Public Health Advisory Committee
Te Rōpū Tohutohu i te Hauora Tūmatanui

The Best Start in Life: Achieving effective action on child health and wellbeing

A report to the Minister of Health

Prepared by the

PUBLIC HEALTH ADVISORY COMMITTEE

He taonga nui to tatou mokopuna

Our grandchildren are very precious

We cannot waste our precious children
Not another one, not another day.
It is long past time for us to act on their behalf.

Nelson Mandela and Graca Machel
in their letter to the people of the world, May 2000

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Message from the Public Health Advisory Committee Chair

New Zealand has been thought of as a great place for children. This is still true if a child's family is employed, has a good income, lives in a dry, warm house and is well educated, and the child is loved, nurtured and well cared for. Unfortunately, this is not the reality for many New Zealand children.

Some children have dramatically different life chances based on their early life experiences. If these experiences are harmful and ongoing, children's health outcomes will be poor, both as children and adults. Children in low-income families have the poorest health, educational and social outcomes, which tend to compound over the course of their lives. We know that many Māori and Pacific children have poorer life chances than other children of the same age. Māori and Pacific children are among the most affected by the current recession.

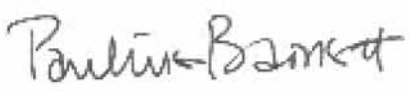
New Zealand is not doing as well for children as are other comparable countries. In fact, New Zealand sits in the bottom third in OECD rankings for most child indicators and near the bottom for immunisation coverage and injury rates. New Zealand also has an appalling rate of child abuse, a factor known to lead to poor health and learning outcomes and behavioural problems.

The lack of priority for children is reflected in our low investment in 'early childhood' compared with other countries. Also, poorly integrated policies and services mean investment may not yield the benefits expected. Our poor performance on measures of child health and wellbeing is shocking. It is distressing to the Public Health Advisory Committee and to other members of the community to learn how many of our children are being left behind.

Children matter. They all have a right to the best possible outcomes, both for their own sakes and to protect their future contributions to society as adults.

However, there are things to celebrate. The Children, Young Persons, and Their Families Act 1989 was world leading. Strengthening Families has had positive impacts. And many innovative, effective local initiatives are occurring around the country, with dedicated health, education and welfare workers and community groups working hard to create better futures for our children. Most of our work on this report pre-dates the release of the Whānau Ora Taskforce report, but the Whānau Ora initiative also gives us much hope.

Governments do not bring up children, but most of their decisions affect families in some way. A more sustained and integrated approach to children's services and policy is necessary. Investing in child development, especially in the early years, brings positive results for children and future productivity. We must do our best for all children, especially those being left behind.



Pauline Barnett
Chair
Public Health Advisory Committee

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Public Health Advisory Committee Members

The members of the Public Health Advisory Committee who worked on this project were:

Sheila Williams (lead project sponsor)

Pauline Barnett (current PHAC chair and project sponsor)

Dale Bramley (project sponsor)

Maaka Tibble (project sponsor)

Linda Holloway (previous National Health Committee chair until 2009)

Geoff Fougere (previous PHAC chair until 2008)

Lynette Stewart (project sponsor until 2008)

Riripeti Haretuku (project sponsor until 2007)

Andrew Moore (project sponsor until 2006).

The PHAC is a subcommittee of the National Health Committee. The PHAC provides the Minister of Health with independent advice on public health issues.

The views expressed in this report belong to the PHAC, as does responsibility for any errors or omissions.

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We must do better

Children matter. Children are one of the most vulnerable groups in our society. Good health and developmental outcomes for children depend on how well families' basic needs are met, the strength of families' social and cultural connections, families' access to quality services and facilities, and families' economic security. Young children's family environments are so influential that they predict children's cognitive, social and emotional abilities and their subsequent success at school.

Children also matter because they are the adults of tomorrow. The early years are important because they shape a person's ability to engage in work, family and community life. Substantial international evidence shows that adult unemployment, welfare dependence, violence and ill health are largely the results of negative factors in the early years.

New Zealand's child health outcomes compare poorly internationally. In a 2009 report from the Organisation for Economic Co-operation and Development (OECD), *Doing Better for Children*, New Zealand ranked 29th out of 30 countries for child health and safety. In fact, some of New Zealand's disease patterns among children are closer to those of developing countries.

New Zealand's health outcomes are low in part because gaps have widened between the health status of different groups in our communities over the past three decades. Māori and Pacific children have two to three times poorer health than non-Māori, non-Pacific children. Children in very low-income families, children of beneficiaries and children of prisoners also have worse health than other children.

Why is New Zealand's child health status poor?

There is no single reason for New Zealand's comparably poor child health status, and the responsibility for improving this status sits with all parts of society. Parents and families/whānau are primarily responsible for bringing up children, but governments can do their part in ensuring families and communities are supported to provide the best outcomes for their children. Over recent decades, there have been several effective policies and strategies for children, but New Zealand still has a long way to go.

The New Zealand Government's investment in the early years is low by international standards, with 'early childhood' spending that is less than half the OECD average. The sustainability of early childhood policy has also been compromised by the variation in agencies' perspectives and changes in ministers and government. This has resulted in haphazard, 'boom or bust' child policies and 'stop–start' programmes that are often not fully implemented.

In early childhood, health, developmental and behavioural issues overlap considerably. However, the planning and delivery of services for children and their families/whānau tend to

take place sector by sector. This leads to disjointed policies and services that are not as effective as they would be with greater coordination. Poor information sharing between providers also leads to break downs in communication between agencies. Families of children with high and complex needs or disabilities are most affected by these incoherent policies and services. These families must navigate their way through inconsistent information and disjointed service delivery.

Government agencies collect a large amount of data about children that is not well coordinated, easily available or carefully selected to inform policy. There are no nationally agreed indicators for monitoring trends and measuring the effectiveness of policies.

What needs to change?

The Public Health Advisory Committee (PHAC) believes that improving child health outcomes requires more than fixing any one health 'problem'. Changes must be made to the overall investment in and structure of policies and services for children. For investment to bring real benefit for child health, it should be sustained – year by year and government by government. We already have a similar approach in place for policies and services for people aged over 65.

Governments in other countries have recognised the need for greater investment in the early years and the interconnected nature of child health. Jurisdictions such as the United Kingdom, Ireland, Victoria (Australia) and Manitoba (Canada) have made dramatic changes to the way they address child health and wellbeing. They have moved to a long-term, whole-of-government approach to child health and development and are basing policies and interventions on the growing evidence about what works for children. These changes appear to be making a positive difference.

The PHAC proposes to the Minister of Health that the Government considers four major improvements for children:

- strengthen leadership to champion child health and wellbeing
- develop an effective whole-of-government approach for children
- establish an integrated approach to service delivery for children
- monitor child health and wellbeing using an agreed set of indicators.

The health and disability sector has an important role in each of these overlapping improvements.

Strengthen leadership to champion child health and wellbeing

Strategic leadership for children is the single most important element needed for a consistent and organised commitment to child health and wellbeing. Over recent decades, communities, iwi, clinicians, academics and advocacy groups have shown strong leadership to improve child health. However, strategic leadership across central government has been less consistent.

The five strategies with the potential to strengthen and embed central government leadership are:

- a legislative framework with statutory responsibilities to ensure policies for children are sustainable across time and changes in government
- a Cabinet champion responsible for bringing together young children's health, education and social development
- an Office for Children to support the Cabinet champion
- a cross-party agreement for children that provides strategic direction
- sustained investment in the early years.

The health and disability sector has shown strong leadership for children on issues such as sudden unexplained death in infancy, child abuse and micronutrient deficiencies. Strategic leadership could be strengthened through the Ministry of Health, the National Health Board and District Health Boards (DHBs) prioritising children in their planning and policy making, supporting iwi leadership for tamariki ora and whānau ora, and supporting clinical and community leadership.

Recommendations

The PHAC recommends to the Minister of Health that the Government:

1 introduces overarching legislation that sets out a long-term commitment to improve health and wellbeing outcomes for children (that is, a Children's Act)

2 establishes government structures and processes to strengthen leadership for children, including the consideration of:

- an identified senior Cabinet position with responsibility for children, such as a Minister for Children
- a cross-agency Office for Children to implement the strategic direction and oversee sector contributions to early childhood development
- a cross-party agreement that provides strategic direction and outlines shared principles and goals

3 assesses early childhood spending and works towards sustained investment in the early years that is evidence based and comparable with countries that have a similar gross domestic product to New Zealand.

The PHAC recommends to the Minister of Health that:

4 the Ministry of Health makes child health a priority and increases the proportion of health sector spending on services for children aged up to six years

5 District Health Boards develop child health implementation plans with measurable outcomes and accountabilities

6 the health and disability sector continues to strengthen leadership on tamariki ora and work with iwi leadership to improve service design and delivery

7 the health and disability sector strengthens child health networks in each region, which are supported by the Ministry of Health.

Develop an effective whole-of-government approach for children

Great potential exists to improve child health and wellbeing through a set of cross-agency public policies that coherently focus on early childhood. Knowledge about which policies work for children is expanding both in New Zealand and overseas. Effective policies take into account the complexity of, and multiple factors affecting, children's environments. Current structures and policies for children, however, do not provide a coordinated approach to addressing children's complex needs.

A whole-of-government approach should be underpinned by legislation, a cross-party agreement for children, and sustained investment. Policies should be developed around agreed whole-of-government child development outcomes rather than agency mandates. The main areas of action involve:

- a set of cross-agency early childhood policies that is based on evidence and has associated work programmes
- consideration of the wellbeing of children in all policies and planning
- monitoring, research and evaluation to inform policy.

The health and disability sector has an important leadership role in a whole-of-government approach. It is the only sector that sees all children at least once in their first six years and has a central position for prevention, early identification and management of health and disability issues. For this reason, the sector should ensure seamless access to high-quality maternal and child health services. The sector should recognise the diverse needs of children with disabilities and work with others to address the wider influences on child health and wellbeing.

Recommendations

The PHAC recommends to the Minister of Health that the Government:

8 develops a set of cross-agency policies that reflects a cross-party agreement and outlines the specific actions and accountabilities of each relevant government agency

9 requires all significant government policies to be assessed for their potential impact on children

10 identifies strategies for reducing the number of children living in serious hardship, sets measurable objectives, and monitors progress towards those objectives

11 continues to support longitudinal studies of childhood development and researches and monitors the effectiveness of early childhood interventions.

The PHAC recommends to the Minister of Health that the health and disability sector:

12 works towards implementing free, 24-hours-a-day, seven-days-a-week primary health care for all children aged under six years

13 assesses access and quality of health care and disability support services for children and finds ways to increase timely access to these services by vulnerable groups of children

14 increases investment in public health initiatives that target the determinants of child health.

Establish an integrated approach to service delivery for children

Services should respond to children in an integrated manner so that the 'whole child' is treated in the context of their wider family/whānau, rather than multiple services focusing on separate problems in an isolated manner. A whole child, or integrated approach to service delivery, requires the Government to focus on the full range of services that need to work together more effectively. It requires a shift away from delivery by separate providers towards processes that support integrated delivery. Integration requires:

- a lead agency
- a flexible funding and contracting model that focuses on results
- workforce development
- improved information systems.

The interconnected nature of child health and wellbeing means the health and disability sector should provide an integrated response to children. Well Child/Tamariki Ora (a first point of contact for children) and the primary health care setting are well suited to lead integrated delivery across agencies. Integrated delivery involves taking a broad approach to health, as well as proactively working within the health sector and across sectors to identify and manage health issues and improve service accessibility. Integrated delivery within the sector is particularly important for the transition between maternity and child health services, as well as for coordinating primary, secondary and tertiary paediatric services. To improve information flows between services, the implementation of the Child Health Information Strategy should be prioritised.

Recommendations

The PHAC recommends to the Minister of Health that the Government:

15 prioritises the concept of integrated service delivery in the design of services for children

16 expands the development of funding and contracting models that support whānau ora and other integrated approaches to service delivery in early childhood

17 supports the early childhood workforce to build its capacity and capability to deliver child-centred and integrated services.

The PHAC recommends that the Minister of Health:

18 instructs the Ministry of Health to ensure a seamless transition from maternity services to health care services for infants and young children

19 speeds up the implementation of the Child Health Information Strategy.

Monitor child health and wellbeing using an agreed set of indicators

National monitoring of child health and wellbeing should inform plans and policies. A national set of indicators should be developed and agreed across government for children from birth to six years. This set should reflect the priorities of a whole-of-government approach. A national set of indicators can highlight trends and emerging issues, inform policy and facilitate international comparisons. The components of improved information and monitoring for child health and wellbeing are:

- effective data collection and sharing
- a clear conceptual framework for monitoring
- robust indicator selection
- ongoing reporting and informed policy development.

The Ministry of Health should be a primary participant in the development of the agreed set of cross-agency child health and wellbeing indicators. This indicator set should include a specific subset of health indicators that the Ministry of Health and DHBs are responsible for monitoring. The agreed subset of health indicators should underpin planning and service delivery in each region, with DHBs and health providers identifying how best to improve outcomes in their local context.

Recommendations

The PHAC recommends to the Minister of Health that the Government:

20 develops a set of universally agreed high-level indicators for child health and wellbeing that includes a subset of health indicators.

The PHAC recommends to the Minister of Health that the health and disability sector:

21 monitors and reports against the agreed health indicator subset of cross-agency early childhood indicators.

About this Report

In this report, the Public Health Advisory Committee (PHAC) identifies options for improving child health and wellbeing. Rather than focusing on specific health issues, the PHAC's advice to the Minister of Health explores why there has been an overall lack of progress in improving health outcomes for New Zealand children aged under six and makes recommendations to improve these outcomes.

The PHAC recognises that over recent years government and non-government reports have highlighted the unacceptable status of child health in New Zealand and called for improvements in child health and wellbeing. The PHAC shares the concern expressed in previous reports. It identifies the need for strategic government leadership and a sustained, integrated approach to children's services and policy. This report also outlines the important role of the health and disability sector in this new approach.

Although much of this report applies to the wellbeing of children and young people of all ages, the PHAC has focused on children from birth to six years. This is the period of children's lives when they are the most vulnerable and when their physical, cognitive and emotional development has the greatest implications for later life. These six years determine children's readiness for school. This readiness affects children's success at school and may influence the rest of their lives. Effective interventions during this period can provide long-term benefits and have positive influences into adulthood.

In developing this report, the PHAC called on the expertise of many agencies and individuals, beginning with a hui of child health experts. The PHAC commissioned a literature review[1] and consulted many national and international documents. The PHAC's findings are well informed by evidence. This report complements the PHAC's earlier publications, including those focused on environmental and economic determinants of health,[2] urban environments,[3] Health Impact Assessment,[4] and the need for all sectors to work together to achieve health and wellbeing.[5]

In writing this report, the PHAC has taken a public health approach to child health. This approach includes the prevention of disease, the promotion and protection of health, and a focus on populations rather than individuals. This approach also recognises that good health is determined by factors wider than just health care delivery. These factors include income, housing, employment and transport. The PHAC recognises that child health and wellbeing include physical, emotional, economic and social wellbeing and overlap with childhood development.

The report has five main sections. Section 1 overviews the problem, makes international comparisons, describes the importance of the early years, and describes what needs to change to improve child health outcomes in New Zealand. Sections 2 to 5 focus on the four areas the PHAC believes will contribute significantly to improving child health:

- leadership to champion child health and wellbeing
- an effective whole-of-government approach for children
- an integrated approach to service delivery for children
- monitoring of child health and wellbeing.

The PHAC acknowledges that these four areas overlap and believes leadership is the 'glue' needed for each of the other actions to be successful.

Two appendices provide supporting material, and references are listed at the end of the report.

