

PRESIDENT'S INTRODUCTION

It is the right of every Australian child to have the best start in life. This includes being safe, having adequate opportunities for growth and development, and access to adequate health, child development and education services. Currently in Australia, not every child benefits from this right. The snapshot of the health of Aboriginal and Torres Strait Islander children in the AMA's 2008 Report Card, *Ending the Cycle of Vulnerability*, painted a disturbing picture of poor health and wellbeing, and limited life prospects. Since then, there have been some improvements. However, while many Aboriginal and Torres Strait Islander children are making a successful transition to healthy adult life, many are being raised in community and family environments that are marked by severe early childhood adversity.

The period from conception to the age of five is a time of both risk and opportunity, when a child's physical, social and child-rearing environments have a disproportionately greater influence on the child's developing biology and human capability than at any other time in life. Exposure to biological and social adversity in pregnancy and early life can have genetic and physiological effects that influence educational and social functioning in later life, as well as increasing the risk of chronic illness. Conversely, good nutrition, responsive care and psychosocial stimulation can have powerful protective benefits that optimise longer-term health and wellbeing. Strong culture and strong identity are also central to healthy early development.

These genetic and physiological outcomes in early life can also be transmitted from one generation to the next, so that children from unhealthy and problematic family circumstances are at risk in later life of reproducing those circumstances for their own children. And so the cycle continues.

The AMA believes that one of the most effective investments that Australia can make in Aboriginal and Torres Strait Islander health is to help parents break this cycle by supporting evidence-based measures to prevent and protect against adversity and chronic stressors in the early years of life.



THE HEALTHY EARLY YEARS – GETTING THE RIGHT START IN LIFE

A number of recommendations the AMA made in *Ending the Cycle of Vulnerability* were reflected in the commitments of the COAG *National Partnership Agreement on Indigenous Early Childhood Development* in 2009. While this is welcome, there is a long way to go. Successive reports since 2009 on the progress of the Overcoming Indigenous Disadvantage and Closing the Gap strategies reveal significant gaps in preventive child health care, the promotion of early childhood development, and the alleviation of key risks for adverse developmental outcomes, especially in remote communities. Much of the program focus has been on detection of problems and remediation, rather than on the implementation of proven effective prevention programs. The 2013 *Closing the Gap Prime Minister's Report* also stressed the urgent need to prevent the developmental disadvantages experienced by many Aboriginal and Torres Strait Islander children and young people through their formative years.

These gaps and shortfalls do not reflect a failure of the efforts so far. They highlight the fact that it is early days in the generational commitment to close the gap, and that it is crucial for the momentum to be sustained by renewing the COAG *National Partnership Agreements on Indigenous Health and on Indigenous Early Childhood Development* for a further five years.

In this Report Card, the AMA outlines the current research on the early life determinants of later life outcomes for Aboriginal and Torres Strait Islander children, and the available evidence for policies, programs and measures that work to protect them against adverse social and physical conditions in early life. The Report Card also makes recommendations about measures that need to be incorporated in renewed and reinvigorated COAG Partnership Agreements to Close the Gap, so that healthy early development in the first five years of life is given the priority it warrants.

The costs to individuals, families and society of Aboriginal and Torres Strait Islander children failing to reach their developmental potential continue to be substantial. Robust and properly targeted and sustained investment in healthy early childhood development is one of the keys to breaking the cycle of ill health and premature death among Aboriginal peoples and Torres Strait Islanders.

Dr Steve Hambleton

President, Australian Medical Association Chairperson, AMA Taskforce on Indigenous Health December 2013

Stew Handeleton

PART 1 PREGNANCY AND EARLY CHILDHOOD – CRITICAL YEARS FOR HEALTHY DEVELOPMENT

THE LONG TERM EFFECTS OF THE EARLY YEARS OF LIFE: WHAT THE CURRENT RESEARCH SHOWS

Early life experiences become hard-wired into the body, with life-long effects on health and wellbeing. There is a strong and growing body of evidence to demonstrate that the quality of a person's early childhood is critical to the health and wellbeing they experience throughout their life [Corsi, 2012]. Adults who have been exposed to chronic or traumatic stressors in their childhood have higher rates of premature death, depression, suicide, substance use, Type 2 Diabetes, cardiovascular disease and compromised immunity [Afifo, et.al 2008; Dong, et.al., 2008; Tamayo, 2010]. Chronic physiological stressors such as under-nutrition and recurrent infection in early life also affect the development and functioning of a child's nervous, endocrine and immune systems, and cognitive development [Tomalski & Johnson, 2010].

Social and environmental stressors in early childhood can have similar life-long impacts. Young children who experience chronic abuse, neglect, inadequate stimulation, exposure to family or community violence, extreme poverty, or even poor responsiveness from their primary caregiver, are at heightened risk of learning and developmental problems, later life mental illness, anxiety disorders, and atypical stress responses to adversities over their lifetime [Bradley, R G et.al, 2008; Gillespie CF, et al, 2009; Shonkoff, 2009; Szyf M, 2009; Swanson J M, et al, 2009].

Anxiety, stress and financial deprivation during pregnancy can contribute to reduced antenatal care, poor nutrition, increased risk of smoking and alcohol and other substance use, as well as adverse obstetric outcomes (Van den Bergh, 2005; Alder, 2005). These maternal stressors pose risks for the development of the child, such as impaired control of emotions and behaviour and inattention [Gotteling, 2007]. New research also shows that stressors experienced during pregnancy, such as through under-nutrition, have the potential to cause enduring changes in the genes in the egg and sperm cells of the fetus [Swanson, et al, 2009].

