self-help skills.



Tool	Description
Tools for assessing child development cont.	
Child Development Inventory (CDI)	• The CDI is a set of three parent-reporting instruments, each with 60 yes/no items and additionally, a General Development Scale. • Appropriate for children and toddlers aged between three and 72 months. • The tool can indicate school readiness and placement in early childhood special education. • The tool provides a report of child observation in eight domains: social; self-help; gross motor; fine motor; expressive language; language comprehension; letter and numbers [65].
Tools for assessing preschool visual acuity screening	
LEA paediatric vision tests	• LEA Symbols are appropriate for vision screening in children older than 3.5 years of age [53]. • There are 8 LEA Paediatric vision tests: visual acuity for near and distance; grating acuity; contrast sensitivity; visual field; colour vision; visual adaptation; oculomotor functions and accommodation; and tests for visual perception [124].
Sheridan Gardiner	• A well-established vision screen designed for children. The Sheridan-Gardiner Test contains near vision, distance and reduced Snellen tests [53].

Tool	Description
Tools for assessing child socioemotional wellbeing	
Ages and Stages — Social and Emotional Questionnaires (ASQ:SE)	• A tool for monitoring social emotional development for children aged between 3 to 66 months. It complements the original ASQ with a more specific focus on the personal-social skills domain. The tool identifies whether a child is in need of further assessment. • Eight age-specific parent completed questionnaires, each with between 22 and 36 social emotional development items. • Seven characteristics items identified in the ASQ:SE are: self-regulation; compliance; communication; adaptive functioning; autonomy; affect and interaction with people.
Neonatal Behavioural Assessment Scale (NBAS or the Brazelton)	• A neuro-behavioural assessment of infants from birth to two months of age, premature babies from about 35 weeks gestation and with infants who are developmentally delayed. • Designed to identify the newborn's contribution to the parent/infant relationship, the competencies and individual differences of the newborn and any difficulties [68]. • The first scale to assess infant competencies in a social context. The tool emphasises how the infant's individual differences affect parental caregiving and infant development [125]. • Consists of 28 behavioural items each scored on a 9-point scale, which assess the infant's behavioural response to positive and negative stimuli. There are a total of 53 features that can be scored, some of which are administered and some observed during the assessment, like startles, tremors, skin colour and other signs of stress or withdrawal, approach signals and smiles. • Seven supplementary items capture the range and quality of the behaviour of frail, high-risk infants. • The materials used for the assessment are a torch, bell, rattle, and a red ball to look at habituation and orientation. The examiner's face and voice are also used for orientation. There are 18 reflex items, each scored on a 4-point scale, which assess the infant's neurological status, although it is a screening tool and is not diagnostic. • It is recommended that to better understand the infant behaviour and adaptation over time, the infant should be assessed more than once within the first four weeks of birth. For use as in intervention, the NBAS should be done three times within the first four weeks of birth [68].