1 Reasons for Focusing on Child Health

Photo courtesy of *Wairarapa Times-Age*

'The true measure of a nation's standing is how well it attends to its children – their health and safety, their material security, their education and socialization, and their sense of being loved, valued, and included in the families and societies into which they were born.'

UNICEF[6]

The PHAC has chosen to focus on child health because:

- children matter as valuable members of our families and communities and are a vulnerable group
- the early years are important, as the positive and negative effects of young children's health and development can last a lifetime
- the health status of New Zealand children compares poorly internationally
- very large inequalities exist in the health and wellbeing between different groups of New Zealand children.

1.1 Why do children matter?

Children matter as human beings growing in, and contributing to, society. How a country cares for its children is one measure of its humanity. The question must be asked – do we in New Zealand value children enough?

Young children make up one of the most vulnerable groups in our society. Children rely on their family and community to nurture, develop and protect them. Good health and developmental outcomes for children depend on how well families' basic needs are met, the strength of families' social and cultural connections, families' access to quality services and facilities, and families' economic security.[7]

Young children's family environments are so influential that they predict children's cognitive, social and emotional abilities and their subsequent success at school.[8] Factors such as parental income and maternal education are associated with almost every measure of child health and wellbeing.[9]

1.2 How important are the early years?

Children also matter because they are the adults of tomorrow. The first six years of life shape a person's ability to engage in work, family and community life. These early years determine a child's readiness for school, which is a factor that affects the whole of their lives. Adult unemployment, welfare dependence, violence and ill health are largely the results of negative factors in the early years. These experiences often negatively affect the next generation of children.[10]

Over time, a deprived start in life places costs on the country through increased demand for health services, increased crime and a less productive workforce than might otherwise be the case. In contrast, social investment to support optimal child health and development will pay a dividend in future years. Healthy children are more likely to grow into healthy adults, who are in turn more likely to make a positive contribution to society and the economy.

Unhealthy children become unhealthy adults for many reasons. Two common explanations are learned behaviours from parents and the long-term impacts of childhood exposure to environmental hazards (such as cigarette smoke or mouldy housing).[11] The quality of the in utero environment has also been identified as contributing to health into adulthood.[12] This is not only the case with well-known problems such as foetal alcohol syndrome disorder, smoking during pregnancy or vitamin deficiencies. Studies have also identified that the mother's diet during pregnancy can contribute to low birth weight at term, which in turn increases the baby's lifetime risks for cardiovascular disease, diabetes and learning difficulties.[13]

A more recent body of research has highlighted neurological changes that can occur as a result of unhealthy early childhood environments and that remain throughout a person's lifetime.[14] The most critical period for brain growth and development is during pregnancy and in the first three years of life. The brain develops through a complex interaction between genes and the environment, determining capacity for future learning, behaviour and health.[15] In the early years of life, the brain chemistry of a child growing up in an environment of sustained neglect, stress or trauma (for example, abuse or poverty) can alter, causing irreversible neurological and cognitive deficits.[16] The result can be a lifetime of increased risk of ill health and learning and behavioural problems.[17]

1.3 How healthy are New Zealand children?

New Zealand is a relatively prosperous nation with excellent healthcare and education systems. It also has social safety nets for individuals and families/whānau at particular risk.

However, New Zealand does not compare well with other prosperous nations when it comes to child health. In a 2009 report from the Organisation for Economic Co-operation and Development (OECD), *Doing Better for Children*, New Zealand ranked 29th out of 30 countries for child health and safety.[23] In fact, some of New Zealand's child disease patterns are closer to those of developing countries.[24]

Child health in New Zealand has improved over recent decades but not as fast as in other countries. In the 1970s, New Zealand featured in the top third for most child wellbeing indicators. In the early 21st century, New Zealand has slipped to the bottom third for most indicators, many of which are preventable conditions. For example, our infant mortality rate is 5.1 per 1,000 live births compared with 2.3 per 1,000 live births in Iceland, the country with the lowest rate.[25] Other examples are listed in Box 1 on page 4.

Overall, health improvement for New Zealand children has slowed as gaps have widened between the health of different groups in our society over the past three decades. The health status of Māori and Pacific children is two to three times poorer than the status of non-Māori, non-Pacific children. Māori children have higher rates of disability than non-Māori children. Children in very low-income families, children of beneficiaries and children of prisoners also have poorer health than other children. Table 1 illustrates some of these inequalities in health status.

The difference in health status between New Zealand children with the best and worst health is similar to the very wide disparity between the health status of the richest and poorest OECD countries. For example, the New Zealand infant mortality rate for those in the least deprived neighbourhoods (deciles 1–4 of the New Zealand Index of Deprivation) is the same as the rates in Norway and Japan, two of the best-performing countries. However, for those in the most deprived neighbourhoods (deciles 9 and 10 of the New Zealand Index of Deprivation), the infant mortality rate is worse than that of all but two OECD countries (Mexico and Turkey).[26]

Box 1: New Zealand compares poorly internationally

Out of 30 OECD countries, New Zealand is ranked:[18]

- 21st for infant mortality (5.1/1,000 live births)
- 29th for measles immunisation rates (82% vaccinated by age two)
- 20th for the percentage of children living in poor households (15% of all children)
- 17th for children in overcrowded houses (31% of all children).

New Zealand fares poorly in other international comparisons. New Zealand:

- is fourth to bottom of all OECD countries for injury deaths among one- to four-year-olds[19]
- has 14 times the average OECD rate of rheumatic fever[20]
- has rates of whooping cough and pneumonia 5–10 times greater than the United Kingdom and United States[21]
- has a four to six times higher rate of child maltreatment death than OECD countries with the lowest incidence.[22]

Table 1: Relative risk of hospitalisation for some serious health conditions by deprivation and ethnicity in children aged 0–14 years, 2002–2006

Cause of hospital admission	European	Māori	Pacific	Asian/ Indian	Low deprivation (NZ Dep 1)	High deprivation (NZ Dep 10)
Rheumatic fever	1.0	23.0	48.6	1.0	1.0	28.7
Tuberculosis	1.0	11.1	45.2	55.0	1.0	5.0
Bronchiectasis	1.0	4.0	10.6	0.7	1.0	15.6*
Serious skin infection	1.0	2.8	4.5	0.9	1.0	5.2
Sudden unexplained death in infancy					1.0	10.6*
Pneumonia	1.0	2.0	5.1	1.1	1.0	4.5

Notes: NZ Dep = New Zealand Index of Deprivation

* = Relative risk provided for deciles 9 and 10, rather than decile 10 alone.

Sources: I Asher. 2009. Child poverty and child health in NZ: A national disgrace. Child Poverty Action Group presentation. 29 October; E Craig, C Jackson, D Han, NZCYES Steering Committee. 2007. *Monitoring the Health of New Zealand Children and Young People: Indicator handbook.* Auckland: Paediatric Society of New Zealand and the New Zealand Child and Youth Epidemiology Service.

1.4 Why is New Zealand's child health status poor?

There is no single reason for the slow rate of improvement of child health in New Zealand compared with the rate in other similar countries. Influences include increasing pressures on families/whānau, widening socioeconomic disparities, comparatively low government investment in early childhood, uncoordinated services, and a lack of information for policy decisions and service delivery. These influences are briefly explored below and discussed in more detail later in the report.

Increasing pressures on families/whānau

Over the past 30 years, rising living costs have placed additional financial pressures on families. More families have moved to urban areas for work and education. The average number of paid working hours per family has increased, and family break-ups have become more common. These trends, common across many OECD countries, have meant many young families live away from their extended family, and more parents are on their own when raising children. In many instances, the wider family support network has become weaker.

In New Zealand, these trends have placed pressure on vulnerable groups. They have had a particular impact on many Māori, who over the past five decades have migrated from traditional iwi regions to urban areas for work. This shift has weakened some iwi, whānau and hapū connections, which are paramount for Māori health and for raising healthy tamariki.[27] Increased job losses among Māori since the 1970s placed further stress on both identity and wellbeing, as it led to rising numbers of families on the benefit, rising criminal activity and dysfunction.

These trends have also meant that some children spend less time with their parents and caregivers. In New Zealand, increasing numbers of young children spend time in some form of childcare and education. Twenty-five percent of New Zealand children aged up to two years spend long periods in childcare, an increase of 23.5 percent over the past four years.[28] While quality early childhood education has benefits for children's development, especially for three- to five-year-olds, the impact of long-term childcare for children aged up to two years is not known (the Children's Commissioner is investigating this issue).

Widening socioeconomic disparities

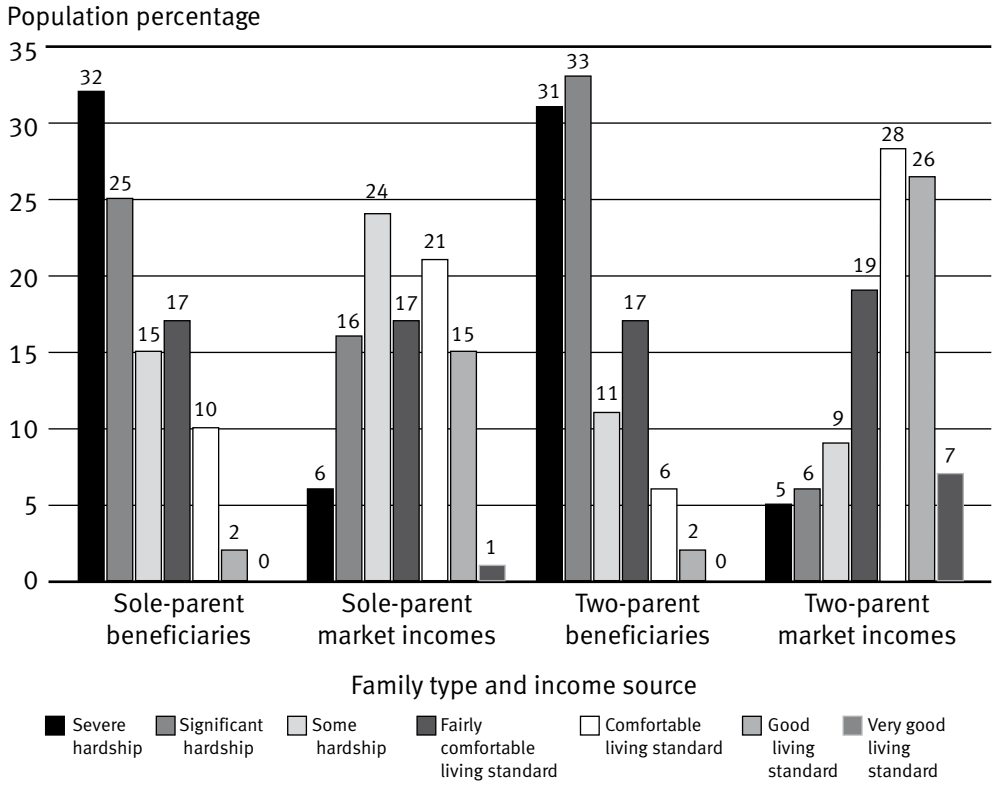
Important influences on child health, such as income levels, good-quality housing and access to services, are inequitably distributed across New Zealand families, giving different groups of children in New Zealand an uneven start.[29] These inequities in access lead to systemic inequalities in health. Inequities often compound each other and tend to be intergenerational.

One of the largest determinants of health is income. Financial hardship limits access to important resources needed for good health, places stress on families and is linked with an increased risk of child abuse and neglect.[30] In all countries, socioeconomic differences are linked with differences in health outcomes for children. Differences in child wellbeing are more extreme in societies with greater income inequality and a higher percentage of children living in poverty.[31]

Several studies have highlighted the extent and impact of childhood disadvantage in New Zealand. New Zealand's two longitudinal studies in Dunedin and Christchurch follow cohorts of children born in 1972 and 1977 respectively. They have shown the strong influence of

disadvantage on children's health outcomes.[32] Other studies have highlighted that New Zealand's income inequalities and child poverty status are comparatively higher than in many other OECD countries.[33] The recent New Zealand Living Standards report identified over 20 percent of all children living in serious or significant financial hardship, and children of families on benefits are the most likely group to face ongoing serious hardship (see Figure 1). This group comprises a significant proportion of New Zealand children. A cohort study identified over 50 percent of all children are reliant on a benefit at some point in their first seven years, and almost 15 percent of all children are reliant on a benefit for at least five of their first seven years.[34]

Figure 1: Family living standards with dependent children by family type and income source



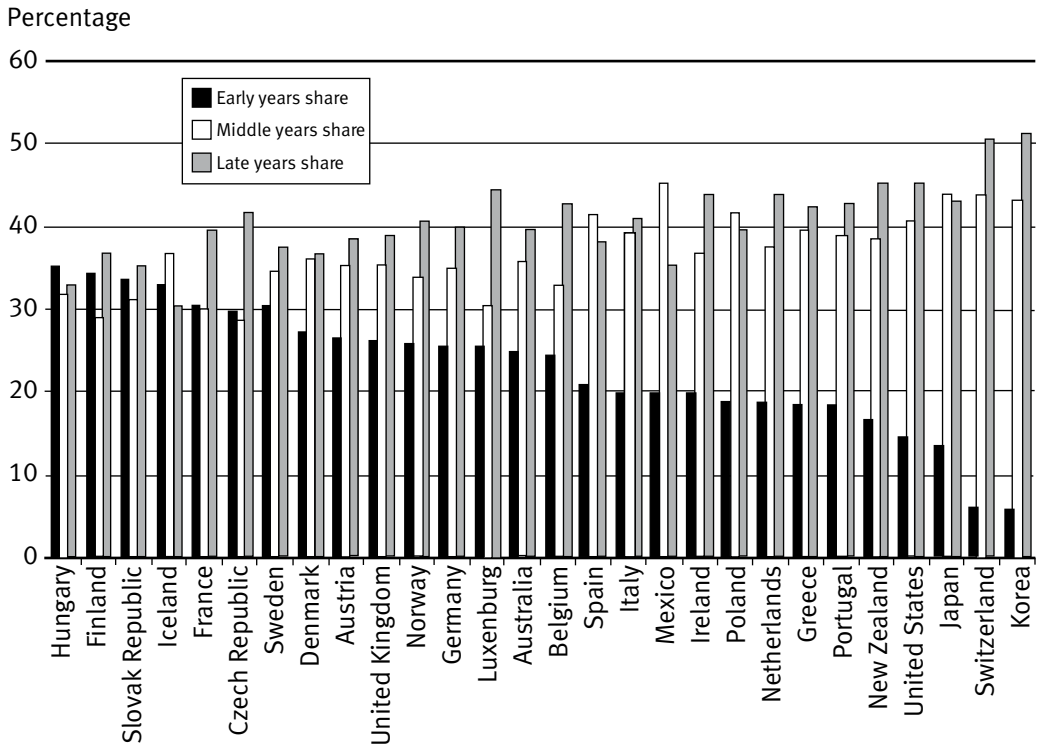
Source: Ministry of Social Development. 2004. *New Zealand Living Standards 2004.* Wellington: Ministry of Social Development.

Comparatively low government investment in early childhood

International evidence clearly shows that investing in the early years produces the greatest long-term benefit for health, educational and social outcomes for each dollar invested. Despite significantly increased support for early childhood education, the New Zealand Government still spends less than half the OECD average on 'early childhood' (in absolute terms and also spends a below average proportion of total spending). Early childhood spending includes expenditure on education, in-kind benefits, childcare, cash benefits and tax breaks (but not health expenditure).[35] In contrast, New Zealand's investment in older children, young people and older people compares well internationally (see Figure 2).

Even when health expenditure is included in early childhood spending, New Zealand expenditure by age is lowest for children from just after birth until age five. It increases after age 14 and continues to increase over the life course, until spending on people in the last two years of their lives is five times greater than the investment in early childhood.[36] This aspect is discussed further in section 2.