Epigenetics and the Developmental Origins of Adult Health

Recent breakthroughs in neuroscience, molecular biology and epigenetics explain how early experiences can have life-long impacts on health and development. Early experiences can influence which of a person's genes are activated and de-activated and, consequently, how the brain and body develop (Das, R. et al, 2009). Repetitive stressful experiences (or 'toxic stress') early in life can cause changes in the expression of genes that influence how well the body copes with adversity throughout life, and how well the brain develops in terms of emotional control, memory function and cognition. Epigenetic processes like this can work for the better, as well as the worse. Supportive environments such as safe, stable and responsive relationships, and rich learning experiences early in life can favour positive genetic expressions that heighten a child's potential for learning and healthy development INSCDC 20101. For example, the prompt and appropriate responsiveness of a child's mother or primary caregiver can have important benefits for the child's emotional security and social and cognitive development, and can also be protective against chronic disease and early mortality [Silburn SR, et al, 2011].

Intergenerational Transmission of Health

The intergenerational health implications of this are clear. Children of parents who themselves experience psychosocial, cognitive, health and mental health problems as a result of toxic stress in their early years are also at risk of being exposed to stressors in their early family life, with the same consequences later in life. By the same token, parents who have had positive, supportive and enriching early childhood experiences are more likely to reproduce similarly supportive experiences for their own children. It is easy to see how epigenetic processes can sustain intergenerational cycles of poor health or good health.



The Good News

It is possible, with careful policy and the implementation of effective programs, to alleviate the sources of adversity in early life and stop the intergenerational cycle of poor health [NSCDC 2010]. Well-proven programs implemented during pregnancy and in the earliest years of life have been shown to have substantial benefits in reducing adverse health and developmental outcomes — benefits that have been sustained into adolescence and adulthood.

Appropriate antenatal care has the potential to address social and health issues, medical conditions and other associated complications in pregnancy [Caroli 2001, WHO 2008]. Good quality early nurture is also protective for children reared in circumstances of severe disadvantage. Even in low socio-economic status families, the amount of speech that is directed to infants has been shown to affect their vocabularies, sometimes improving vocabulary by the equivalent of up to two years of age [Weisleder & Ferald, 2013]. Improvement of parental care has preventive effects over the long term, enhancing a child's social competence, school performance, as well as later adult health and productivity [Walker et al, 2007], including, importantly, reducing the risk of chronic ill health [Felitti et al, 1998].

The Context of Aboriginal and Torres Strait Islander Childhood Development

There is great diversity in the composition, role definition and functioning of Aboriginal and Torres Strait Islander families - their circumstances, their strengths and their vulnerabilities. In many Aboriginal and Torres Strait Islander families, children outnumber adults, and many of those adults suffer a substantial burden of chronic disease [AMA, 2012]. Aboriginal and Torres Strait Islander children and young people have three times fewer mature adults available to assist with their child rearing, guidance and education than their other Australian counterparts.

Many Aboriginal and Torres Strait Islander children are being raised in circumstances of stress and adversity, which affects the quality of family relationships and childrearing, and translates into high rates of parental smoking, substance use and family violence. Drug and alcohol use also significantly increases the risk for child abuse and neglect [AMA, 2008]. These are all well-known risk factors for poor maternal and perinatal outcomes, including infants small for their gestational age, preterm birth and low birth weight [Lumley J 2009, Silverman 2006, Brown, 2011].

Some key factors impacting on Aboriginal and Torres Strait Islander Health and Wellbeing in the Early Years

Pregnancy and Birth

- Aboriginal and Torres Strait Islander women have a higher birth rate compared with all women in
 Australia (2.6 babies compared to 1.9), and are more likely to have children at a younger age: 52 per
 cent of the Aboriginal women giving birth in 2010 were aged less than 25 years, and 20 per cent were
 less than 20 years, compared with 16 per cent and 3 per cent, respectively, for the broader community
 [AIHW, 2012];
- Aboriginal women remain twice as likely to die in childbirth as non-Aboriginal mothers, and are significantly more likely to experience pregnancy complications and stressful life events and social problems during pregnancy, such as the death of a family member, housing problems, and family violence [Brown, 2011];
- around half of Aboriginal and Torres Strait islander mothers who gave birth in 2010 smoked during pregnancy, almost four times the rate of other Australian mothers; and
- · while infant mortality continues to fall, low birth weight appears to be increasing.



Some key factors impacting on Aboriginal and Torres Strait Islander Health and Wellbeing in the Early Years (cont.)

Infancy and early years

- Aboriginal and Torres Strait Islander children are twice as likely to die before the age of five than other Australian children of that age group. However, the Closing the Gap target to halve this gap in mortality rates by 2018 will be reached if current trends continue;
- between 2008 and 2010, Aboriginal and Torres Strait Islander children less than five years of age were hospitalised at a rate 1.4 times greater than other children of the same age [AIHW, 2013];
- Aboriginal and Torres Strait Islander children suffer from nutritional anaemia at 30 times the rate of other children [Bar-Zeev, et al, 2013]; and
- Aboriginal and Torres Strait Islander children between 2 and 4 years of age are almost twice as likely to be overweight or obese compared with all Australian children in that age range [Webster et al, 2013].