Tool	Description
Tools for assessing child socioemotional wellbeing cont.	
Strengths and Difficulties Questionnaire (SDQ)	• A tool that determines psychological attributes and screens for behavioural disorders in children aged three to 16 years. • Completed by parents or teachers. • There are six versions of the SDQ currently specified under the National Outcomes and Casemix Collection [69] (Australian Mental Health Outcomes and Classification network). Two of these are relevant to the birth to 8 years age group: - PC1: Parent Report Measure for Children aged four to 10 years, baseline version. - PC2: Parent Report Measure for Children and Adolescents aged four to 10, follow-up version. • The tool consists of either three or (all) four of the following components 1. 25 items and five clinical scales measuring: hyperactivity / inattention; emotional symptoms; conduct problems; peer relationship problems; pro-social behaviour; 2. an impact supplement; 3. cross informant information; and 4. follow-up questions.
Paediatric Symptom Checklist	• A psychological screen used to identify and refer psychological problems • Two versions of the Checklist – one for parents to complete if their child is under 11 years of age (PSC), and the other for children to complete if they are aged 11 years and above (Y-PSC) [126]. • Facilitate the identification of problems in the cognitive, emotional and behavioural domains. • Contains 35 scored items. It has separate cut-off scores for children aged four to five years and six to 16 years.
Nursing Child Assessment Satellite Training (NCAST) — Parent-Child	• The Parent Child Interaction (PCI) Scales (for feeding and teaching) are widely used scales for measuring parent/child interaction. • Two scales – the Feeding Scale (for infants aged birth to 12 months) and the Teaching Scale (for infants and children aged birth 36 months). • Both scales include a set of observable behaviours that can describe parent/child interaction during the respective situation for standardised age-appropriate tasks. • The tools describe the behaviour, response patterns and overall interaction between a parent and infant and provide two conceptually parallel observations of parent/child interaction. • The scales build upon caregiver and child strengths in the relationship and identify areas that may benefit from intervention [70].
Modified Checklist for Autism in Toddlers (M-CHAT)	The M-CHAT is validated for screening toddlers between 16 and 30 months of age, to assess risk for autism spectrum disorders (ASD). The M-CHAT can be administered and scored by universal child and family health services as part of the well-child check-up, and also can be used by specialists or other professionals to assess risk for ASD. A good overview of the M-CHAT is provided at http://www.rch.org.au/emplibrary/clinicalguide/m-chat.pdf

Tool	Description
Tool for assessing maternal perinatal mental health	
Edinburgh Postnatal Depression Scale (EPDS)	• A 10-item self-report measure designed to screen women for symptoms of depression and emotional distress during pregnancy and the postnatal period. The scale will not detect women with anxiety neuroses, phobias or personality disorders. • Extensively researched regarding reliability and validity in various populations since its original development in 1987 [127]. • Also known as the Edinburgh Depression Scale following its validation when used antenatally or with fathers in the perinatal period [127]. • The scale indicates how the mother has felt during the previous week, and a score above 10 should be repeated after two weeks. Two scores above 12 require further assessment to establish if a clinical disorder is present. The validation study showed that mothers who scored above a threshold 12/13 were likely to be suffering from a depressive illness. • The EPDS is a screening tool and should not override clinical judgement. It does not diagnose depression and referral for further assessment is required. • The EPDS includes one question (Item 10) about ***suicidal thoughts*** and the scale should be scored immediately to allow further enquiry regarding the nature of any thoughts of self-harm. The level of risk is determined and appropriate referrals made to ensure the safety of the mother and baby. • Translated into a range of languages including French, Italian, Spanish, Norwegian, Arabic, Bengali and Indonesian. • Aboriginal and Torres Strait Islander women [128]. • Users may reproduce the scale without permission providing the copyright is respected by quoting the names of the authors, title and the source of the paper in all reproduced copies.



Appendix 4: Interventions appropriate in the child and family health service context

Examples of brief universal interventions in response to population needs	
The following interventions are universal interventions and as such, they address a population or community need rather than respond to an individual's identified need. These interventions are by definition provided to all children and families at core contacts and seek to improve population outcomes.	
Reach Out and Read (ROR)	Read focuses on health professional-based literacy in a three-step model designed to take advantage of health professional access, knowledge and the forms and functions of the clinical setting. The three steps of the model are: • volunteer readers in the clinical waiting room; • anticipatory guidance from the health professional; and • a new book for each child [49]. Steps 2 and 3 were adapted in a program tested in Victoria – Let's Read, a joint initiative by the Centre of Community Child Health and The Smith Family. Let's Read incorporates its two core components from ROR: children are given a quality book and parents are given guidance on how to effectively interact with their child when reading. Several studies have found positive effects from the Reach out and Read program including: higher levels of parents reading to their children; higher levels of book ownership and higher levels of parents' literary orientation and higher speaking and language understanding in children [103].
Dental health Teeth cleaning	A teeth cleaning and mouth demonstration is administered by child and family health services as part of schedule core contact visits;6-8 months, 12 months, 18 months, two, three and four years of age. Mouth checks comprise three steps – lift the lip (to view the mouth) look (at tooth services) and locate (locate a dental professional if referral is required). Anticipatory guidance appropriate to the age of the infant is provided to parents at health checks. Examples of guidelines are available at Dental health Services Victoria http://www.google.com.au/search?source=ig&hl=en&rlz=1G1GGLQ_ENAU360&q=Dental+Health+Services+Victoria+&aq=f&aqi=g1&aql=&oq=&gs_rfai= NSW Health http://www.health.nsw.gov.au/policies/gl/2009/pdf/GL2009_017.pdf