Figure 2: Public per capita social expenditure by stage of childhood by OECD country, 2003



Source: OECD. 2009. *Doing Better for Children*. Paris: Organisation for Economic Co-operation and Development.

Uncoordinated services

Many good services and programmes exist for families and children throughout New Zealand. Strengthening Families, Family Start/Early Start, 20 hours per week free childcare, and Working for Families have made a difference to the health and wellbeing of many children. Various community initiatives, such as Barnados, SKIP (Strategies with Kids, Information for Parents), and family violence prevention groups also provide essential support to families raising children.

In spite of this good work, service delivery is problematic. Information about services for preschool children is often difficult to find and is only sometimes available to parents of children with high needs. Services available for children with high needs are often uncoordinated, placing additional pressure on families in times of crisis. Cases such as those of James Whakaruru and Soleil and Olympia Aplin show the result of a break-down in agency coordination.[37] There are many other cases of children in less extreme situations but whose health and development still suffer because of poor agency coordination. This aspect is discussed further in section 4.

Lack of good information for policy decisions and service delivery

Government agencies collect a large amount of data that is not coherently managed. Incompatible data, privacy concerns, and agencies being unwilling or unable to share their data mean many providers do not share information. Information sharing is necessary if care is to be provided across services and effective policies are to be developed. New Zealand also has little information about the effectiveness of interventions and no nationally agreed indicators for monitoring trends against international benchmarks. This means we do not fully understand or have evidence about what initiatives work in a New Zealand environment. This aspect is discussed further in sections 4 and 5.

1.5 Why have other countries had better results for children?

All parts of society play an important role in raising children. Parents and families/whānau are primarily responsible for bringing up children, but communities have a significant influence on societal attitudes towards children. Governments can do their part in ensuring families and communities are supported to achieve the best outcomes for their children. This support can occur through high-quality health, education and social services for children from birth to six years, as well as through economic and social policies that improve families' living conditions.

Overseas governments have faced similar challenges to those the New Zealand Government faces, with poor outcomes in some groups, ineffective service coordination, and negative, long-term effects of poor early childhood development on crime, employment, and health service demand. Overseas governments have made dramatic changes to the way they invest in and address child health and wellbeing, which appear to be making a positive difference. For example, the United Kingdom (UK) Government has adopted a whole-of-government approach to children that is underpinned by the Children Act 2004.

The Children Act 2004 provides the framework for Every Child Matters, an agenda for children and young people that applies across government agencies.[38] Every Child Matters was further advanced by the Children's Plan, a 10-year strategy with ambitious targets covering education, health, child poverty and child offenders. Early signs are that the UK is making positive progress towards some targets, with significant reductions in the child poverty rate, proportion of overweight children, and number of first-time young offenders.[39]

Other jurisdictions that have recognised the interconnected nature of child health and the need for greater investment in the early years are Manitoba (Canada), Victoria (Australia), and Ireland. Inherent in the long-term nature of these approaches is the acknowledgement that improvements to child health and wellbeing take time. These initiatives are discussed throughout this report.

1.6 What needs to change to improve the health of New Zealand children?

New Zealand's ongoing poor record of child health and child abuse suggests we must do better. We must put a higher value on the health and welfare of all children.

Over the past decade, many reports have expressed concern about the state of child health and wellbeing in New Zealand.[40] Recommendations from these reports (some of which are summarised in Appendix 1) include the need for:

- a whole-of-government approach to children
- fewer children living in poverty
- coordinated services
- strong leadership at various levels.

These reports have not led to sustained action, largely because they have not been sponsored at a high enough level and in a sustained manner. In addition, recent OECD and United Nations Children's Fund (UNICEF) reports on child health indicators are sometimes discredited with

suggestions the indicators are measured inconsistently across countries. However, many of the indicators used relate to straightforward information such as mortality or immunisation rates. Indicators might not always be directly comparable, but this discussion diverts attention from the more serious issue of an unacceptable pattern of poor child health and wellbeing in New Zealand that requires serious attention and investment.

The PHAC has reviewed reports on New Zealand children along with international developments and evidence of policy interventions. It shares the concern expressed in reports about the state of child health in New Zealand. It is especially concerned about those children who have been substantially left behind and is primarily interested in finding ways to reduce health inequalities between groups of children. The PHAC sees opportunities in some initiatives that have been established or planned for children and their families/whānau.

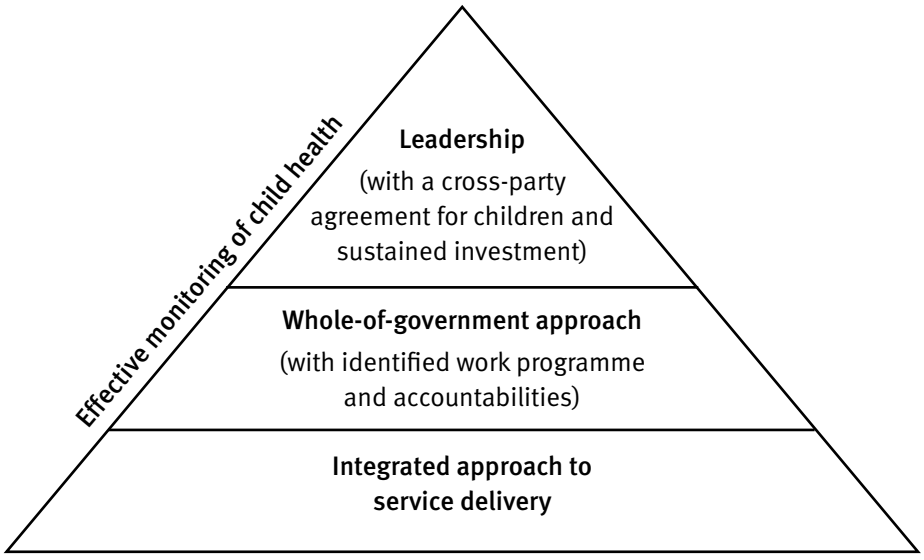
The PHAC also recognises the unique position Māori have as tāngata whenua and the importance of taking a whānau ora approach to the health of tamariki.

The PHAC believes that improving child health requires more than merely fixing any one health 'problem'; it requires a change to organisational systems. The PHAC proposes to the Minister of Health that the Government considers the following four major improvements for children:

- strengthen leadership to champion child health and wellbeing
- evelop an effective whole-of-government approach for children
- establish an integrated approach to service delivery for children
- monitor child health and wellbeing using an agreed set of indicators.

These four areas are inter-related and build on each other, as shown in Figure 3. Sections 2 to 5 discuss these areas in more detail and recommend specific actions to achieve each of them. The PHAC believes that to achieve tamariki ora and whānau ora, the principles of the Treaty of Waitangi should underpin the four identified actions.

Figure 3: Hierarchy of change required for improved child health and wellbeing



Bold changes must be made to the Government's approach to child health and wellbeing if overall outcomes are to improve. The PHAC recognises that some actions may not be feasible until New Zealand's economic situation improves. However, it is necessary to plan for change now and implement recommendations that do not have major cost implications. The PHAC believes the wellbeing of children, especially the most vulnerable, must be considered in all health, social and economic policy development.

2 Strengthen Leadership to Champion Child Health and Wellbeing

Photo courtesy of Nelson City Council

'Investing in [children] is not a national luxury or a national choice. It's a national necessity.'

Marian Wright Edelman,
Child rights advocate

Leadership is the most important element for achieving a consistent and organised commitment to child health and wellbeing. Around the country, communities, iwi, clinicians, academics and advocacy groups have shown leadership to improve child health. For example, rūnanga have developed whānau-centred services for children. Providers and early childhood educators have worked long hours to improve services and drawn attention to disturbing trends in child health and wellbeing. Academics have tracked information on child development and, along with non-governmental organisations, have a long history of advocating for children's wellbeing. The Office of the Children's Commissioner and Families Commission have been strong, independent voices for children's rights, interests and development.

Over recent decades, there has been no consistent leadership for child health in central government. In countries such as the UK and Canada, both political and strategic government leadership has initiated dramatic improvements in their response to child health.

2.1 Why focus on government leadership?

Strong, continuous and effective government leadership is necessary to achieve sustained, sound policies for children. Strategic leadership will provide the impetus to ensure children's policies are prioritised, remain relevant and are consistent across agencies and over time.

Recent challenges to New Zealand's child health and wellbeing policies illustrate why leadership is needed. The challenges are:

- no sustained leadership for action
- planning for children is sector based
- investment in children has been low and sporadic.

No sustained leadership for action

In recent years, governments and government agencies have shown a desire to improve outcomes for children. However, there have been continuous challenges in achieving and sustaining action across sectors. Attempts to develop national strategies for New Zealand children have lost impetus with changes in government (for example, the Child Health Strategy 1998), have not been completely implemented (for example, the Child Health Information Strategy 2004), or have had limited buy-in across sectors (for example, the Agenda for Children 2002). Few of these strategies were accompanied by an action or implementation plan or had long-term dedicated funding streams. The lack of an action plan meant each strategy was a one-off document that, in most cases, had no specified actions or accountability. A literature review the PHAC commissioned noted that each strategy (even those within the Ministry of Health) has been built on a different set of core principles and has suggested a different course of action.[41] Effective leadership would reduce this wasted effort.

Planning for children is sector based

In early childhood, health, developmental and behavioural issues overlap considerably. Aspects of children's health, such as vision and hearing, affective and attention deficit disorders, and injuries, are also important matters for the education and social development sectors. However, planning for children tends to take place sector by sector.

Each sector has its own leadership at central, regional and local levels. Leaders from government agencies have come together on specific issues that affect children (for example, children with high and complex needs, child abuse, and whānau ora). However, planning processes do not enable a comprehensive and ongoing overview of children's health and wellbeing. For instance, the Kia Puawai early intervention initiative, organised by the Ministry for Social Development, examined issues for children from birth to six years, but this initiative has not been sustained. Whole-of-government leadership for children would coordinate efforts to respond to the 'whole child' across sectors and agencies.

Investment in children has been low and sporadic

Investment in the early years can help children to reach their health and development potential, which improves their opportunity for good health, social and economic outcomes in adulthood. Section 1 described how government investment in the early years in New Zealand was low by international standards. In addition, the sustainability of early childhood policy has been compromised by the variation in agencies' perspectives and changes in ministers and governments. This has resulted in haphazard, 'boom or bust' child policies, and 'stop–start' programmes that are often not fully implemented. An example includes funding to implement the Child Health Information Strategy. Funding was substantial at the end of the 1990s, but it markedly diminished after the development of District Health Boards (DHBs) in the early 2000s.

For investment to benefit child health, it must be sustained, in the same way as policies for people aged over 65 are sustained year by year and government by government. The PHAC believes both cross-sector and cross-party leadership are likely to lead to the introduction of well-considered and evaluated policy that persists over time. The PHAC does not suggest poorly performing policies be sustained or that continued scrutiny of effectiveness is unimportant.

2.2 What is needed for effective government leadership?

Strategic central government leadership for children is crucial to improve the quality of government support for children and families. A review of other countries' experiences identified five components required to strengthen central government leadership (summarised in Table 2). The requirements are:

- legislation
- a Cabinet champion
- an Office for Children
- cross-party agreement and strategic direction
- a sustained investment in the early years.

The PHAC believes these elements are essential for embedding a commitment to children within New Zealand government policy.

Table 2: Summary of government leadership in four jurisdictions

Jurisdiction	Legislation	Cabinet champion	Lead government department	Policy with cross-party support	Strategic direction
United Kingdom[1]	Children Act 2004	Minister for Children	Department for Children, Schools and Families	Every Child Matters	Children's Plan – a 10-year strategy with targets
Ireland[2]	Children Act 2001	Minister for Children and Youth Affairs	Office of the Minister of Children and Youth Affairs	National Children's Strategy 2000–2010	Agenda for Children's Services
Manitoba, Canada[3]	Healthy Child Manitoba Act 2007	Minister for Family Services and Consumer Affairs	Healthy Child Committee of Cabinet	Healthy Child Manitoba	Action Plans linked to Healthy Child Manitoba
Victoria, Australia[4]	Child Wellbeing and Safety Act 2005	Minister for Children and Early Childhood Development	Department of Education and Early Childhood Development	Children's Services Coordination Board (deals with cross-portfolio issues)	Blueprint for Education and Early Childhood Development (includes health, education and care services)

Source notes

1 Department for Children, Schools and Families. 2010. http://www.dcsf.gov.uk (accessed 18 January 2010).

2 Office of the Minister for Children, Department of Health and Children. 2007. *The Agenda for Children's Services: A policy handbook.* Dublin: Office of the Minister for Children, Department of Health and Children.

3 Healthy Child Manitoba. 2010. About Healthy Child Manitoba. http://www.gov.mb.ca/healthychild/about/index.html (accessed 2 February 2010).

4 Department of Education and Early Childhood Development. 2010. Outcomes for Victoria's Children. http://www.education.vic.gov.au/about/directions/children (accessed 2 February 2010).

Legislation

In New Zealand, no legislation provides an overarching framework for the full range of children's needs. Legislation focuses on single issues such as child welfare and protection (the Children, Young Persons, and Their Families Act 1989), the care of children (the Care of Children Act 2004) and child support responsibilities (the Child Support Act 1991).

The PHAC believes that broad enabling legislation for child development is a vital requirement for developing policies for children that are sustainable across agencies, time and governments. Legislation such as a Children's Act could set out the principles for children's wellbeing and outline agencies' statutory responsibilities. Such an Act could establish an infrastructure of governance, government and community structures, bringing together relevant elements of child health, development and education, and covering all relevant agencies. Legislation could include the requirement for the wellbeing of children to be assessed and protected in all policy development and planning. Such legislation has been enacted in the UK, Manitoba (Canada) and Victoria (Australia).

A Cabinet champion

The second component required to strengthen and embed central government leadership is the establishment of a Cabinet champion, such as a Minister for Children. Such a minister would be responsible for bringing together young children's health, education and social development. The minister would coordinate government policy, direct cross-agency action, ensure compatibility across sectors, and be a child advocate in Cabinet. This minister would also focus on strengthening partnerships with iwi and other communities. It is important this champion does not subsume the role of the Children's Commissioner, who acts an essential independent advocate for children.

The PHAC recognises the overlap that might exist between a Cabinet champion for children and the new Minister Responsible for Whānau Ora. It urges the Government to consider how these positions interrelate to ensure they complement each other while having a focus on children.

An Office for Children

A Cabinet champion would require support to fulfil their leadership and coordination role. The PHAC suggests that an agency, such as an Office for Children, be established to support the Minister for Children.

This office could be located in three places: as an independent agency (for example, Manitoba's Healthy Child Office reports to the Healthy Child Committee of Cabinet), as a separate government agency (for example, the Department for Children, Schools and Families in the UK), or in an existing department (for example, the Irish Office of the Minister for Children within the Department of Health and Children, and similar to the New Zealand Ministry of Youth Development within the Ministry of Social Development). This agency would view all children's educational, social and health issues and work would closely with key government agencies, iwi and community groups.

Cross-party agreement and strategic direction

The other challenge in sustaining leadership for child development is the change that occurs when governments change. The PHAC proposes the development of a cross-party agreement that provides strategic direction for the wellbeing of children and addresses the full context in which children live, learn and play. This agreement would outline shared principles and goals and could form the backbone of government policy to encourage child development. The PHAC suggests such an agreement prioritises the most disadvantaged groups of children in New Zealand and incorporates the principles of the United Nations Convention on the Rights of the Child and the United Nations Convention on the Rights of Persons with Disabilities.