Family Life

- More than 20 per cent of Aboriginal and Torres
 Strait Islander families with children younger than
 16 years have experienced seven or more life
 stress events in a year [Zubrick et al, 2006]. The
 greater the number of family life stress events
 experienced in the previous 12 months, the higher
 the risk of children having clinically significant
 social and emotional difficulties [FaHCSIA, 2013];
- for Aboriginal and Torres Strait Islander children, risk factors such as: a close family member having been arrested, or in jail or having problems with the police; being cared for by someone other than their regular carers for more than a week; being scared by other people's behaviour, had the greatest impact on a child's social and emotional difficulty scores, especially if these factors were sustained over a number of years [FaHCSIA, 2013];

- between 2006 and 2010, the injury death rate for Aboriginal and Torres Strait Islander children was three times higher than that for other children. In 2010–11, the rate of hospitalisation for injuries was almost 90 per cent higher for children from remote and very remote areas than for children in major cities. Overall, hospitalisation due to injury among Aboriginal and Torres Strait Islander children was almost double that of other children, with the greatest disparity relating to assault [AlHW, 2012];
- Aboriginal and Torres Strait Islander children were almost eight times as likely to be the subject of substantiated child abuse and neglect compared with other Australian children [AIHW, 2012].

Early Childhood Education and Schooling

- Aboriginal and Torres Strait Islander children were almost twice as likely to be developmentally vulnerable than other Australian children, and to require special assistance in making a successful transition into school learning;
- the Closing the Gap target for all Aboriginal and Torres Strait Islander four-year-olds living in remote communities to have access to 15 hours of early childhood education per week was achieved in 2013;
- across the country, the proportion of Aboriginal and Torres Strait Islander children achieving the national minimum standards decreases as remoteness increases. For example, in 2012, only 20.3 per cent of Aboriginal and Torres Strait Islander year 5 students in very remote areas achieved national minimum standards in reading, compared with 76 per cent in metropolitan areas;
- only modest progress has been made in achieving the Closing the Gap target to halve the gap for Aboriginal and Torres Strait Islander students in NAPLAN reading, writing and numeracy assessment scores by 2018.

PART 2 PROTECTING AGAINST ADVERSITY IN EARLY LIFE

Investment in evidence-informed, universally available early childhood services, coupled with targeted interventions for additional needs, is the most effective strategy available to break the cycle of inter-generational disadvantage [Young et al, 2007]. There is mounting evidence for the effectiveness of certain types of intervention to address the early life determinants of poor health.

Improving Pregnancy and Birth Outcomes

ANTENATAL CARE, AND PERINATAL AND MATERNITY SERVICES

Antenatal care improves the health of both the mother and baby. Women who attend more antenatal sessions are less likely to experience adverse perinatal outcomes, and the total number of visits, timing of visits and quality of care play a role in maternal and infant outcomes [Vogel, 2013]. In 2009. Aboriginal and Torres Strait Islander mothers attending five or more antenatal care sessions had lower rates of low birth weight babies (8 per cent) compared with those who did not access antenatal care (37 per cent). Similar relationships were found for rates of pre-term births and perinatal mortality. A number of factors hamper the ability of Aboriginal and Torres Strait Islander mothers to attend antenatal sessions, such as there being no-one available to mind other children, a lack of transport, being anxious about attending health services and hospitals, and not knowing when in pregnancy to attend [AIHW, 2012; Glover, 2013; Li, et al, 2012]. Improvements in community support and awareness for pregnant mothers, particularly those who are young, would assist in increasing antenatal attendance.

Access to appropriate programs in infancy, primary health care services and proven effective home visiting programs for pregnant mothers and children, is important for improving maternal health, addressing social support needs and improving infant and child growth and development. The COAG National Partnership Agreement on Early Childhood Development included funding for 85 services across the country to increase access to antenatal care by young Aboriginal and Torres Strait Islander mothers (under the "New Directions: Mothers and Babies Services Program"). The Nurse Family Partnership Program of home visits has the strongest evidence of effectiveness with regard to the capacity to sustainably improve outcomes for children.

These improved outcomes have been sustained through the schooling years into adolescence and the second decade of life. It involves a series of programmed visits during pregnancy and following birth, delivering around 50 visits by the time the child is aged two years [Olds, et al 2002; Karoly et al, 2005]. This proven program is being implemented in a few Aboriginal and Torres Strait Islander communities, and has demonstrated acceptability [Ernst & Young Australia, 2012].

MATERNAL EDUCATION

One of the most effective interventions for improving pregnancy and birth outcomes is ensuring that all girls complete 12 years of formal schooling [Lakshman, et al, 2013; Chou, et al, 2007]. This has been shown to significantly reduce pregnancy risks for the mother and the foetus as well as to significantly improve birth outcomes. The benefits to the mother accrue throughout her life, as well as that of her child. This means that girls who become pregnant in adolescence should not curtail their formal school education, and that continuation of schooling in these circumstances should be supported.