Examples of universal interventions delivered outside the core contacts	
The following interventions are primary prevention interventions and as such, they address a population or community need rather than respond to an individual's identified need. These interventions are by definition provided to all children and families and seek to improve population outcomes. All of the following interventions could be appropriately delivered in a primary care setting.	
Smoking cessation among parents of young children	Some individual trials have demonstrated efficacy in assisting parents to cease smoking [105]. The evidence, however, does not determine which interventions are most effective for decreasing parental smoking and preventing exposure to tobacco smoke in childhood. Although several interventions, including parental education and counselling programs, have been used to try to reduce children's tobacco smoke exposure, their effectiveness has not been clearly demonstrated. The review was unable to determine that one intervention reduced parental smoking and child exposure more effectively than others, although four studies were identified that reported intensive counselling provided in clinical settings was effective. The *Smoke Free Families* intervention has had meta-analyses performed on its effectiveness. The results of these show that brief (five to 15 minute) interventions delivered by a trained provider and paired with pregnancy-specific self-help materials can increase cessation rate among pregnant smokers by 30 to 70 per cent [129].
Infant sleep interventions	A recent Cochrane review suggests [130] education on sleep enhancement appears to increase infant sleep. In Australia a study by Hiscock [104, 131] found behavioural strategies to be effective in addressing sleeping problems in young children. The treatment group for the research received three consultations from a maternal and child health nurse to develop an individualised sleep management plan. Infants were 10 months of age or over. The plan included positive bedtime routines such as controlled comforting, camping out and phasing out nighttime feeds and dependence on dummies. The program was effective in helping parents resolve infant sleep problems. Sleep problems were resolved for more participants in the treatment group than in the control group and those sleep problems that remained in the treatment group were less severe. The intervention was effective in reducing depression symptoms overall. The results were best for mothers who entered the study with higher levels of depression [104, 131].

Examples of universal interventions delivered outside the core contacts	
The following interventions are primary prevention interventions and as such, they address a population or community need rather than respond to an individual's identified need. These interventions are by definition provided to all children and families and seek to improve population outcomes. All of the following interventions could be appropriately delivered in a primary care setting.	
Peer support for breastfeeding	Two systematic reviews of support for breastfeeding indicate all forms of extra support demonstrate an increase in initiation and duration of any (partial and exclusive) breastfeeding. Peer support can be delivered through telephone counselling, through one-to-one contact and in groups [102].
Parent groups	Quasi-experimental and qualitative research reports have demonstrated increased levels of social support and parenting confidence and high levels of satisfaction among parents who attend new parents groups facilitated by child and family health nurses [97-99]. These groups appear to be successful in de-emphasising the power and expertise of the professional [99]. These groups often become self-sustaining social networks providing important support for parents [98]. Parent groups are gatherings of parents to receive group well-child care and usually facilitated by a health care professional. When compared to having individualised well-child care, parent groups were found to have equal or favourable benefits to parents [80].
Parents as Teachers	*Parents as Teachers* has run from 1984 and currently remains in multiple sites in the United States and internationally. Parents are offered regular home visits, group meetings and printed information on child development. The program also helps to develop children's cognitive, language, social and motor development skills (Parents as Teachers National Centre Inc., 2005). Evaluations indicate that *Parents as Teachers* participating children have higher academic achievements in maths and reading and participating parents are more knowledgeable about child development issues [107, 132].