A sustained investment in the early years

Evidence suggests it makes economic sense to invest in young children, especially those from disadvantaged backgrounds. International studies have shown a $2–17 return on every $1 invested in early childhood health and development programmes.[43]

> '[I]f governments in rich and poor societies were to act while children were young by implementing quality Early Child Development . . . programmes and services . . . these investments would pay for themselves many times over.'
>
> World Health Organization[42]

It is clear that early childhood interventions are more effective, cost less than remedial action later in life, and even cost less than preventive action later in childhood. This evidence applies well beyond areas usually seen as being health related. A study conducted by the Department of Corrections highlights the economic benefits of early intervention:[44]

> [W]e know the earliest possible intervention works best and costs the least. Working with a five-year-old to change aggressive and defiant behaviour is estimated to cost $5,000 and has a success rate of 70 percent; the same behaviour at age 20 costs $20,000 and has a success rate of only 20 percent.

Investment at an early stage of a child's life produces high returns, since deficiencies during childhood in many areas (for example, neglect and poor nutrition) cannot be adequately compensated for in adulthood. Limited access to the services and environments required for children's progress affects their future productivity and the country's development and economic growth in turn.[45]

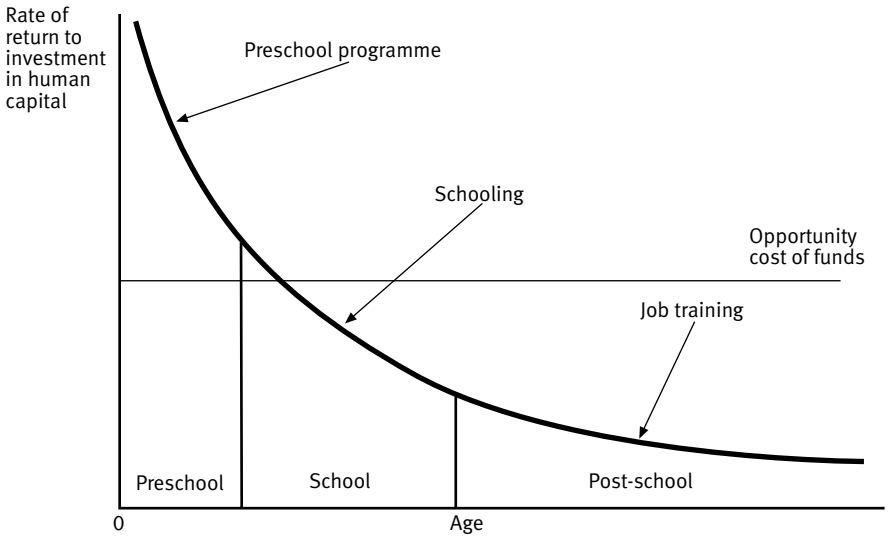
Rates of return on investment by age are illustrated in Figure 4. The current age-group spending structure in New Zealand is the inverse of the structure shown in Figure 4. The PHAC believes existing investment towards early childhood should be strengthened so it is evidence based and comparable with countries with a similar gross domestic product. Existing spending should be redistributed towards early childhood. Such redistribution should be staggered over a period so it does not jeopardise the stability of current services.

The PHAC also urges the Government to prioritise preventive and protective spending, rather than remedial and treatment spending. Spending can be categorised as:

- preventive – spending directed towards positive future outcomes, for example early childhood education, good child nutrition and maternal health during pregnancy
- protective – spending directed towards protecting 'at-risk' individuals and acting as a buffer against the risk factors of poor health, for example targeted housing insulation or centre-based early childhood education
- remedial or treatment – spending to treat or manage problems after they have emerged.[46]

Remedial spending, which maintains a minimum level of current wellbeing, is necessary but insufficient for ensuring the best outcomes for children. Preventive and protective spending bring better returns than does remedial spending, because they are made before problems arise and are more likely to avert poor outcomes. For example, a cost–benefit analysis of four early childhood programmes found that investment in early childhood has benefits for taxpayers and governments through lower public education expenses, reduced criminal justice costs, increased tax contributions, and less dependence on public welfare.[47]

Figure 4: Rate of return to human capital investment



Source: J Heckman. 2000. *Invest in the Very Young*. Chicago, Illinois: Ounce of Prevention Fund and University of Chicago Harris School of Public Policy Analysis. Cited by Royal Children's Hospital. 2006. *Early Childhood and the Life Course*. Policy Brief No 1. Parkville, Australia: Royal Children's Hospital.

Only a minority of New Zealand's services for children qualify as preventive or protective investment. Early childhood education and Well Child/Tamariki Ora are the most obvious examples. However, even in the case of education spending, proportionally little educational spending is targeted at the early years. The highest per capita subsidies are paid for tertiary education, which is more likely to be accessed by people from already advantaged families.[48]

2.3 What is the health and disability sector's leadership role?

Health and disability sector leadership for children is important because a significant proportion of the Government's early childhood spending occurs in this sector. The sector has shown strong leadership in advocating for children's health (for example, sector leadership on sudden unexplained death in infancy and clinical leadership around the prevalence of child abuse

and micronutrient deficiencies in children). The PHAC endorses this leadership, but believes leadership across the sector must be strengthened to prioritise child health and wellbeing.

The PHAC has identified that the health and disability sector can strengthen its leadership by:

- prioritising children in health plans and policy development
- supporting iwi leadership and participation
- supporting clinical and community leadership.

Prioritise children in health plans and policy development

Over the past decade, responsibility for child health has shifted from the Ministry of Health to DHBs. This shift was to be guided by the Child Health Strategy (1998) and a Child Health Toolkit (2004) for DHBs to use during the strategy's implementation.[49] A promised implementation plan for the strategy never eventuated, but DHBs were expected to take leadership at a district level, and performance measures were written into their contracts. Some DHBs have identified child health as a priority in their district strategic and annual plans. However, DHB actions to improve child health, over and above specified health targets,[a] are inconsistent; in some places, they are inadequate and they lack strong central leadership.

The Ministry of Health has a responsibility to take a strong leadership role and increase central coordination for children. Because the Ministry of Health is undergoing a series of changes to reprioritise health spending and improve the quality of services, it has the opportunity to give greater weight to child health and wellbeing in this work. The PHAC believes the proportion of health sector spending on services for children aged up to six years should increase.

The PHAC also believes the Ministry of Health should work with the National Health Board, DHBs and clinicians to develop an agreed set of sector-wide goals for children. These goals would guide prioritisation work, policy advice and service planning. To be effective, these goals must be based on high-level indicators (discussed further in section 5).

The goals must also be backed by DHB implementation plans that include measurable outcomes and accountabilities and incorporate local priorities.

Finally, the National Health Board should support the goals by making child health expertise a criterion for the board's membership.

Support iwi leadership and participation

The health and disability sector is well placed to strengthen its leadership on whānau ora and tamariki ora. The presence of whānau ora in the Ministry of Health's *Statement of Intent*[50] and current development of the Whānau Ora government initiative reflects the Ministry of Health's commitment to developing services that work for Māori. The Whānau Ora Taskforce report and *He Korowai Oranga: Māori Health Strategy* provide the Ministry with an overarching framework for achieving whānau ora.[51] These frameworks are grounded in the principles of the Treaty of Waitangi and support Māori aspirations.

a A health target in the 2009/10 Statement of Intent is increased immunisation rates (85 percent of two-year-olds fully immunised by July 2010; 90 percent by July 2011; and 95 percent by July 2012).

The PHAC emphasises that leadership for whānau ora should run throughout all services, not just Māori-specific services. This leadership includes meaningful partnerships between iwi and the health and disability sector to design services that support Māori aspirations. The PHAC also emphasises that tamariki ora be a focus of the health sector's commitment to Māori. In most instances, what is needed to achieve whānau ora is the same, or similar, as what is needed to achieve tamariki ora. However, this is not always the case because of the vulnerability of children. For this reason, tamariki Māori also need to be an explicit priority. Part of iwi leadership is ensuring iwi have the resources to strengthen whānau and hapū to achieve tamariki ora.

Support clinical and community leadership

Clinicians and community providers witness the impact of social, economic and other factors on child health and development. These providers are important groups for central agencies to confer with when reviewing the responsiveness of systems to the needs of children. The PHAC believes clinical networks around child health in each region need to be formalised to foster this leadership. It is essential the networks include primary care, because most interactions between children and the health sector occur in primary care.

The recently established Managed Paediatric Clinical Network (led by the Paediatric Society with support from the Ministry of Health) is intended to bring clinical leaders together into an organisational framework within which they can deliver integrated health services for children. The PHAC supports the network's development because it provides a sound strategic platform for improved health sector leadership on child health. The PHAC emphasises that the network's sustainability requires strong governance and leadership from clinicians, as well as continued engagement with and resources from the Ministry of Health.

2.4 Recommendations

The PHAC recommends to the Minister of Health that the Government:

1 introduces overarching legislation that sets out a long-term commitment to improve health and wellbeing outcomes for children (that is, a Children's Act)

2 establishes government structures and processes to strengthen leadership for children, including the consideration of:

- an identified senior Cabinet position with responsibility for children, such as a Minister for Children
- a cross-agency Office for Children to implement the strategic direction and oversee sector contributions to early childhood development
- a cross-party agreement that provides strategic direction and outlines shared principles and goals

3 assesses early childhood spending and works towards sustained investment in the early years that is evidence based and comparable with countries that have a similar gross domestic product to New Zealand.

The PHAC recommends to the Minister of Health that:

4 the Ministry of Health makes child health a priority and increases the proportion of health sector spending on services for children aged up to six years

5 District Health Boards develop child health implementation plans with measurable outcomes and accountabilities

6 the health and disability sector continues to strengthen leadership on tamariki ora and work with iwi leadership to improve service design and delivery

7 the health and disability sector strengthens child health networks in each region, which are supported by the Ministry of Health.

3 Develop an Effective Whole-of-Government Approach for Children

'If New Zealand is to be a great place for children, we need to change. We need to treat children as respected citizens who can contribute to society now and not just as 'adults in the making'. And we need to move from looking at health, education, welfare or other services for children in isolation, to looking at all aspects of children's lives. We need all government agencies to work together.'

Ministry of Social Development[52]

Photo courtesy of New Zealand Transport Agency

Governments provide essential services to children and create supportive environments to help families raise children. To get the best outcomes for children, policies and services should be coordinated. The PHAC believes there is great potential to improve child health and wellbeing through a whole-of-government approach. Under a whole-of-government approach, a cross-agency set of public policies would coherently focus on early childhood. Each agency would have work programmes with clear roles and responsibilities for which the agency would be accountable.

To be effective, this approach needs to be based on national and international evidence, underpinned by legislation, and based on the principles and goals of a cross-party agreement for children. It also requires increased investment in the early years (all discussed in section 2).

3.1 Why focus on a whole-of-government approach?

A whole-of-government approach to early childhood reflects the complex environments that affect children. Such an approach would bring government agencies together to agree on a shared, strategic agenda. It would enable government agencies to jointly consider the expanding knowledge of what is effective for child health and wellbeing in policy development.

Children's environments are complex

Children live in a complex and ever-changing social environment. Their needs do not conveniently slot into the functions of one policy sector or another. Their needs overlap and interact with each other; needs range from direct requirements (such as the quality of time and care provided by parents, housing conditions and nutrition) to distal needs (such as government policies to ensure families have sufficient income and employment, access to health care, early childhood education, and safe neighbourhoods).[53]

No one agency is likely to be able to address all of a child's needs, particularly for children or families with high and complex needs or disabilities. However, current agency structures and policy development processes do not provide a coordinated approach to children's needs, leading to both duplication and gaps in service development. An example is the concurrent but separate work by the New Zealand Child and Youth Epidemiology Service to develop child health indicators and by the Ministry of Social Development to develop child wellbeing indicators. Policies need to be developed in a coherent manner to reflect the complexity of children's environments and to maximise existing resources.

Expanding knowledge of what is effective for child health and wellbeing

We have growing knowledge about which policies work for children. The evidence comes from a combination of neuroscience and child development research and rigorous programme evaluation data from New Zealand and overseas.[54] Some of this research focuses on young children, some on parents' wellbeing, and some on living conditions. Successful policies include:

- prenatal and postnatal and well child health care (including immunisation)
- intensive home-based prenatal and postnatal support for high-risk mothers
- nutrition vouchers for pregnant women and young children
- paid parental leave and other income support (including child benefits)
- early childhood centre-based education targeted to disadvantaged families
- widely available parenting programmes
- child protection support that is integrated with treatment services
- neighbourhoods with reduced driving speeds, well-located pedestrian crossings and well-designed outdoor play areas
- warm housing of a good standard.[55]

The evidence highlights that disadvantaged children stand to benefit most from high-quality programmes. For example, access to early childhood education for children in low-income families helps reverse developmental delays and has been shown to provide long-term cost benefits.[56] A population approach to evidence-based parenting programmes has been found to reduce behaviour problems, mental health problems, child maltreatment and youth offending.[57] Adequate income support has shown long-term improvements for children with high needs.[58]

Successful policies span government departments, as illustrated in Appendix 2. Without a coordinated approach to child health and development, agencies cannot design these policies to be coherent and comprehensive. A lack of a coordinated approach is a particular problem for children with high needs who require effective early (and usually cross-agency) intervention if their outcomes are to be improved over the short and long term.

3.2 What is needed to establish a whole-of-government approach?

From the information it has gathered, the PHAC concludes that a whole-of-government approach for children that plans collaboratively towards desired outcomes is essential.

> 'Many of the well-documented risk factors that can impair early brain development are embedded in the experiences of poverty and malnutrition, illiteracy, violence, toxic exposures, and substances abuse . . . It requires a vigorous public health approach.'
>
> Shonkoff and Phillips[59]

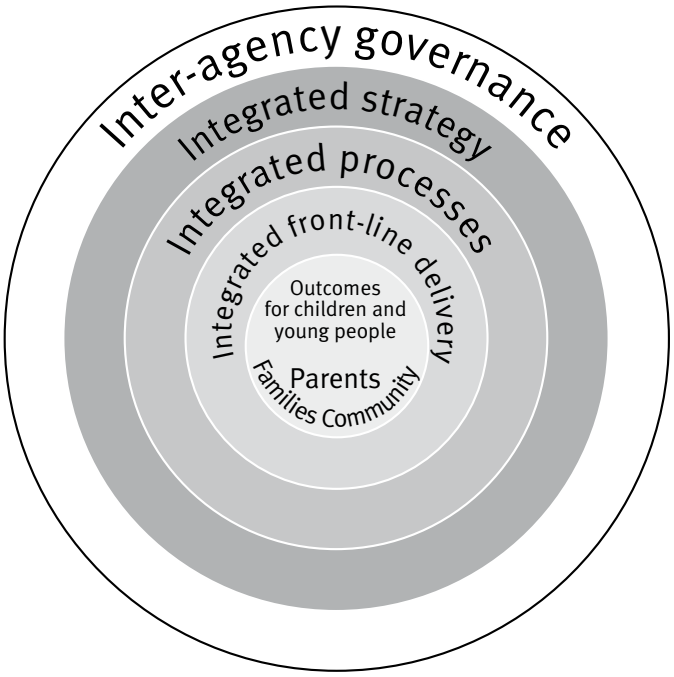
A whole-of-government approach for children involves three main areas of action:

- a cross-agency early childhood policy set with associated work programmes
- the consideration of the wellbeing of children in all policies and planning
- monitoring, research and evaluation to inform policy.

The PHAC believes that Every Child Matters in the UK, Healthy Child Manitoba, and the Agenda for Children's Services in Ireland are excellent examples of whole-of-government approaches. Each country has a policy document that sets out the strategic direction of public policy for children's health and social services. All policy documents are linked to action plans that provide a framework, vision and specific actions for relevant agencies and community groups.[60] Policies are developed to support the required outcomes of child development (for example, parenting and family supports and healthy infancy) rather than around agency mandates (for example, education and social development).

The Every Child Matters plan illustrates the multiple layers of integration that are being executed in the UK's approach to child health and wellbeing (see Figure 5).