Integrated Early Childhood Services

The effective engagement of Aboriginal and Torres Strait Islander families with Aboriginal community controlled and other primary care services is of particular importance to mothers during pregnancy, and for the early identification of infants and young children with specific health needs or developmental risks. Families and children need a coordinated, culturally inclusive service where comprehensive programs of support are available, and which can facilitate follow-up from the welfare and education sectors. Better outcomes may be achieved when services are well-coordinated and there is good continuity of care [Centre for Community Child Health, 2006]. The 38 Children and Family Centres around Australia funded

through COAG are intended to provide integrated delivery of early childhood and family services to Aboriginal and Torres Strait Islander families. While these integrated services may be justified, progress has been slow in establishing them, and no meaningful assessment can yet be made as to their effectiveness. There is also a need for this program and these centres to more clearly identify the child outcomes they seek to improve.

Supporting Parenting and Family Life

Poor parenting quality is one of the strongest known predictors of poor child outcomes. Parents raising children in circumstances of social disadvantage and adversity face significant challenges which can contribute to toxic stressors for children. There is extensive evidence that good quality parenting can mediate the effect of genetic and environmental risk factors, including poverty. Parenting programs have thus become central to strategies to improve child outcomes. Along with the Nurse Family Partnership Program, there are also effective initiatives that support families through the development of good parenting skills. The Triple P – Positive Parenting Program, for instance, focuses on providing parents with the skills and awareness they need to prevent and address social, emotional and behavioural problems in their children and teenagers. The Let's Start parenting program focuses on the conditions for child development and early learning, as well as the emotional wellbeing of parent and child. Preliminary evaluations of the Let's Start program have indicated that it can achieve reductions in risky behaviour among participating children, as well as curbing stress among parents [Robinson, et al, 2012].

Ensuring Optimal Nutrition and Growth

Adequate childhood nutrition is a high priority for improving the short-term health of Aboriginal and Torres Strait Islander children, and to minimise the occurrence and effects of infection and preventable chronic diseases. Aboriginal and Torres Strait Islander infants and children are at increased risk of nutritional deficiencies, growth faltering and early childhood obesity. While Australia is a wealthy nation, lack of food security is emerging as an issue among Aboriginal and Torres Strait Islander families. Public health interventions to improve food security require sustained action across all sectors and governments to address the structural and systemic problems that cause poor food security in many remote communities [Farmar-Bowers et al. 2013].

CHILDHOOD ANAEMIA AND GROWTH FALTERING

Anaemia in pregnancy has physical and mental health consequences for the mother, and anaemia in childhood affects physical and cognitive development, increases the risk of infection and is associated with the development of chronic diseases. Growth faltering, or stunting, reflects inadequate nutrition over a prolonged period of time, which interferes with a child's physical and, potentially, neurological development.

Community-based nutrition education, counselling and multifaceted interventions involving carers, community health workers and community representatives may be effective in reducing the incidence of growth faltering. [World Bank, 2005; Grantham-McGregor, et al, 2007]. Maternal iron supplementation during pregnancy and delayed umbilical cord clamping may also improve infant birth weight and reduce childhood anaemia. Advice to families that babies need food in addition to breast milk from around six months may also be beneficial. The overall evidence for the effectiveness of interventions to prevent growth faltering is not strong, however, and there is little published evaluation of nutritionally-focused programs for Aboriginal and Torres Strait Islander communities despite many being implemented [McDonald, et al, 2008].

EARLY CHILDHOOD OBESITY

A concerning proportion of Aboriginal and Torres Strait Islander infants living in urban areas experience rapid weight gain and become overweight and obese during early childhood [Webster, et al, 2013]. There is evidence that adversity experienced during pregnancy and the first two years of life (mediated by the caregiver's interactions with the baby) create the physiological, and then the epigenetic, basis for later obesity and insulin resistance. Other causes of obesity among Aboriginal and Torres Strait Islander children are likely to be the same as those in the general population - over-consumption of highenergy, low-nutrient foods and low levels of physical activity - compounded by social adversity. Education and awareness about food and nutrition - incorporated into nutritional counselling programs and home visits may be beneficial. However, there is a lack of evidence as to what interventions may be effective in reducing rates of obesity.



Strengthening Early Childhood Development and the Transition to School

EARLY LITERACY AND NUMERACY

Success in early literacy and numeracy is a key developmental outcome that has important implications for a child's school learning and opportunities later in life. One of the headline targets of the 2008 Closing the Gap Strategy was to halve the gap, within 10 years, between the proportions of Aboriginal and Torres Strait Islander children and other children who score at least the national minimum standards on NAPLAN tests (which measure reading, writing and numeracy at Years 3, 5, 7 and 9). After five years of NAPLAN testing, Aboriginal and Torres Strait Islander children are on target to reach national minimum standards, but only in reading, by 2018. Also, the NAPLAN trends for Aboriginal and Torres Strait Islander children in the Northern Territory fall far short of those of their national counterparts.

The continuing gap in literacy and numeracy standards needs to be addressed by intensive preventive and remedial action, including the intensified implementation of early childhood services and supports, which have been shown to correlate with improved outcomes. Without these interventions there will be serious consequences for the future health and wellbeing of Aboriginal and Torres Strait Islander children.