Examples of targeted interventions in response to identified needs or risk delivered outside core contacts	
The following interventions are interventions designed to target children and families with an identified need or from a high risk group. These interventions can appropriately be delivered in a primary healthy care setting but will require additional resources and time that would make them impractical for delivery within the schedule of core contacts. In addition most of these interventions require collaboration with other universal service providers such as child care, education, specialist health providers and/or NGO's.	
Circle of Security	The Circle of Security is a US-based early intervention program that utilises attachment theory to strengthen a parent's ability to observe and improve their care-giving capacity. Useful diagrammatic representations (including the one below) show how the infant uses the attached parent as a secure base in which to explore the world, all the time knowing they can return to a 'safe haven' whenever they become stressed. The Circle of Security is used in many parenting programs in Australia. To find out more go to the following website http://www.circleofsecurity.org/ [109, 110]
Group-based parenting programs	The findings of a Cochrane review [133] provide some support for the use of structured group-based parenting programs to improve the emotional and behavioural adjustment of children with a maximum mean age of three years 11 months. The evidence concerning the long-term effects of improvements is inconclusive. It may be that during this period of rapid development, input at a later date is required. Specific programs such as *Incredible Years* and *Tripe P* have a strong evidence base (see below).
Incredible Years	The *Incredible Years* program originated in the United States in 1982 and now also operates in the United Kingdom. Anticipated benefits of the *Incredible Years* are: • decreases in problem behaviours including aggression, non-compliance and disruptive classroom behaviour; • improvement of children's social skills, conflict management skills and decrease negative attributions; • increases in children's academic engagements, school readiness and cooperation with teachers; • increases in parenting competencies in behaviour management and parenting skills; • foster involvement with children and improve parent/child interaction; • prevent delinquency, drug abuse and violence. The program comprises three main series of interventions – parent training, teacher training and child training. The *Incredible Years* program has a strong evidence base [111, 134]. An evaluation of the early childhood component has shown that in summary, compared with the control group: • participating mothers had less frequent problem behaviours; • participating children displayed more positive behaviour (Webster-Stratton); • teachers observed that participating children had larger decreases in behavioural problems; and • participating children had higher scores on the Strengths and Difficulties Questionnaire for conduct problems in two periods.

Examples of targeted interventions in response to identified needs or risk delivered outside core contacts cont.	
Positive Parenting Program (Triple P)	The Triple P program is currently being run in Australia as well as other locations internationally. The program is divided into five developmental periods – infants, toddlers, preschoolers, primary school-aged and teenagers and each period has five targeted levels. There have been several evaluations in Australia [108, 135, 136]. In general, the trials have found Triple P to help improve parenting skills and conclude that the more intensive levels of the program have larger effects. Some specific outcomes include: • a reduction in the number of behaviour problems as well as a reduction in the intensity of behaviour problems at 12 and 24 month follow-ups; • increased sense of competence and satisfaction in parenting and increase in the use of positive parenting strategies with a reduction in self-reported dysfunctional parenting strategies; • significant reductions in aversive maternal behaviour and increased maternal satisfaction with partner support training; • decreases in parental depression, anxiety and stress as well as small but significant improvements in mental health; and • significant improvement on observed and home mealtime behaviour.

Examples of targeted interventions in response to identified needs or risk delivered outside core contacts cont.

Nurse-Family Partnerships (NFP)

The NFP model has been developed over the last 30 years by Professor David Olds and his team at the University of Colorado.

The NFP focuses on home visits to first-time mothers at the beginning of their pregnancy and continuing to the child's second birthday. The three goals of the program are to:

- improve pregnancy outcomes by promoting health-related behaviours;
- improve child health, development and safety by promoting competent care-giving;
- enhance parent life-course development by promoting pregnancy planning educational achievement and employment [112, 113, 137-139] (NFP 2008).

The program is implemented through home visits that begin during pregnancy and continue until the child is 2 years of age. Home visits occur every week or fortnight and provide mothers with skills to identify health problems and monitor their health. The nurses teach mothers about:

- positive health related behaviours
- competent care of children
- maternal personal development (family planning, educational achievement, and participation in workforce.