Figure 5: United Kingdom model for 'whole system change'



Source: Department for Children, Schools and Families. 2007. *Every Child Matters: Children's plan.* London: Department for Children, Schools and Families.

Cross-agency early childhood policy set

The PHAC believes a set of interconnected, cross-agency early childhood policies and programmes should form the foundation of a whole-of-government approach. These policies must be underpinned by legislation and a sustainable, nationally agreed way forward, as discussed in section 2.

To be effective, a cross-agency policy set must be grounded in evidence and developed against outcomes of child wellbeing. Table 3 outlines six child health and development outcomes (and their primary contributors), which could underpin the policy set. To compile this table, the PHAC assessed research on child health and development and evidence of effective interventions for children. (Appendix 2 provides more details about this evidence and lists New Zealand's current government policies and programmes targeted at children and families.)

The policy set covers a broad range of topics; for example, antenatal care, alcohol and other drug treatment services, targeted early childhood education, income support, and parks and playgrounds. As part of such a policy set, work programmes would be developed for each agency. Work programmes would identify roles, linkages with other agencies, and accountabilities for outcomes.

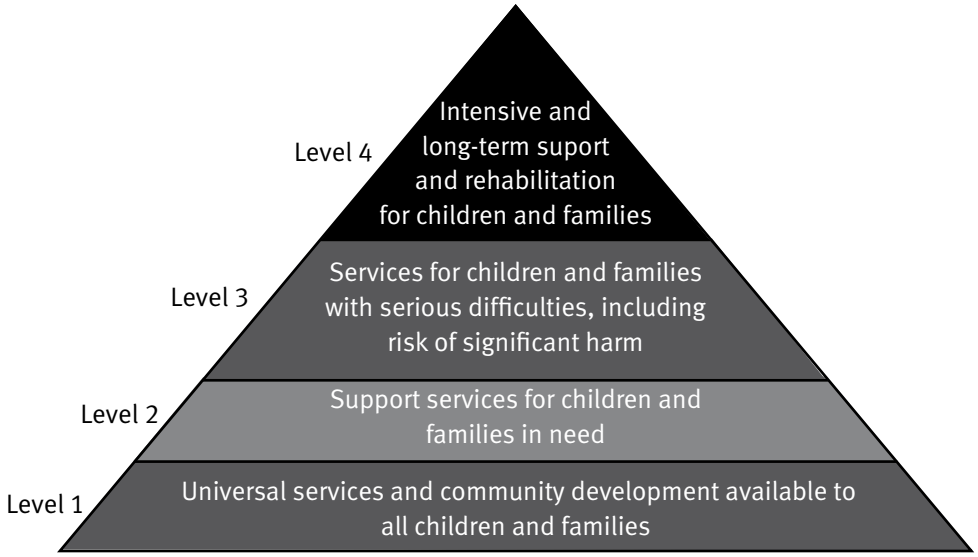
Table 3: Overview of domains covered by a cross-agency policy set for child health and wellbeing

Outcome	Contributors
Outcome 1: Physical and mental health	Affordable, high-quality prenatal and maternal care High-quality primary health care for children Specialist health and disability support services Parental (especially maternal) mental wellbeing Healthy home and neighbourhood environment Adequate family income and employment Adequate nutrition and food security Smoke-free environment
Outcome 2: Positive network of family, friends, neighbours and community members	Parental mental wellbeing Effective parenting skills Families free from violence Families free from drug and alcohol abuse Adequate income and employment
Outcome 3: A secure physical and economic environment	Healthy home and neighbourhood environment Adequate family income and employment Adequate family and child income support
Outcome 4: Active learning	Effective parenting skills High-quality early childhood education
Outcome 5: Safety from accidental and intentional harm	Families free from violence High-quality child protection services Home environment with minimal hazards Neighbourhood environment with minimal hazards
Outcome 6: Inclusion and participation in society	Strong and inclusive iwi and community networks Effective parenting skills

An effective blend of services

A continuum of universal, targeted, interventionist and intensive services should make up the cross-agency policy set (see Figure 6). This blend is important from an equity perspective, because it provides essential preventive services for the whole population while also targeting at-risk groups and providing treatment or support for children with existing needs.

Figure 6: Levels at which families need support



Source: Office of the Minister for Children, Department of Health and Children. 2007. *The Agenda for Children's Services: A policy handbook.* Dublin: Office of the Minister for Children, Department of Health and Children.

Countries have taken different approaches to the type of services provided for children. For example, Sweden takes a primarily universal approach with high-coverage prenatal care, income policies to bring families with young children above the poverty line, up to 18 months' paid parental leave, monthly nurse monitoring in the first 18 months of life, universal access to publicly funded early childhood programmes, and gradual transition from play-based to school-age learning. Mexico, on the other hand, takes a targeted approach to many services, with a conditional cash transfer scheme that gives money to poor mothers on the condition their children attend school and health visits.[61]

New Zealand has a variety of universal, targeted, interventionist and intensive services for children. The PHAC believes many of these services, although wide ranging, have been designed in isolation of each other and so lack a focus on collective health and wellbeing outcomes. As a result, the overall package of services in New Zealand is not effective.

The PHAC advocates that priority be given to 'proportional universalism', whereby policies are aimed at all levels of society but are designed to have greatest impact on the most disadvantaged children and their families.[62] This approach is important if child health status is to improve in New Zealand. Too often, advantaged children benefit most from services for children and families, as the OECD highlights:[63]

> Governments need to consider ways to avoid committing resources to programmes captured by advantaged children, especially programmes directed at those past the age of compulsory education. These are likely to reinforce inter-generational inequality.

The PHAC considers that Well Child/Tamariki Ora services could do more to reach disadvantaged children and that proportional universalism could also be strengthened with parenting programmes, neighbourhood facilities and income support.

Protective social and economic policies

Limited financial resources mean families are less able to pay for health care, healthy food and heating. Fewer resources place additional stress on families and, as noted in section 1, this stress can have a lifelong physiological impact on child health and development.[64] In times of high unemployment (such as in the current recession), financial pressures from rising living costs are felt more by families on low incomes than families on high incomes, with Māori and Pacific families disproportionately represented in the low-income group.

The PHAC emphasises the importance of protective social and economic policies in a cross-agency policy set. Economic and social policies play a pivotal role in improving child health and wellbeing; protective policies can provide resources to families to help meet basic needs and enable parents, grandparents and whānau to spend quality time with children, pass on knowledge and support healthy development.

Many countries have taken a protective approach to social and economic policies for children. As part of its Children's Plan, the UK Government has emphasised that early intervention services are of limited impact if social and economic factors affecting child health are not also addressed.[65] The UK Government has developed a Play Strategy to make public space more child and family friendly, and local governments are investing in outdoor play areas.[66] Housing policies are also included as a priority in the Children's Plan, and the Child Poverty Act 2010 has been developed to help lift children out of poverty.[67] In other countries, approaches have been introduced to help parents meet the costs of raising children – from prenatal nutrition vouchers to universal child benefits.[68] Some governments are forming partnerships with community agencies to strengthen social support for families.[69]

New Zealand's spending to assist parents with the cost of raising children (for example, financial benefits, tax allowances, subsidies and in-kind services) is relatively low compared with spending by the rest of the OECD.[70] New Zealand provides the domestic purposes benefit for sole parents but children of beneficiaries are the group most likely to face serious hardship (as described in section 1). Other policies such as Working for Families, the in-work tax credit, and childcare subsidies are available only to parents in paid work, so exclude families receiving a social welfare benefit.[71]

The OECD and non-governmental organisations have raised concerns about the number of children living in serious hardship in New Zealand.[72] The PHAC reiterates this concern and urges the Government to develop protective policy responses to reduce the number of children living in hardship. In particular, the PHAC believes the adequacy of social welfare benefits for families of preschool children should be assessed.

Consideration of the wellbeing of children in all policy and planning

Because there are many social and economic influences on children's health, major policies should be routinely assessed early in their development for their potential impact on children. This assessment would enable policy agencies to reduce possible negative and unintended consequences and enhance potential positive effects. For example, Warm Up New Zealand, the Government's nationwide housing insulation subsidy scheme, should have targeted spending towards households with young children and people with respiratory conditions to reduce high rates of child respiratory disease.

The rationale for a formal assessment process is well articulated in a report from the Auckland University of Technology for the Children's Commissioner.[73] For this process to be effective, policy agencies must understand how their policies affect child health and wellbeing. The PHAC developed *A Guide to Health Impact Assessment*, and the Ministry of Health has used that guide as a basis for further development of its Whānau Ora Impact Assessment Tool.[74] Either of these tools can be adapted to assess impacts on specific population groups, including children. Alternatively, agencies could be required to receive independent advice from the Children's Commissioner on all Cabinet papers that have major implications for children.

Monitoring, research and evaluation

Research on child health and development, the monitoring of child health outcomes, and the evaluation of policies and interventions should be the platform for the planning and funding of services that affect children. Too often, decisions about policies and programmes that affect children are politically made, rather than evidence based. As noted earlier, there is a growing evidence base of interventions that are effective for child health and development. However, there is less evidence about what interventions work in New Zealand. For example, there is no evidence about the effectiveness of home visiting compared with centre-based initiatives targeting children in high-needs families.

The PHAC believes government support of child development research should be a high priority. Because of the overlapping nature of child health and development, disciplines such as epidemiology, early childhood education, social policy, and neuroscience each carry specialist expertise that is best considered together.

High-priority research includes New Zealand's longitudinal studies, which are vital in providing information across the life course. The two longitudinal studies in Dunedin and Christchurch have provided a wealth of material on childhood, showing how important the family environment is to young children's development. The studies have highlighted the prevalence and long-term impacts of family violence and disadvantage on crime later in life[75] and have informed Ministry of Social Development policies. A new longitudinal study, *Growing up in New Zealand,* led by the University of Auckland, will build on the Dunedin and Christchurch studies with a larger and more ethnically diverse cohort of children. It will provide data that is relevant to the current social context in which children are developing and will build on the body of knowledge about the policies and actions that work for children.

3.3 What is the health and disability sector's role in a whole-of-government approach?

The health and disability sector is potentially the only sector that will see all children at least once in the first six years of their lives. For this reason, the health and disability sector has a responsibility to ensure families/whānau are supported to provide a healthy environment for their children, that health and development problems are prevented, and that health and development issues are identified and managed early.[76] For a whole-of-government approach to the early years to be successful, this role of promotion, prevention, early identification and management is crucial.

The PHAC has identified four ways in which the health and disability sector can fulfil its role in a whole-of-government approach. The health and disability sector should:

- model a whole-of-government approach to child health and wellbeing
- provide seamless access to high-quality maternal and children's health services
- address the diverse needs of children with disabilities
- address the wider influences on child health and wellbeing.

Model a whole-of-government approach to child health and wellbeing

The PHAC believes a Cabinet champion and an Office for Children, as described in section 2, would be best suited to lead the development of a whole-of-government approach to child health and wellbeing. However, the health and disability sector should also provide leadership in advocating for and developing whole-of-government approaches to service planning for children. This leadership could include the Director-General of Health initiating a cross-agency taskforce on children, the Ministry of Health involving other agencies at an early stage of child health planning, or DHBs working with other agencies to develop their child health implementation plans (described in section 2).

Ensure seamless access to high-quality maternal and children's health services

Seamless access to high-quality prenatal, postnatal and early childhood health services is essential to ensure every child gets the best start in life and in preparation for school. However, access varies significantly across regions and population groups. Even access to high-priority services such as immunisation appears to be a problem in some areas. The PHAC believes the Ministry of Health should assess spending towards, quality of and access to primary, secondary and tertiary services for pregnant women and children with a view to increasing timely access to services for vulnerable groups of mothers and children in particular.

Access to affordable and appropriate primary health care is paramount to identifying and treating health and developmental problems and providing children with necessary support services.[77] Since the introduction of 'free' health care for children aged under six, children's access to primary health care has improved. However, many families still have to pay high fees to non-participating primary care practices, especially for after-hours care. In many instances, fees for after-hours care for children under six are so high (up to $120) that they have become a barrier to families seeking urgent care.[78] Many families use emergency departments as alternatives to primary care, which puts pressure on hospital services and increases waiting times. The PHAC believes that unless primary health care is free, 24 hours a day, seven days a week for children under six years, then children's health issues cannot be managed effectively.

Ensure the diverse needs of children with disabilities are addressed

Children with disabilities may have greater and more varied needs than other children. Some of these needs relate directly to their impairment (for example, hearing aids and speech therapy for a child with hearing loss). Other needs are indirect (for example, social support to a child or respite care for a family) and require coordination with other sectors.

Early diagnosis of impairments and long-term conditions is linked with improved management and support.[79] However, because varied needs span several sectors, children with disabilities

run the risk of receiving disjointed care. The health and disability sector should work with other sectors to ensure a whole-of-government approach to children prioritises the needs of children with disabilities.[80] Health professionals must pay particular attention to potential impairments or health conditions among children from families who have limited resources, are in crisis or are not well linked into services. These groups include children in highly transient families, children who have a family member in prison, or children of parents with an alcohol or other drug addiction.

Address the wider influences on child health and wellbeing

Although health services are crucial for managing ill health in an individual child, they have only a narrow role in overall health improvement at the population level. [81] The health and disability sector has an important role in preventing ill health through public health approaches. Public health initiatives that address the wider determinants of child health and wellbeing have the potential to result in major overall improvements in child health. Public health units and non-governmental organisations have led the way in addressing many of the wider impacts on the health and safety of children such as housing, transport, food security, tobacco control and family income.

The PHAC believes the health and disability sector should increase investment in public health initiatives that address the wider determinants of child health. The sector can improve physical, social and economic conditions by:

- working with local and central government to provide supportive community settings for children (for example, housing, playgrounds, transport and early childhood centres)
- working with local government to introduce fluoridation in communities with reticulated water supplies
- identifying and responding to environmental hazards such as contaminated land and recreational water or traffic hazards in areas where children live and play
- developing programmes and guidelines to promote physical activity, healthy eating, and safety in early childhood education and community settings.

Public health services have a responsibility to prioritise work in settings where there are vulnerable or disadvantaged children.

3.4 Recommendations

The PHAC recommends to the Minister of Health that the Government:

8 develops a set of cross-agency policies that reflects a cross-party agreement and outlines the specific actions and accountabilities of each relevant government agency

9 requires all significant government policies to be assessed for their potential impact on children

10 identifies strategies for reducing the number of child living in serious hardship, sets measurable objectives, and monitors progress towards those objectives

11 continues to support longitudinal studies of childhood development and researches and monitors the effectiveness of early childhood interventions.

The PHAC recommends to the Minister of Health that the health and disability sector:

12 works towards implementing free, 24-hours-a-day, seven-days-a-week primary health care for all children aged under six years

13 assesses access and quality of health care and disability support services for children and finds ways to increase timely access to these services by vulnerable groups of children

14 increases investment in public health initiatives that target the determinants of child health.

4 Establish an Integrated Approach to Service Delivery for Children

'Children are our taonga and our future. If they are not supported, empowered and loved, it is impossible for anyone in our society to live a fulfilling life.'

National Collective of Independent Women's Refuges

Photo courtesy of *The Press*

Leadership and a whole-of-government approach will not make much progress towards improving health and wellbeing outcomes for children unless consideration is also given to *how* services are delivered to children.

A variety of agencies and organisations deliver services for children and their families/whānau – government agencies, non-governmental organisations, iwi and community groups. To get the best outcomes for children, services should respond to children in an integrated manner, so the 'whole child' is treated in the context of their wider family/whānau and community, rather than multiple providers focusing on separate problems in isolation.

Integrated service delivery requires joined-up action across agencies, services, professionals, communities and organisations. Government agencies, as both funders and service providers, have an important role in working with other agencies, communities and families to achieve an integrated approach. The Government has already shown leadership in this area with initiatives such as Whānau Ora, High Trust Contracts, and Strengthening Families, but more can be done.