SCHOOL ATTENDANCE

The gaps in school attendance levels between Aboriginal and Torres Strait Islander students and other students are substantial, even in the first year of school [Hancock et al, 2013]. This gap increases during the course of their school careers, demonstrating that poor attendance is established very early (i.e. by year 3), and is then usually maintained over time. Poor attendance is not just a product of accumulated poor experiences in school. It begins with family and community factors, including whether the child has emotional and behavioural difficulties, whether the family has recently experienced stressful life events, whether the primary carer has been arrested or charged with an offence, and whether the child's carer(s) had been forcibly separated from their natural families. Additionally, Aboriginal children who had attended day care, as well

as kindergarten and preschool, are likely to have better attendance patterns in school [Zubrick, et al, 2006]. The positive effect of preschooling should also be recognised through improved preschool resourcing and support, and by educating families about the benefits of preschool enrolment.

Keeping Children Safe - Reducing Child Abuse and Neglect

The safety and wellbeing of families, particularly women and children, is fundamental to any healthy, functioning community. Infants and young children are significantly over-represented compared with older children in rates of child deaths, hospitalisation, morbidity and disability related to accidental and non-accidental injury, as well as notified and substantiated instances of child abuse and neglect.

ACCIDENTAL AND NON-ACCIDENTAL INJURY

Aboriginal and Torres Strait Islander children (and women) are markedly over-represented as victims of family violence, abuse and neglect. Isolated and uncoordinated health and welfare responses to this problem are inadequate. The many complex social factors contributing to the extreme over-representation of young Aboriginal and Torres Strait Islander children in injury and accident statistics highlights the need for sustained and coordinated investment in safe communities, coupled with intensive support for families where there is known risk.

CHILD PROTECTION NOTIFICATIONS AND SUBSTANTIATIONS

Infants and young children are particularly vulnerable to the developmental impact of inadequate care and abuse, and also of disrupted attachments and relationships, all of which perpetuate cycles of disadvantage. These high rates reflect complex and chronic family needs and problems, including domestic and family violence, parental mental health problems, family homelessness, precarious housing, and parental drug and alcohol problems [Tilbury, 2012].

Most states and territories endeavour to adhere to the *Indigenous Child Placement Principle* when out-of-home care becomes necessary. However, the capacity of child



THE HEALTHY EARLY YEARS – GETTING THE RIGHT START IN LIFE

protection services to place Indigenous children with Indigenous carers is increasingly challenged by difficulties in locating kinship or other suitable families willing to assume this responsibility, particularly given that many families are already over-burdened. In line with the *National*

Framework for Protecting Australia's Children 2009-2020, there is a need to shift away from tertiary interventions that focus on 'rescue' and deal with consequences, toward programs that more effectively address the determinants of child abuse and neglect.

The production of this report card has benefited from the research and expertise provided by the following individuals: Professor Sven Silburn and Dr Sarah Mares (Centre for Child Development and Education, Menzies School of Health Research, Darwin); Professor Frank Oberklaid and Associate Professor Sharon Goldfeld (Centre for Community Child Health, Royal Children's Hospital); Professor Jonathan Carapetis (Telethon Institute for Child Health Research); Professor Victor Nossar (Northern Territory Department of Health); Dr Susan Woolfenden and Dr Karen Zwi (Sydney Children's Hospital Network); Associate Professor Stephanie Brown (Murdoch Childrens Research Institute); and Karen Glover (Pangula Mannamurna AMS).

There are many examples of best practice in promoting healthy early development among Aboriginal and Torres Strait Islander children, and good news stories. Examples of these can be found on the AMA website at https://ama.com.au/2013-ama-indigenous-health-report-card-good-news-stories



RECOMMENDATIONS TO IMPROVE HEALTH AND WELLBEING IN THE EARLY YEARS

The COAG *Closing the Gap* strategy rightly emphasises the importance of healthy early development for the lifelong health and wellbeing of Aboriginal and Torres Strait Islander children.

The evidence presented in this Report Card strongly indicates that a much greater proportion of the national expenditure on Aboriginal and Torres Strait Islander health, education and human services must be invested in evidence-based measures for the early years, to reduce exposure to preventable biological and social adversity during pregnancy and early childhood. Policies and programs to improve Aboriginal and Torres Strait Islander early childhood development also need to have realistic timeframes, and to be sustained, if they are to bring about enduring intergenerational change.

The AMA believes that it is crucial for governments to renew their commitment to another COAG National Partnership Agreement on Indigenous Health, and National Partnership Agreement on Early Childhood Development, without which the early gains currently being experienced in closing the gap will not be sustained in the longer term.

The AMA believes that the following measures supporting healthy early development should be central to these agreements.

A National Plan for Expanded Comprehensive Maternal and Child Services

A national plan should be developed for the expansion of existing child and maternal services to provide a comprehensive range of evidence-based services to all Aboriginal and Torres Strait Islander mothers and children throughout Australia. These services should include:

- traditional antenatal services, with outreach to maximise utilisation;
- childhood health monitoring and screening, and access to specialists;

- services targeting risk factors such as smoking, substance use, nutrition, mental health and wellbeing, and family violence;
- parenting education and life skills, including for teenage parents; and
- processes to engage young fathers in appropriate programs.

Comprehensive information collection and management processes should be in place in each centre to enable regular reporting of:

- utilisation rates, including at each gestational stage;
- rates of low birth weight and perinatal mortality; and
- the incidence of, and improvements in, other risk factors and outcomes (such as smoking, substance use, nutrition, etc.)

This system of Aboriginal and Torres Strait Islander child and maternal services should be provided, where possible, through the Aboriginal community-controlled health sector. Where this is not possible, all non-Aboriginal health and medical staff should have cultural safety training, and links between mainstream and community-controlled services should be fostered to facilitate cultural guidance.