When the child is born, home visits continue to provide information on how to detect child illness and develop parent/child communication skills. The Nurse-Family Partnership has strong evidence base. The summarised findings from three tests of the effects of the NFP include:

- women participants were more aware of the community services available and attended childbirth education classes more frequently;
- babies of young mothers were born with a healthier birth weight;
- pregnant women smoker participants had greater reductions in the number of cigarettes smoked; and
- nurse-visited children had fewer health problems and hospitalisation rates.

At the 15-year evaluation, findings included that the participants compared with the control group: had fewer arrests and of those children born to unmarried women, a low socioeconomic background, there were fewer incidents of running away, fewer sexual partners and less alcohol consumption.

The Australian Nurse Family Partnership Program (ANFPP), based on the NFP model is currently undergoing a small scale implementation in Australia. The ANFPP supports women pregnant with an Aboriginal and/or Torres Strait Islander child until the child is two years old through a sustained program of home visits. The ANFPP will be evaluated to assess the effectiveness of the Program over the life of the Program and it is expected that the first evaluation will be finalised in 2011.



Examples of targeted interventions in response to identified needs or risk delivered outside core contacts cont.	
Miller Early Childhood Sustained Nurse Home Visiting (MECSH)	The Miller trial was the first randomised control trial of nurse home-visiting in an area of profound socioeconomic disadvantage. Outcomes from the Miller trial are summarised in terms of outcomes at four weeks and at 12 months. Outcomes at four weeks after birth compared with control group: • better knowledge of SIDS prevention; • mothers had better self-rated health; and • mothers felt significantly more able to manage their baby's needs (NSW Health n.d.). Outcomes at 12 months compared with control group: • mothers more likely to breastfeed and breastfeed for longer; • mothers more likely to create a quality and stimulating environment for their child; • higher use of primary services (e.g. early childhood health services, playgroup) and lower use of secondary services (e.g. Karitane, family support services).
Baby Happiness, Under-standing, Giving and Sharing Program (Baby HUGS)	Baby HUGS is based on the original HUGS program from Melbourne that was a parent/toddler group aiming to facilitate positive parent/child interactions. This version of the program extended from HUGS to work with parent/infant relationships. Evaluation reported that maternal depression has reduced and there were significant reductions in tension, confusion and fatigue among the treatment group as well as significant differences between groups' post-treatment [29, 140].
Parents under Pressure	The Parents Under Pressure (PuP) program combines psychological principles relating to parenting, child behavior and parental emotion regulation within a case management model. The program is home-based and designed for families in which there are many difficult life circumstances that impact on family functioning. Such problems may include depression and anxiety, substance misuse, family conflict and severe financial stress. The program is highly individualized to suit each family. The overarching aim of the PuP program is to help parents facing adversity develop positive and secure relationships with their children. Within this strength-based approach, the family environment becomes more nurturing and less conflictual and child behavior problems can be managed in a calm non punitive [115-117]

Appendix 5 Competencies for child and family health nurses

State / territory	Competencies
New South Wales	CAFHNA Competency Standards for Child and Family Health Nurses (2009)
Victoria	Australian Nursing Federation (Vic. Branch), Standards for Professional Practice for Maternal and Child Health Nurses, (1999)
South Australia	Clinical Competencies for Child Health Nurses engaged by Children Youth and Women's Health Service, (2006)
Western Australia	Western Australian Community Health Nurses' Competency Standards, Second Edition, (2001)
Queensland	CAFHNA Competency Standards for Child and Family Health Nurses (2009)
Northern Territory	CAFHNA Competency Standards for Child and Family Health Nurses (2009)
Tasmania	CAFHNA Competency Standards for Child and Family Health Nurses (2009)
Australian Capital Territory	Australian Nursing Federation (Vic. Branch), Standards for Professional Practice for Maternal and Child Health Nurses, (1999)