4.1 Why focus on an integrated approach to service delivery?

An integrated approach to service delivery is important. Currently, most service delivery is sector based and uncoordinated, which means:

- families are left dealing with the complexity of service delivery
- families are not supported in times of crisis
- current service delivery is a poor use of government resources.

Families are left dealing with the complexity of service delivery

Impermeable agency boundaries mean services are often not coordinated within and across sectors, providers do not communicate with each other about clients, and agencies have separate assessment processes. In New Zealand's cases of violent deaths of young children, the failure of agencies to communicate and 'connect the dots' highlights the extreme end of agency breakdown. The death of James Whakaruru, a child who had had 40 visits to health services in four years as well as ongoing contact with Child, Youth and Family and the New Zealand Police, illustrates what can happen when providers do not adopt an integrated approach to service delivery.[82]

Poor coordination and communication mean information is not readily available to families about the range of services available for young children. Families do not know what services they can access and spend unnecessary time trying to sort out disjointed information and coordinate services themselves. A study of parents of children with autism spectrum disorder identified a lack of support following diagnosis, parental uncertainty about the services available, and parents' feeling they had to ask the 'right' questions to receive information about services.[83]

Impermeable agency boundaries also mean services are unnecessarily disjointed. In describing services delivered to their children, parents of children with autism spectrum disorder highlighted the extent to which education and health services functioned separately, particularly in primary school, creating confusion for parents and gaps in care for children. In another example, a new entrant child who had one foot was not using his prosthetic, but the education agency responsible for the child did not respond to this issue, noting that physical impairments were not their area of expertise.

Families are not supported in times of crisis

Children who are highly mobile, have high health or support needs, or have disabilities are the ones most affected by breakdowns in service delivery. The Whānau Ora Taskforce identified problems with services for many Māori. It highlighted problems of too many agencies involved with whānau and a focus on crisis intervention for individuals instead of a proactive whole-whānau view.[84] The taskforce highlighted a succession of agencies calling on whānau independently of one another, each addressing a different problem the family is facing. Separate assessment processes can lead to conflicting and confusing advice for the family and tension between service providers. Multiple actions can be initiated without the family having a clear sense of the overall package of services that will best address its needs. Although multiple agencies may be necessary for the provision of specialist services, the taskforce highlighted that generally, 'whānau require someone with a multiplicity of skills, not a multitude of people'.[85] A better use of resources would be to coordinate service delivery behind the scenes so families are not the ones solely responsible for navigating and coordinating services.

The recent government announcements about Whānau Ora and integrating services for the most vulnerable families will go some way to addressing these problems for families at highest risk. However, the lack of coordination of services affects a wider range of families who have frequent contact with government agencies or services, but are not in the 'at-risk' category, such as families with children with disabilities.

Disjointed service delivery is a poor use of resources

Lack of coordination within and between service providers is a poor use of resources. For example, a child with a physical disability as a result of an accident was under the care of three publicly funded physiotherapists: one from the health and disability sector to assess the child's requirements for mobility aids; one from the education sector to assess the child's requirements during school hours; and a third to assist with the child's rehabilitation from the injury. A coordinated effort, with one physiotherapist providing the assessments and rehabilitation, would surely have been a better use of financial and human resources.

Inefficiencies in resources also arise through poor communication. When services are developed under separate funding streams, communication between services is often poor and service planning and delivery are often inefficient. For example, some DHBs have separate funding and work streams for family violence and child abuse, each of which works independently.

4.2 What is needed for effective service integration?

Effective integrated service delivery involves a shift of focus away from independent delivery by separate providers. Integrated delivery can occur in a variety of ways along a continuum from coordination across providers to a complete fusion of services.

The PHAC believes the goal of integrated service delivery should be a comprehensive focus on the whole child and, in most cases, the whole family/whānau. This approach requires a change of orientation so services are delivered in a way that empowers children and families to make decisions. For example, through the integrated delivery of health services, a family's housing problems would also be identified and addressed. Another example is the potential to address the full developmental milestones of a child with disabilities when they enter school, rather than simply focusing on the child's learning development milestones.

Integration is not a magic bullet, but it does reduce the potential for duplicated effort and unresolved differences in approaches between agencies. Integration also provides opportunities for agencies and families to address together the full range of influences involved in any particular social problem and avoid further unintended negative consequences.[86] Overseas jurisdictions have realised the importance of the effective integration of services and set up a variety of initiatives to achieve this (see Table 4).

Table 4: International examples of integrated service delivery

Jurisdiction	Integrated action
United Kingdom	*Sure Start Children's Centres* are located in each of the 20 percent most deprived neighbourhoods. Centres combine nursery education, family support, employment advice, and childcare and health services on one site. *Children's Trusts* bring together local authority education and social services and some children's health services. *Communities that Care* is a community-based early intervention programme to tackle future social problems before they arise.
Victoria, Australia	*Children's Centres* are integrated centres that provide preschool programmes and childcare along with a variety of other services such as maternal and child health, early childhood intervention, counselling, and family and parenting services. The Department of Human Services provides grants to local governments or partnerships to set up the centres. *Best Start* is a cross-agency project to improve the health, development, learning and wellbeing of all Victorian children from their time in the womb through to their transition to school. *Communities that Care* is a community-based early intervention programme to tackle future social problems before they arise.
Manitoba, Canada	*Access Centres* provide a variety of health and social services for children and families. *Children's Special Services Offices of Family Services and Housing* provide support for families with children with disabilities, including service coordination, respite, early childhood intervention, behavioural assessments, and mobility equipment.

Integrated service delivery is not new in New Zealand. It reflects Māori views of health and wellbeing more accurately than do services in isolated silos. Many Māori providers take this approach and the Whānau Ora initiative will provide a further opportunity to integrate services for whānau. Pacific providers and community organisations also provide a variety of services to children and families, and several government initiatives, including Early Years Service Hubs and Strengthening Families, aim to coordinate services.[87]

The Government is displaying leadership in developing services that are more coherent for families/whānau. The Whānau Ora initiative is one example, which will provide a model for delivering whānau-centred services in a way that enables Māori leadership and control. Integrated Family Health Centres are another current example. The PHAC suggests that when the Government develops the contracts for these new initiatives, priority is given to children and to ensuring services will be accessible and affordable for those children who will most benefit from them.

The PHAC also suggests that integrated approaches should become a matter of course rather than the exception for services for children. To be successful, service integration needs clear leadership, roles and responsibilities; effective governance arrangements; transparent lines of accountability; and sufficient support and resources.[88] Leadership and governance arrangements were discussed in sections 2 and 3. The components of the necessary support, resources and accountability are:

- a lead agency
- a flexible funding and contracting model that focuses on results

- workforce development
- effective information sharing.

In addition, all integrated approaches should design services to be responsive to local needs and family and cultural contexts. The Whānau Ora Taskforce has emphasised the importance of services being attuned to cultural norms, whānau traditions and whānau heritage.[89]

Lead agency

To reduce the complexity of services for children, a lead agency is often needed to coordinate delivery, funding and/or planning. In some instances, this may be a new body with a specific coordinating role. The UK developed Children's Trusts to integrate key services for children and young people, including education and social services and some health and other services. In Victoria, Australia, a Children's Services Coordination Board coordinates the efforts of different programmes and deals with cross-portfolio issues. In New Zealand, the Whānau Ora Taskforce has recommended a Whānau Ora Trust to manage integrated service delivery for whānau and the creation of Whānau Ora services to implement integrated care.

In other instances, existing providers may play a lead agency role. They could take a management role on cases and be responsible for ensuring a coherent package of services. This requirement was identified by parents of children with autism spectrum disorder. These parents noted that having a case manager would have made it easier for them to know which services to access, monitor progress and avoid having to repeat case histories.[90] In many situations, primary health services may also take a lead agency role.

Flexible funding and contracting model that focuses on results

An integrated approach needs to be underpinned by a funding and contracting model that allows more flexibility to follow the full needs of children and their families/whānau. One way for this to occur is for contracts to integrate service provision across health, social and education services. Contracts also need to be outcomes focused and long term. The PHAC understands the Government has begun implementing High Trust Contracts and whole-of-government contracts, which focus on results rather than just service compliance and reporting. These contracts should simplify contracting processes and allow the necessary flexibility for integrated delivery. They are consistent with the Whānau Ora Taskforce's recommendation for a 'relational' contracting approach that reduces fragmentation and transactional costs.[91] The PHAC suggests this approach be adopted for other contracting arrangements, particularly with Māori and Pacific providers and other community providers of services for children.

In some instances, the pooling of budgets may be an effective way to break down contract silos. However, such budget pooling requires clear governance arrangements and a robust accountability framework.

Workforce development

The PHAC believes capacity and capability should be built across the early childhood workforce (including health, education and social development) to deliver integrated services. The health and social sector workforce needs to be adequately trained to work with other agencies to focus on the whole child and their extended family rather than on separate problems. For example, health providers should assess whether a child is at risk of family violence even if they are seeing the child for an 'unrelated' issue.

To adopt this integrated approach, providers need core knowledge about children's needs. Providers should be trained to identify and manage common health and behavioural issues, as well as have communication skills and be culturally competent.[92] Trust must be developed between providers through informal relationships and clinical networks.

The PHAC recognises the workforce shortages in areas of child health and development (for example, children's mental health service workers and care and protection social workers). Action is needed to address workforce recruitment, training and retention to ensure providers have the capacity to adopt a more integrated approach.

Improved information sharing

Well Child/Tamariki Ora providers have consistently highlighted poor information systems as a barrier to integrated service delivery. They have pushed for district and national registers to improve information sharing. Parents of children with chronic conditions, disabilities or high needs have also expressed frustration at having to repeat case histories each time they see a different provider.[93] Poor information systems, together with concerns over privacy and confidentiality, mean that within and across sectors, the information collected has limited application beyond the individual child and provider.[94]

Information systems should support providers to share information appropriately and deliver care in an integrated way. This includes providers having a mandate, guidance and data collection systems to facilitate appropriate information sharing and an agreed response to problems. Potential privacy issues must also be thought through.

A common assessment framework and care plan across services is being adopted in the UK to improve information sharing. Through this framework and plan, providers are better able to assess a child's and family's overall needs early on following the onset of difficulties, and providers have an agreed process for working with other agencies in meeting those needs.[95] New Zealand could adopt a common assessment framework.

4.3 What is the health and disability sector's role in effective service integration?

The interconnected nature of child health and wellbeing means the health and disability sector should be integrated in its service delivery. Studies of coordinated and integrated care in chronic disease management show evidence of the effectiveness of service integration in primary care. Evidence suggests the principles of integration also apply to child health.[96]

The PHAC has identified several ways the health and disability sector can provide integrated service delivery to best meet the needs of children and their families/whānau. For effective integration, the health and disability sector needs to:

- take a lead coordinating role in service delivery
- strengthen links between health and disability services
- strengthen links with other sectors
- prioritise implementation of the Child Health Information Strategy.

Take a lead coordinating role in service delivery

Section 3 highlighted the important role of the health and disability sector in early identification and management of health and social problems, particularly because it is the sector that will come into contact with most children before they turn six. This position creates an opportunity for the sector to take a coordinating role in service delivery and places responsibility on the sector to ensure link-ups do occur. A nurse, general practitioner or social worker in a practice could be a single point of reference to manage complex health and social issues.

The PHAC emphasises that the health sector should manage and refer health issues in a proactive way, taking a broad approach to health and managing problems (rather than referring on) when possible. For example, health sector professionals should view family violence as a health problem as much as a social problem and respond to it as they would respond to a vision or hearing problem. The newly developed Well Child needs assessment tool is designed to improve the identification of a broad range of needs and make more effective links to support services. The PHAC supports this tool, but emphasises that it should be compatible with other assessment tools to improve information sharing.

Strengthen links between health and disability services

The health and disability sector can improve its responsiveness to child health by strengthening coordination within the sector. The most important coordination is among maternity and child health services. During the early years, a series of health providers will see both mothers and children, including midwives, general practitioners and Well Child/Tamariki Ora services. Points of transition between these services are important in order to maintain continuity of care and not lose track of the child. They are also important because at some of these transition points (for example in pregnancy, around the time of birth, and when the child starts school), parents tend to be particularly receptive to information.[97]

For seamless transitions to occur, effective systems for information flow between services are needed, including a standardised assessment tool for providers and linked records. Simplified funding and contracting models that reflect population need and have clear accountability based on outcomes are essential. These outcomes should prioritise improving access for vulnerable groups and reducing inequalities in health.

Effective transition of care is also important between primary, secondary and tertiary paediatric services. Often the continuum of care between these services is disjointed. As a child's needs heighten or lessen (for example, a child with a chronic disease experiencing a flare up or remission), their level of care is not always managed at the appropriate level. In some situations, care is at the tertiary level when it could be managed at the secondary or primary level (or vice versa). This leads to inefficiencies and poor quality service delivery.[98] The PHAC emphasises the need to deliver the right care at the right time for each child and supports the development of clinical networks as a way to strengthen the continuum of care (discussed in section 2).

Finally, better integration of care could occur between adult and child health services. This integration is particularly important for adult services that are seeing parents with high needs. For example, health providers in alcohol and other drug or mental health services can be responsive to child development needs by taking account of and responding appropriately when adult service users have dependent children.

Strengthen links with other sectors

The health and disability sector can also create conditions that are conducive to an integrated approach to service delivery with other sectors. The PHAC has found in discussions with community providers that the complexity of contracting arrangements can make integrated service provision a nightmare for those providing a variety of health, education and social services. The Ministry of Health could enable integrated delivery to be both feasible and efficient by simplifying and streamlining contracting arrangements and establishing integrated information systems. (This issue was discussed in the National Health Committee's 2010 report on rural health.[99])

The health and disability sector could also be proactive in working with other sectors to improve access to health services. An example of this is part of the Violence Intervention Programme, in which DHBs have reduced the number of 'did not attends' (individuals not showing up to appointments) by children in care and protection. Many of these children move around frequently, so do not receive appointment notices. Some DHBs have responded by sending appointment reminders to the child's social workers, as well as the child's place of last residence.

Finally, the health and disability sector should work proactively in settings where young children spend time to identify and respond to health issues. These settings include early childhood centres and community facilities. Opportunities include vision and hearing technicians visiting centres to identify vision and hearing problems, or health promoters working with early childhood centres to ensure centres encourage healthy eating, mental wellbeing and hygiene.

Prioritise implementation of the Child Health Information Strategy

The Ministry of Health's Child Health Information Strategy planned to provide national direction for the collection and sharing of child health data.[100] Progress on the strategy's implementation has been slow, but is ongoing. Once the strategy is fully implemented, New Zealand will have a universal child health record that integrates maternity and Well Child/Tamariki Ora data and data from other services with which the child interacts. The universal health record will improve services for individual children through better information sharing and increase the quality of, and access to, data for population health monitoring. The PHAC urges full implementation of this strategy and the integration of child health information with primary care information systems.

The data system established for the B4 School Checks could be expanded to accommodate other data. This system would provide a sound framework within which to integrate various data sets to create a national register that providers could share. The system would also provide information to enable services to focus on vulnerable children and families.

4.4 Recommendations

The PHAC recommends to the Minister of Health that the Government:

15 prioritises the concept of integrated service delivery in the design of services for children

16 expands the development of funding and contracting models that support whānau ora and other integrated approaches to service delivery in early childhood

17 supports the early childhood workforce to build its capacity and capability to deliver child-centred and integrated services.

The PHAC recommends that the Minister of Health:

18 instructs the Ministry of Health to ensure a seamless transition from maternity services to health care services for infants and young children

19 speeds up the implementation of the Child Health Information Strategy.