The National Plan should be fully implemented within five years, and should be evaluated in terms of specific targets, including (among others):

- improved antenatal health care utilisation, at appropriate gestational points;
- · reduced maternal smoking and alcohol use;
- reduced anaemia, inadequate nutrition and stunting; and
- improved parenting skills.

Nurse Home Visiting

The Australian Nurse Family Partnership Program of home visiting, which has a proven track record of success, should be extended to more centres, so that all Aboriginal and Torres Strait Islander families can benefit. While the success of this home visiting program depends, to an extent, on it adhering to a prescribed design, there may be benefits in involving Aboriginal community workers in the delivery of the program, particularly in remote communities.

Support for Families at Risk

There are relatively few targeted interventions for Aboriginal and Torres Strait Islander infants and young children at risk of neglect, abuse and family violence, and a paucity of Australian evaluations of what interventions and support are most effective to prevent or ameliorate these risks. While the implementation of the other recommendations in this Report Card will go a substantial way to removing the risks of neglect, abuse and family violence, there remains a strong need for investment in initiatives for children exposed to maltreatment, including:

- measures to support the health and wellbeing of children in care, and support for foster and kinship carers (including grandmothers and aunties, who often play key roles as caregivers in regional and remote communities):
- services addressing the needs of traumatised women during pregnancy and the post-natal period;
- culturally-informed services for young children and infants traumatised by maltreatment; and
- support for local community-developed initiatives that address issues such as family violence, and which have the potential to improve the capacity of communities and families to develop local solutions to local problems. Initiatives such as the mentoring of younger males by older men in the community, should be considered.

The rate of incarceration of Aboriginal and Torres Strait Islanders, particularly for juvenile offenders, is unacceptably high. This is all the more troubling when a major factor affecting the social and emotional wellbeing of Aboriginal and Torres Strait Islander children is whether a close family member has been imprisoned, arrested or is having problems with the police. Every effort must be made to reduce the incarceration of Aboriginal people and Torres Strait Islanders, including:

- through efforts to reduce the incidence of offending;
- through the provision of therapeutic support and education in the case of substance use offences; and
- through the creation of alternative options and pathways within the justice system (for example, through local community-based diversion programs).

Unemployment and a lack of meaningful engagement in mainstream economic life contributes directly to many of the stressors in families that harm the health and wellbeing of children.

• The AMA reiterates its 2009 recommendation that much more needs to be done nationally to improve the access of Aboriginal people and Torres Strait Islanders to the benefits of the Australian economy, in terms of employment in the full range of occupations, as well as self-employment and opportunities for successful business and entrepreneurial ventures. Governments should make use of the various fiscal and regulatory levers they have available to improve business and entrepreneurial opportunities for Aboriginal people and Torres Strait Islanders.

Keeping children at school

Education is a very protective factor in young people's lives, with many health and other benefits carrying into later life. Support for the engagement and retention of Aboriginal and Torres Strait Islander young people in schooling is paramount.

- Access to preschool and early childhood education should be greatly expanded, so that every Aboriginal and Torres Strait Islander child has the opportunity to participate, no matter where they live;
- for many children and families, the transition from home to preschool and school needs to be supported, and more research needs to be conducted on what measures work to achieve this:
- all Aboriginal and Torres Strait Islander children should receive the Abecedarian program in their early childhood (potentially facilitated through the expanded system of maternal and child health services); and
- all Aboriginal and Torres Strait Islander girls should be supported to complete 12 years of formal education (whether they are pregnant or not), and schools should be informed of the benefits of this.



Strong culture, strong communities, strong capacity

A strong sense of cultural identity and self-worth can be protective in a person's ability to weather adversities in life. One way of strengthening people's cultural identity is to strengthen the cultural communities of which they are a part. Empowering a community to explore and develop local solutions to its own particular problems can be effective in strengthening that community, through capacity building that carries from one generation to the next. There are many examples of successful community projects and initiatives developed and operated by, and for, Aboriginal and Torres Strait Islander communities, including those that have potential to prevent or ameliorate toxic stressors in early life.

 Community capacity should be extended through the allocation of \$10 million a year over 10 years for grants to community groups or NGOs for the development of measures that prevent early life stressors, promote healthy early development for Aboriginal and Torres Strait Islander children, and build a community's capacity to solve problems in these areas.

Improving the Living Environment

- A national audit of the living environment in Aboriginal and Torres Strait Islander communities should be implemented to measure housing conditions, access to clean water, sanitation facilities and the conditions for safe and healthy living; and
- based on the audit, programs of housing and community maintenance should be implemented to ensure that, within five years, critical healthy living conditions exist in 75 per cent of all housing, and that appropriately-sized housing is available where needed. These programs should be coupled with sanitary and environmental health education.

Better Data, Research and Evaluation

To support the planning, resourcing and delivery of these and future measures, and to expand the evidence-base for what works and what does not, it is crucial that:

- culturally appropriate measures of early childhood development and wellbeing are developed in collaboration with Aboriginal peoples and Torres Strait Islanders, and are validated for those populations;
- high quality data, specifically relevant to the health and early development of Aboriginal people and Torres Strait Islanders, is collected consistently between all Australian jurisdictions, and reflects the diversity of living circumstances and place-based needs at regional and community levels, especially including urban populations. The collection of data by specific service areas (such as health, family and early childhood and preschool and education sectors) should be shared, rather than 'silo-ed', to ensure resources are allocated to maximimum effect, and to support comprehensive program development and evaluation; and
- greater emphasis should be given to action-based research in the form of projects developed for, and located within, local communities. Links fostered between local communities and researchers at universities and research centres in Aboriginal and Torres Strait Islander health and development would greatly facilitate the quality and evaluation of such projects, and their capacity to be shared with other communities.

AMA Taskforce on Indigenous Health 2013



Affif TO, Enns MW, Cox BJ, Asmundson GJ, Stein MB, Sareen J. (2008). "Population attributable fractions of psychiatric disorders and suicide ideation and attempts associated with adverse childhood experiences" *American Journal of Public Health* 98(5) pp: 946-52.

AlHW (Australian Institute of Health and Welfare) (2012). *A picture of Australia's children 2012*. Cat. no. PHE 167.Canberra: AlHW. http://www.aihw.gov.au/chi/.

AlHW (Australian Institute of Health and Welfare) (2013). *Aboriginal and Torres Strait Islander Health Performance Framework 2012*: detail analysis. Cat. no. IHW 94. Canberra: AlHW.

Alder J et al (2005). "The effects of prenatal stress on temperament and problem behaviour of 27 month old toddlers". *Europ Child Adolesc Psychiatry*, 14, pp: 41-55.

AMA Australian Medical Association (2008) 2008 AMA Indigenous Health Report Card — 'Ending the Cycle of Vulnerability: The Health of Indigenous Children' . Available on-line at: https://ama.com.au/2008-ama-indigenous-health-report-card-%E2%80%93-ending-cycle-vulnerability-health-indigenous-children.

AMA (Australian Medical Association) (2012). *Aboriginal and Torres Strait Islander Health Audit Report 2012: Progress to Date and Challenges that Remain.* Available on-line at: https://ama.com.au/aboriginal-and-torres-strait-islander-health-report-cards.

Bar-Zeev, S. J., Kruske, S. G., Barclay, L. M., Bar-Zeev, N., & Kildea, S. V. (2013). "Adherence to management guidelines for growth faltering and anaemia in remote dwelling Australian aboriginal infants and barriers to health service delivery". *BMC health services research*, 13(1), p. 250.

Bradley, R. G., Binder, E. B., Epstein, M. P., Tang, Y., Nair, H. P., Liu, W. (2008). "Influence of child abuse on adult depression: Moderation by the corticotro-pin-releasing hormone receptor gene". *Archives of General Psychiatry*, 65(2), pp: 190-200.

Brown SJ, Yelland J, Sutherland G, Robinson J, Baghurst P. (2011). "Stressful life events, social health issues and low birthweight in an Australian population-based birth cohort: challenges and opportunities in antenatal care". *BMC Public Health*; 11: p: 196.

Caroli G, Rooney C, Villar J (2001). "How effective is antenatal care in preventing maternal mortality and serious morbidity? An overview of the evidence". *Paediatric and Perinatal Epidemiology* 15 (Suppl 1) pp:1-42.

Centre for Community Child Health. (2006). *Services for Young Children and Families: an Integrated Approach*. Parkville, Victoria: Royal Children's Hospital.

Chou, S. Liu, J. Grossman, M. Joyce, T. (2007). *Parental Education and Child Health: Evidence from a Natural Experiment in Taiwan*. National Bureau of Economic Research (NBER) Cambridge, MA.

Corsi S and Cristen P (eds) (2012). *Epigenetics, Brain and Behaviour: Research and Perspectives in Neurosciences*. New York: Springer.

Das, R., Hampton, D. D., & Jirtle, R. L. (2009). "Imprinting evolution and human health". *Mammalian Genome*, 20(9-10) p. 563.

Dong M, Giles WH, Felitti VJ, Dube SR, Williams JE, Chapman DP, et al. (2008). "Insights into causal pathways for ischemic heart disease: adverse childhood experiences study". *Circulation* 110(13):1761-66.

Ernst & Young Australia (2012). *Stage 1 Evaluation of the Australian Nurse Family Partnership Program - Final Report.* Department of Health and Ageing, June 2012.

THE HEALTHY EARLY YEARS – GETTING THE RIGHT START IN LIFE

FaHCSIA (2013). Footprints in Time - The Longitudinal Study of Indigenous Children: Report from Wave 4. http://www.fahcsia.gov.au/our-responsibilities/indigenous-australians/publications-articles/families-children/footprints-in-time-the-longitudinal-study-of-indigenous-children-lsic/key-summary-report-from-wave-4

Farmar-Bowers, Q., Higgins, V., & Millar, J. (Eds.). (2013). Food Security in Australia: Challenges and Prospects for the Future. Springer.

Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, Koss M and Marks JS (1998). "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study". *American Journal of Preventive Medicine*,14 (4) pp: 245-258.

Gillespie, C. F., Bradley, B., Mercer, K., Smith, A., Conneely, K., Gapen, M. (2009). Trauma exposure and stress-related disorders in inner city primary care patients. *General Hospital Psychiatry*, 31(6), pp: 505-514.

Glover K, Buckskin M, Ah Kit J, Miller R, Weetra D, Gartland D, Yelland J, Brown S. (2013). *Antenatal care: experiences of Aboriginal women and families in South Australia. Preliminary findings of the Aboriginal Families Study.* Murdoch Children's Research Institute, Melbourne, Victoria and Aboriginal Health Council of South Australia, Adelaide, South Australia.