5 Monitor Child Health and Wellbeing Using an Agreed Set of Indicators

Information is important for many reasons. As identified in section 4, client information that can be shared between providers helps to improve the quality of care and delivery of services for children. Information is also important on a population level, to monitor progress with child health and wellbeing. Monitoring child health outcomes with a set of high-level indicators enables planners and policy makers to identify unacceptably high rates of poor health, respond with appropriate strategies, and monitor changes over time. The response to high rates of sudden unexplained death in infancy in the 1990s is a good example of this process.

5.1 Why focus on monitoring?

To monitor progress on the health and wellbeing of New Zealand children, we need robust and regularly collected information about the health of these children. Currently, a large amount of data on child health and wellbeing is collected. However, the challenges with using this data for monitoring are:

- data is not well coordinated
- there are no clear ways of sharing data between agencies
- there is a lack of a strategic approach to monitoring.

These issues lead to duplicated data, unused data and unnecessary expenditure.

Data is not well coordinated

New Zealand agencies and organisations collect a lot of data about the health and wellbeing of children, using a variety of different methods. Data is regularly collected in health, social development and education agencies. However, there has not often been agreement across – and even within – sectors about what data should be collected. Often, data goes unused or cannot be considered alongside other data, because of incompatibility between information systems or incompatibility between data. In many instances, there is variation in the age-group break downs that are used when gathering data on children. Furthermore, some of New Zealand's high-level indicators of child health and wellbeing are incompatible with annual reporting requirements from the United Nations Commission on the Rights of the Child, which makes it difficult to track New Zealand's progress against international standards.

No clear ways of sharing data between agencies

Valuable data is not readily accessible across a range of relevant agencies for planning, research and education.[101] This inaccessibility is the result of a lack of agreed mandate or processes for sharing information. Within the health sector, an agreed process for information collection and sharing has begun with the development of DHB child and youth health monitoring reports (also known as health needs assessments). The New Zealand Child and Youth Epidemiology Service (NZCYES) produces these reports. However, this process is still fragile and lacking across sectors.

Poor sharing of data is also a result of privacy concerns, where many data sets cannot be jointly analysed across agencies. (This is not only a problem at a provider level but also an agency level.) For example, police data cannot easily be matched with hospitalisations from intentional injury. In another example, damp and cold housing conditions are a major contributor to respiratory disease, but housing data cannot be linked to children's respiratory admissions.

Lack of a strategic approach to monitoring

Several organisations have developed indicators to track child health and wellbeing (see Table 5), but a coordinated and sustained cross-agency approach to monitoring is missing. Agencies use different indicators, as well as different conceptual frameworks to develop indicators. In addition, many monitoring reports are either one-off reports[102] or track a single issue, such as foetal and infant death or oral health.[103] In other instances, indicators have been selected on the basis of data availability rather than on their importance to child health or health inequalities.[104]

This lack of coordination has led to duplicated effort and data, reducing its usefulness for service and policy development.[105] Without comprehensive and repeated reports, trends cannot be accurately assessed, and the full picture of child health remains unclear. Repeat studies provide time series data that is important for statistical forecasting and policy analysis.

Table 5: Selected publications that have tracked child health over short periods

Publication	Description
Children and Young People: Indicators of wellbeing in New Zealand[1]	The Ministry of Social Development has developed a set of indicators for the wellbeing of children and young people in New Zealand. The indicators are based on the domains in the Social Report. Monitoring reports based on these indicators were produced in 2004 and 2008, and the next is due in 2012. The report is one of the few in New Zealand that is designed to be repeated regularly (every four years) and covers a variety of outcome domains. The 35 indicators cover health outcome indicators such as infant mortality, childhood obesity and hearing test failure; indicators of risk factors, such as bullying at school and smoking in the home; and indicators of socioenvironmental influences on health, such as education and economic security. However, only two of the seven indicators the Ministry of Health uses to monitor the performance of district health boards are in the set of indicators.
An Indication of New Zealanders' Health[2]	This Ministry of Health publication was produced in 2002, 2004, 2005 and 2007, but it has been discontinued. This publication was based on a set of national indicators, including some relating to child health (infant mortality, low birth weight, breastfeeding, unintentional injuries, hearing failure at school entry, asthma, road traffic injury, and mortality).
Our Children's Health[3]	In 1998, the Ministry of Health produced a report on children's health and disability status using a comprehensive set of indicators. Since then there have been no comprehensive reports from the Ministry of Health on child health, although some, such as the Health Survey,[6] have included child health indicators.

Publication	Description
Monitoring the Health of New Zealand Children and Young People[4]	In 2006, the Paediatric Society and NZCYES undertook the New Zealand Child and Youth Health Indicator Project. The project developed a monitoring framework and comprehensive set of child and youth health indicators. Presentation of each indicator provides a formal definition, a discussion of its public health relevance, and an analysis of its distribution by age, ethnicity, and New Zealand Deprivation Index decile. The NZCYES continues to provide monitoring reports for most DHBs, and in 2010 it will provide a national report of child and youth health indicators.
Children's Social Health Monitor[5]	A new development is the Children's Social Health Monitor website, which the NZCYES maintains. The website covers indicators that have social gradients in the areas of economic status and health and wellbeing. The aim of the initiative is to monitor the effects of the recession on child health inequalities.

Notes:

1 Ministry of Social Development. 2004, 2008. *Children and Young People: Indicators of wellbeing in New Zealand.* Wellington: Ministry of Social Development.

2 Ministry of Health. 2002, 2004, 2005, 2007. *An Indication of New Zealanders' Health.* Wellington: Ministry of Health.

3 Ministry of Health. 1998. *Our Children's Health: Key findings on the health of New Zealand children*. Wellington: Ministry of Health.

4 E Craig, C Jackson, D Han, NZCYES Steering Committee. 2007. *Monitoring the Health of New Zealand Children and Young People: Indicator handbook*. Auckland: Paediatric Society of New Zealand and the New Zealand Child and Youth Epidemiology Service.

5 Children's Social Health Monitor. 2010. *Introduction to the Children's Social Health Monitor.* http://www.nzchildren.co.nz (accessed 11 February 2010).

5.2 What is needed to improve monitoring of child health and wellbeing?

The PHAC proposes that a national set of indicators is developed and agreed across government for the group of children aged up to six years. These indicators would be based on the outcomes and strategic direction outlined in the whole-of-government approach described in section 3. The indicators would allow the Government to identify and report on trends and emerging issues in New Zealand. The indicators would also inform policy and facilitate international comparisons.

The World Health Organization emphasises that action on issues such as child health is more effective if information systems are in place and mechanisms ensure information can be used for policy, systems and programmes.[106] Several countries have developed indicator sets for child wellbeing. The Child Health Indicators of Life and Development (CHILD) Project in Europe developed indicators of children aged from 1 week to 15 years. Ireland developed a National Set of Child Wellbeing Indicators as part of its National Children's Strategy and in consultation with policy makers, service providers, academics, parents and children. Australia has produced a series of reports, *A Picture of Australia's Children*, which resulted from the National Child Health Information Framework.[107]

The components of improved information and monitoring for child health and wellbeing are:

- effective data collection and sharing
- a clear conceptual framework for monitoring
- robust indicator selection
- ongoing reporting and informed policy development.

Effective data collection and sharing

To develop high-level indicators, effective data collection and sharing across agencies is necessary. Three aspects that need to be addressed to improve data collection and sharing are:

- standards to govern information systems need to be developed
- legislative barriers, such as privacy restrictions that prevent the sharing of data, need to be reduced (although, privacy is a complex topic that needs to be carefully worked through)
- technical compatibility between systems across and within sectors needs to improve.

An overseas example of effective data collection is Manitoba's Centre for Health Policy, which receives data from the Ministries of Health, Justice and Education that the centre links and tracks.[108] The centre has followed the trajectory of children born to teenage parents who are on social assistance, and found these children are more likely to truant than other teenagers are. This information has sparked conversations between the Ministries of Justice and Health about the best strategies to support teenage parents.

Clear conceptual framework for monitoring

For monitoring to be effective, it must be systematic, organised and sustainable.

Systematic – data collected accurately and regularly and analysed in a systematic way.

Organised – monitoring organised around an agreed set of well-defined indicators.

Sustainable – information provided over time so progress can be checked.

To make indicator selection both systematic and organised, agencies need to agree on the conceptual framework that underpins the selection of indicators.

No two countries have developed the same frameworks for monitoring but many share common dimensions. All frameworks recognise to some extent that health results from multiple, interconnected influences – whānau and population health outcomes are the result of interconnecting biological factors, risk and protective factors, and environmental factors, including the policy environment.

In New Zealand, two main frameworks have been developed. The Paediatric Society and NZCYES consulted a variety of stakeholders across the health sector to develop child and youth health indicators (described in Table 5). They developed a framework based on the four domains of:

- individual and whānau health and wellbeing
- risk and protective factors
- socioeconomic and cultural determinants of health
- historical, economic and policy context.[109]

The framework includes over 50 indicators that cover the life course. The framework is designed to enable planners and policy makers to look beyond individual health indicators and identify the indicators' various contributors. When the NZCYES develops monitoring reports, it selects indicators from every domain of the framework. With a health indicator such as bronchiolitis,[b] the monitoring framework enables planners to identify risk factors (for example, household crowding and exposure to second-hand smoke), socioeconomic and ethnic differences in the prevalence of the risk factors, and social and economic policies that have contributed to these differences.

At the same time, the Ministry of Social Development has developed a conceptual framework and proposed indicators of wellbeing. These indicators are based on the five overarching child health and wellbeing outcomes described in the Early Years Outcomes Framework.[110] The five indicators are safety, knowledge and skills, attachment and belonging, participation, and physical health and mental wellbeing. These outcomes form the rationale for having a spectrum of parent, community and specialised support services.

The Ministry of Social Development's indicator selection project and the Paediatric Society and NZCYES's series of child and youth health indicators can form the foundation of a conceptual framework, provided all relevant agencies are involved in this process. The PHAC emphasises that the development of a conceptual framework should involve *all* relevant agencies and be framed in the strategic direction set out in a whole-of-government approach. This would ensure the framework is organised, systematic and sustainable and can become a consistent tool to guide policy development.

Robust indicator selection

An agreed conceptual framework provides the basis for the next stage – the selection of a robust and consistent set of indicators. These indicators should be based on consistent criteria. They should prioritise the health outcomes, risk factors and determinants that have the greatest impact on the most vulnerable groups of children and for which effective interventions exist. The Ministry of Social Development has developed robust criteria for selecting indicators (Table 6).

b Bronchiolitis is a viral infection of the airways in the chest that occurs in babies – usually those aged between three and six months old.

Table 6: Ministry of Social Development criteria for selecting indicators for children and young people

Criterion	Description
Relevant	New Zealand society broadly agrees that the outcome being measured is a desired outcome for children and young people. There is well-established evidence in the research literature that the indicator is related to child and youth wellbeing. The indicator is based on children and young people rather than families.
Nationally significant	The indicator reflects progress at a national level and is not confined to particular areas or specific groups of children or young people.
Able to be disaggregated	The indicator can be broken down to show variation by age, sex, ethnic group, family status, region and socioeconomic status wherever feasible.
Valid	The indicator accurately represents the phenomenon in question and is sensitive to changes over time.
Statistically sound	The indicator is derived from high-quality data and is statistically and methodologically sound.
Replicable	The indicator can be defined and measured consistently over time to enable accurate monitoring of trends.
Interpretable	The indicator is readily understandable by a broad audience. It has a clear, normative interpretation so that change clearly represents an improvement or deterioration in what is being measured.
Internationally comparable	Wherever feasible, the measure is consistent with international indicators to enable comparison.

The PHAC believes these criteria could be used for cross-agency indicator selection. However, also important when developing indicators relevant to a public health perspective are the following criteria (from the *Manual for Public Health Surveillance in New Zealand*):[111]

- frequency of the health event
- severity of the health event
- disparities or inequalities associated with the health event
- costs associated with the health event
- preventability
- potential clinical course in the absence of an intervention
- public interest.

Ongoing reporting and informed policy development

Monitoring child health outcomes is most useful if it can actively inform policy and programme development. To do this, there should be vehicles for reporting progress on agreed indicators. Regular reporting on the agreed set of indicators is needed at both national and regional levels and should feed into the whole-of-government approach. The timing of reporting should align with policy development and planning cycles to effectively prioritise services and inform action.

Regular tracking against internationally comparable indicators should also occur through the United Nations Convention on the Rights of the Child reports or OECD reports.

5.3 What is the health and disability sector's role in monitoring?

The health and disability sector faces challenges with information sharing between providers, but it has made progress with population-level monitoring. NZCYES and DHB child and youth health monitoring reports have been running for five years, but these are comprehensive scans and are not a consistent part of the planning cycle for child health services. National monitoring of child health outcomes is also beginning to occur. However, this monitoring uses a comprehensive set of indicators, rather than a selective, ongoing set of indicators developed to inform high-level policies. More can be done with the indicators to monitor the effectiveness of service delivery, target high-risk groups and inform policy development. The health and disability sector can improve information and monitoring by:

- being a partner in cross-agency indicator selection
- using a subset of indicators for regional and local health sector planning.

Being a partner in cross-agency indicator selection

Because of the important role the health and disability sector plays in child health and wellbeing, the Ministry of Health needs to be a leading participant in the development of the agreed set of child health and wellbeing indicators. The PHAC believes that this indicator set should include a specific subset of health indicators for which the Ministry of Health and DHBs are responsible for monitoring. The Ministry of Health should ensure the health indicators selected reflect child health priorities and are subsequently used in policy development.

The involvement of statisticians and policy advisors from each sector in indicator development will help to ensure the indicators are robust and useful for policy across government. These advisors include epidemiologists and others in the health sector with technical and clinical expertise. Too often, indicators are not particularly useful as the complexity of outcomes cannot be captured by a simple figure. For example, low birth weight data may be suggested as an indicator that reflects poor health. However, it is a composite of premature babies' birth weights and the birth weights of full-term babies who are small for their gestational age.[112] Epidemiological and clinical expertise would help identify what health data is most helpful.

Using a subset of health indicators for regional and local health sector planning

The agreed subset of health indicators, which connects to the high-level indicators agreed across government, should underpin planning and service delivery in each region. DHBs and health providers in each region should be responsible for responding to the child health issues identified in this agreed subset by assessing their local context and identifying how best to improve outcomes. DHBs should use information on the indicator's contributing factors, risk factor profiles of indicators (for example, age, ethnicity or deprivation), subcomponents of indicators (for example, disaggregating infant mortality into sudden unexplained death in infancy, perinatal mortality, congenital anomalies or respiratory infections), and evidence of effective interventions.[113]

The PHAC emphasises that this subset of health indicators should not subsume the DHB health needs assessments that the NZCYES conducts. These assessments provide in-depth scans of the full range of child and youth health issues in each region in order to track patterns, identify emerging trends and inform planning. This regional scanning must continue in addition to the high-level indicators, as it will identify smaller health problems that the agreed set of indicators will not.

5.4 Recommendations

The PHAC recommends to the Minister of Health that the Government:

20 develops a set of universally agreed high-level indicators for child health and wellbeing that includes a subset of health indicators.

The PHAC recommends to the Minister of Health that the health and disability sector:

21 monitors and reports against the agreed health indicator subset of cross-agency early childhood indicators.

Appendix 1: Key Reports over the Past Decade

Author	Title	Date	Description of report
Minister of Health	*Child Health Strategy*[1]	1998	The Child Health Strategy was developed by the Child Health Advisory Committee. The strategy represented the collective wisdom of the child health and disability sector about what was required to improve child health services and, ultimately, the health status of New Zealand children from 1998 until 2010. The strategy identified four priority populations: tamariki Māori, Pacific children, children with high health and disability support needs, and children from families with multiple social and economic disadvantage. The future directions highlighted were: • a greater focus on health promotion, prevention and early intervention • better co-ordination • a national child health information strategy • child health workforce development • child health research and evaluation • leadership in child health. The strategy called for an implementation plan to be developed, but this never occurred.
Ministry of Social Development	*Agenda for Children, Whole Child Approach*[2]	2002	The Agenda for Children was a government strategy to improve the lives of New Zealand's children. It had a vision, a set of principles to guide decision-making, a new way of developing child policies and services, and a programme of action for the Government. The agenda's plan of action covered: • a whole-child approach • children's participation • an end to child poverty • violence prevention in children's lives with a particular focus on reducing bullying • central government structures and processes to enhance policy and service effectiveness for children • local government and community planning for children • enhanced information, research and collaboration relating to children.

Author	Title	Date	Description of report
Office of the Minister for Social Development	*Reducing Inequalities: Next steps*[3]	2004	This document set out policies and programmes to reduce inequalities. It stated that changes in overall outcomes reflect a variety of influences, only one of which is government policy. Based on an analysis of the causes of disadvantage and 'what works' to address that disadvantage, the following priorities were proposed for the future. Many of these priorities focus on children and families: • ensure a robust programme of early intervention for at-risk children and families • address the income needs of children in low-income families through implementation of the Working for Families programme • focus on the health needs of families/whānau across the life course by improving access to health services, particularly primary care • increase participation in early childhood education by groups with low participation • improve participation and achievement among young people at risk of leaving school with few qualifications • improve access to education and employment for economically inactive young people • address the barriers to employment and increase employment incentives for disadvantaged groups • improve models for ensuring high-quality and responsive funding and delivery of services for at-risk groups • support community-led solutions • tackle risk factors of poor health and improve access to services for those at risk of poor health outcomes across the life course. • improve quality of evaluative activity within the social sector and fill gaps in information to improve understanding of evidence.
Office of the Children's Commissioner	*More Than Just An Apple a Day*[4]	2006	This report was based on a review by Auckland University of Technology of child and youth health strategic documents published from 2000 to 2005. The review signalled significant areas of concern in New Zealand for child health and health care access. The *More Than Just an Apple a Day* report discussed action needed to enable every New Zealand child to enjoy their right to good health and health care. It stressed that this action requires commitment from the highest level, with an appropriate allocation of Vote Health, commitment of resources and personnel, recruitment and retention of a skilled workforce, and recognition of the real health challenges facing our children and youth.
Office of the Children's Commissioner	*Report on the Implementation of the United Nations Convention on the Rights of the Child in New Zealand*[5]	2008	The Children's Commissioner provided this report to the United Nations Convention on the Rights of the Child. The report noted that although there have been some improvements (eg, access to primary health care), the Government needs to invest more resources than it currently invests in the health and wellbeing of its youngest citizens. The report raised concerns about the lack of specialist mental health services for children and young people.

Author	Title	Date	Description of report
Organisation for Economic Co-operation and Development	*Doing Better for Children*[6]	2009	The New Zealand country highlight for this report identified that New Zealand needs to strengthen its focus on child poverty and child health in the early years. It noted that New Zealand had good average educational performance but high gaps in education between the top and bottom performers. It also highlighted that government spending on children is considerably less than the OECD average, in particular for spending on young children.
Child Poverty Action Group	*Every Child Counts Policy Overview*[7]	2009	This report outlined recommendations generated at the first Summit on Children and the Recession held on 16 September 2009 by the Every Child Counts group. The summit presented a plan of action to address the wellbeing of children during the recession. The summit's main recommendations were: • develop one strategic plan to promote innovation and productivity in the economy and equitable social redistribution that invests in children • set targets to eradicate child poverty • invest in the development of families as units of learning together • implement child impact assessments to avoid unintended consequences from policies • prioritise the period from conception to 24 months of age • increase core benefit levels to reduce negative impacts on children and the economy. Specific recommendations for health included: • build on and broaden the Well Child Health Review, with the Prime Minister hosting a discussion on health in the conception to 24 months period • ensure antenatal and postnatal education focuses on child development • increase support for parenting education • reduce the cost of after-hours health care • invest in nutrition through food in schools • invest in social marketing that promotes a vision of the kind of nation we want to create and the place of children in that nation • deliver universal, integrated services to families with children.

Notes

1 Minister of Health. 1998. *The Child Health Strategy*. Wellington: Ministry of Health.

2 Ministry of Social Development. 2002. *New Zealand's Agenda for Children: Mahere rautaki m te hunga tamariki: Making life better for children*. Wellington: Ministry of Social Development.

3 Minister for Social Development. 2004. Reducing inequalities: next steps. Paper to the Cabinet Social Development Committee.

4 OCC. 2006. *More than Just an Apple a Day: Children's rights to good health*. Wellington: Office of the Children's Commissioner.

5 OCC. 2008. *Report on the Implementation of the United Nations Convention on the Rights of the Child in New Zealand*. Wellington: Office of the Children's Commissioner.

6 OECD. 2009. *Doing Better for Children: New Zealand country highlights*. Paris: Organisation for Economic Co-operation and Development.

7 Child Poverty Action Group. 2009. *Every Child Counts Policy Overview*. Auckland: Child Poverty Action Group.

Appendix 2: Overview of Evidence for a Cross-Agency Policy Set

Selected contributor	Rationale for contributor	Evidence of benefit of intervention	Selected New Zealand policies and programmes related to contributor
Outcome 1: Physical and mental health			
Access to affordable, high-quality prenatal and maternal care	Healthy foetal development is crucial for children's later physical and cognitive development.	Access to prenatal care can prevent threats to healthy development, for example adequate prenatal nutrition.[1] Early and intensive support for at-risk families expecting a child, including home visits by trained nurses, provides benefits for both child and parents.[1]	Maternity services Specialist health and disability services
Access to affordable, high-quality primary health care for children	There are lifelong impacts of poor physical health, such as inadequate nutrition and poor oral health. Compared with other children, children with social and emotional problems are less likely to succeed in school and more likely to have conduct problems, anti-social behaviours, delinquency and serious mental health problems.[2]	Screening of physical, social, emotional and behavioural problems enables early identification, treatment and provision of supports.[2] Access to medical care can improve outcomes for young children with developmental delays or impairments.[1]	Well Child/Tamariki Ora Free primary health care for children under six Child & Adolescent Oral Health Service
Access to specialist health and disability services	Impairments often become worse when not identified and managed early.[4]	Early identification and management of health conditions and impairments can improve health outcomes.[3]	Paediatric speciality services Disability support services After hours and emergency care
Parental (especially maternal) mental wellbeing	Parents' wellbeing affects children's development. Children of mothers with postpartum depression show cognitive delays, behavioural problems, and attachment problems.	Screening and parenting supports (including home visiting) for parental depression can reduce its negative impact on young children.[1, 2]	Maternity services Well Child/Tamariki Ora Mental health services

Selected contributor	Rationale for contributor	Evidence of benefit of intervention	Selected New Zealand policies and programmes related to contributor
Adequate nutrition and food security	There are high rates of deficiencies in some nutrients among New Zealand young children.[5] Children in families with significant financial hardship are less likely to be able to eat healthy food.[6] Obesity is greater and oral health status is poorer in children from food insecure families.[7]	Proper nutrition improves child development, including cognitive function.[8] Nutrition support programmes, such as those for pregnant women and infants, and school breakfast programmes, have been shown to reduce rates of low birthweight, iron deficiency, and school underachievement.[9]	Primary care services Well Child/Tamariki Ora Health promotion services Community initiatives (eg, vegetable markets, community gardens) School breakfast programmes
Smokefree environment	Exposure to second-hand smoke in children is linked to middle ear infections, lower respiratory illness, onset of asthma, reduced lung growth and sudden unexplained death in infancy.[10]	Smokefree legislation and some social marketing campaigns increase cessation rates, and reduce exposure to second-hand smoke. Increased quit attempts are linked with provision of cessation services and 'early brief intervention' by health professionals.[11]	Primary care services Well Child/Tamariki Ora Health promotion services Early brief intervention and cessation services
Healthy home and neighbourhood environment	Cold, damp housing conditions are linked with respiratory illness and asthma. Design and form of the outdoor environment affects opportunities for physical activity.	*See Outcome 3*	
Outcome 2: Positive network of family, friends, neighbours and the community			
Effective parenting skills	Some parents do not have positive parenting skills, often because they were not well parented themselves.	Evidence-based parenting programmes that are made widely available reduce child maltreatment, child out-of-home placements and child maltreatment injuries.[12] They also improve behaviour problems and prevent mental health problems and youth offending. The impact of income on children's development can be mediated by up to 50% through interventions that target parenting.[2]	Strategies with Kids – Information for Parents Whānau Toko I Te Ora Parents as first teachers Home Interaction Programme for Parent and Youngsters (HIPPY) Parenting Education Programme Parenting programmes for emerging child behaviour problems (eg, Triple P, Incredible Years) Early Years Service Hubs Family Start/Early Start Strengthening Families

Selected contributor	Rationale for contributor	Evidence of benefit of intervention	Selected New Zealand policies and programmes related to contributor
Parental mental wellbeing	Parents' wellbeing affects children's attachment, belonging and development.	*See Outcome 1*	
Families free from violence and substance abuse	Extreme stress caused by abuse or neglect affects brain chemistry, leading to physical, behavioural and learning difficulties.	For young children experiencing toxic stress from abuse or neglect, intensive services that match a child's specific problem can prevent disruption of brain architecture and promote better developmental outcomes.[1]	Early Years Service Hubs Family Start/Early Start Strengthening Families Child and Adolescent mental health services (CAMHS) Social workers in schools Conduct disorder/severe antisocial behaviour services Special Education (GSE) early intervention services High and complex needs service Violence Intervention Programme Alcohol and other drug services Mental health services
Adequate income and employment	Low maternal employment in the first year of a child's life is linked with deleterious health and cognitive effects.[13]	*See Outcome 3*	
Outcome 3: A secure physical and economic environment			
Healthy home environment	New Zealand's public and privately owned older housing stock is poorly insulated and damp. These conditions increase the risk of hospitalisation from respiratory conditions.	Insulating houses reduces doctor visits and hospital admissions for respiratory problems.[14]	Warm Up New Zealand Other insulation schemes
Healthy neighbourhood environment	Children are less physically active than they used to be, in part because of poorly planned environments. Geographic areas without water fluoridation have populations with poorer oral health. Environmental problems such as lead exposure or water contamination can have serious or long-term health impacts.	Safe road crossings, play spaces etc promote physical activity and independence.[15] Fluoridation prevents caries particularly among high-deprivation communities.[16] Environmental interventions that reduce toxins in the environment protect foetuses and young children from exposure to substances known to damage their brain.[1]	Traffic and road design initiatives Public health services (Health promotion, health protection, communicable disease control) Local government initiatives (fluoridation, district planning)

Selected contributor	Rationale for contributor	Evidence of benefit of intervention	Selected New Zealand policies and programmes related to contributor
Adequate income and employment (including income support)	Children growing up in low-income households have poorer cognitive abilities, lower educational achievement, more behavioural problems and poorer health. They are exposed to high levels of stress. Cost is a barrier to primary healthcare access for children from families on low incomes. Food is often the first purchase to be cut back when there is a limited income. High housing costs prevent spending on other important items, or forces people into low-quality housing. Limited income prevents spending on other items such as bedding and participation in social activities.	Parental income is associated with almost every measure of child wellbeing. Income supplements (eg, tax credits, welfare reform, employment support or housing support) for families living under the poverty level can boost children's achievement.[1] Paid parental leave is associated with reduced death rates among infants and young children.[17]	Free primary health care for children under six Income support for families (eg Domestic Purposes Benefit, Working for Families, Accommodation Supplement) Minimum wage Paid parental leave Child breakfast initiatives Provision of social housing

Selected contributor	Rationale for contributor	Evidence of benefit of intervention	Selected New Zealand policies and programmes related to contributor
Outcome 4: Active learning			
Effective parenting skills	Some parents do not have sufficient information about parenting to be effective in encouraging their children's learning.	*See Outcome 2*	
High-quality early childhood education	Many children from low-income families are not involved in early childhood education in spite of increased government financial support for three- and four-year-olds to attend early childhood education. Childcare subsidies are not available from Work and Income unless parents are in employment, training or their child has a disability (ie, families on welfare benefits are excluded). Children under two are spending increasing time in early childhood education.	Participation in quality early childhood education (children aged three to five years) is known to enhance cognitive and social development. It also ensures readiness for school, an important predictor of health and wellbeing across a lifetime.[18] For children from low-income families, participation in high-quality, centre-based early education programmes enhances child cognitive and social development. For children in families with significant hardship, this exposure is best accompanied by support for parents.[1] Early childhood centres are effective settings in which to deliver a range of programmes and services (eg, parenting, health protection).	Early Childhood Education (including kindergarten, kōhanga reo, education and care centres, home-based services, playgroups and playcentre) 20 hours free early childhood care Childcare subsidy Special Education (GSE) early intervention services

Selected contributor	Rationale for contributor	Evidence of benefit of intervention	Selected New Zealand policies and programmes related to contributor
Outcome 5: Safety from accidental and intentional harm			
Families free from violence and abuse	New Zealand's children have higher rates of intentional injury than many other countries.	*See Outcome 2*	
High-quality child protection services	Child protection services are necessary to protect children from harmful home environments.	Child protection services are effective when combined with prevention initiatives to improve mental wellbeing, and community supports to reduce drug and alcohol abuse.[19]	Child, Youth and Family care and protection services High and complex needs interagency service Community family support programmes
Home environment with minimal hazards	Most injuries occur in the home.	Raising awareness among parents and caregivers of the risk of injuries in the home.[20]	Injury prevention campaigns Community safety programmes
Neighbourhood environment with minimal hazards	Road traffic injuries are a leading cause of hospitalisation for young children. The design of the environment is linked with differing rates of road traffic injuries.	Well-maintained playground equipment can prevent fall injuries in children.[20] Traffic calming measures, well-maintained pavement etc reduce pedestrian accidents.[21]	Local government initiatives Police community programmes Injury prevention campaigns Community safety programmes
Outcome 6: Inclusion and participation in society			
Strong and inclusive iwi and community networks	Connections to iwi, hapu and whānau for many Māori have changed over previous generations with increasing migration from traditional iwi regions and changes in family structure. There are increasing numbers of whānau who have family members with no whakapapa links to other whānau members.[22] Weak community networks can lead to anti-social behaviour among children.	The relationship between tamariki Māori and kaumātua/kuia is important for the development of tamariki.[23] A positive social environment provides social support to children.[24]	Community programmes (eg, community guardians, sports clubs, community programmes) Local government initiatives Rūnanga and iwi trusts Informal networks
Effective parenting skills	Parenting skills and parental involvement in the community can foster children's participation in society.	*See Outcome 2*	

Notes from Appendix 2

1 Center on the Developing Child. 2007. *A Science-Based Framework for Early Childhood Policy: Using evidence to improve outcomes in learning, behavior, and health for vulnerable children*. Cambridge: Center on the Developing Child at Harvard University.

2 J Cooper, R Masi, J Vick. 2009. *Social-Emotional Development in Early Childhood: What every policymaker should know*. New York: National Center for Children in Poverty, Columbia University.

3 Department for Children, Schools and Families. 2010. *Early Intervention: Securing good outcomes for all children and young people*. London: Department for Children, Schools and Families.

4 L Murray, P Cooper. 1996. The impact of postpartum depression on child development. *International Review of Psychiatry* 8(1): 55–63.

5 S Collins. 2005. Vitamins lacking in 1 of 10 toddlers. *New Zealand Herald*. 10 January.

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9 M Weitzman. Low income and its impact on psychosocial child development. Encyclopedia on Early Childhood Development. http://www.child-encyclopedia.com/documents/WeitzmanANGxp.pdf (accessed 1 March 2010).

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