Gotteling BM et al (2007). "Depression and anxiety during pregnancy: a risk factor for obstetric, foetal and neonatal outcome". *J Mat-Fetal Neonatal Medicine*, 20, pp 189-200.

Grantham-McGregor SM, Powell C, Walker S, Chang S, Fletcher P. (1994). "The long term follow-up of severely malnourished children who participated in an intervention program". *Child Development* 65 pp:428-39.

Grantham-McGregor SM, Cheung YB, Cueto S, Glewwe P, Richter L, Strupp B, et al. (2007). "Child development in developing countries 1. Developmental potential in the first five years for children in developing countries". *Lancet*; 369 pp:60-70.

Hancock KJ, Shepherd, CCJ., Lawrence D & Zubrick SR (2013). *Student attendance and educational outcomes: Every day counts.* Report for the Department of Education, Employment and Workplace Relations, Canberra.

Karoly LA, Kilburn RM, Cannon JS. (2005). Early Childhood Interventions: Proven results, future promise. New York: RAND Corporation.

Lakshman R, Zhang J, et al, 2013. "Higher education is associated with favourable growth of young children in different countries", *Journal of Epidemiology and Community Health* 67, pp: 595-602.

Li Z, Zeki R, Hilder L & Sullivan EA (2012). *Australia's mothers and babies (2010).* Perinatal statistics series no. 27. Cat. no. PER 57. Canberra: AIHW National Perinatal Epidemiology and Statistics Unit.

Lumley J, Chamberlain C, Dowswell T, Oliver S, Oakley L, Watson L. (2009). "Interventions for promoting smoking cessation during pregnancy". *Cochrane Database Syst Rev*: 8(3): CD001055. doi: 10.1002/14651858.CD001055.

McDonald, E. L., Bailie, R. S., Rumbold, A. R., Morris, P. S., & Paterson, B. A. (2008). "Preventing growth faltering among Australian Indigenous children: implications for policy and practice". *Medical Journal of Australia*, 188 (8), S84

NSCDC (National Scientific Council on the Developing Child) (2010). *Early Experiences Can Alter Gene Expression and Affect Long-Term Development: Working Paper No. 10.* Centre on the Developing Child, Harvard University. http://www.developingchild.net

Olds DL, Robinson J, O'Brien R, Luckey DW, Pettitt LM, Henderson CJR, et al. (2002). "Home visiting by paraprofessionals and by nurses: A randomised, controlled trial". *Pediatrics* 110(3):486 - 96.

Robinson, G., Tyler, W., Jones, Y., Silburn, S. & Zubrick, S. (2011). Context, diversity and engagement: Early intervention with Australian Aboriginal families in urban and remote contexts. *Children and Society*, 26(5), pp: 343-355

Shonkoff JP, Boyce WT, McEwan BS (2009). "Neuroscience, molecular biology and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention". *JAMA*, 301(21) doi 10 1001/ JAMA 2009 754.

THE HEALTHY EARLY YEARS - GETTING THE RIGHT START IN LIFE

Silburn SR, Nutton G, Arney F, Moss B, (2011). *The First 5 Years: Starting Early.* Topical paper commissioned for the public consultations on the Northern Territory Early Childhood Plan. Darwin: Northern Territory Government.

Silverman JG, Decker MR, Reed E, Raj A. (2006). "Intimate partner violence victimisation prior to and during pregnancy among women residing in 26 US states: associations with maternal and neonatal health". *Am J Obstet Gynecol* 195(1) pp:140-8.

Swanson, J. M., Entringer, S., Buss, C., & Wadhwa, P. D. (2009). "Developmental origins of health and disease: Environmental exposures". *Seminars in Reproductive Medicine*, 27(5), pp. 391-402.

Szyf, M. (2009). "Early life, the epigenome and human health". Acta Paediatrica, 98(7), pp:1082-1084.

Tamayo T, Christian H, Rathmann W. (2010). "Impact of early psychosocial factors (childhood socioeconomic factors and adversities) on future risk of type 2 diabetes, metabolic disturbances and obesity: a systematic review". *BMC Public Health* 10 p. 525.

Tilbury, C. (2009). The over-representation of Indigenous children in the Australian child welfare system. *International Journal of Social Welfare*, 18, pp:57-64

Tomalski and Johnson (2010). "The effects of early adversity on the adult and developing brain", *Current Opinion in Psychiatry* 23 pp:233-238.

Van den Bergh B, et al (2005). "Antenatal maternal anxiety and stress and the neurobehavioural development of the foetus and child". *Neuroscience Biobehav Rev.* 29, pp:237-58.

Vogel JP, Abu Habib N, Souza J et al (2013). "Antenatal care packages with reduced visits and perinatal mortality: a secondary analysis of the WHO Antenatal Care Trial" *Reproductive Health* 10(19).

Walker, S.P., Wachs, T.D. Gardner, J et al (2007). "Child development: risk factors for adverse outcomes in developing countries". *The Lancet*, 369, pp: 145-159.

Webster, V., Denney-Wilson, E., Knight, J., & Comino, E. (2013). "Describing the growth and rapid weight gain of urban Australian Aboriginal infants". *Journal of Paediatrics and Child Health*.

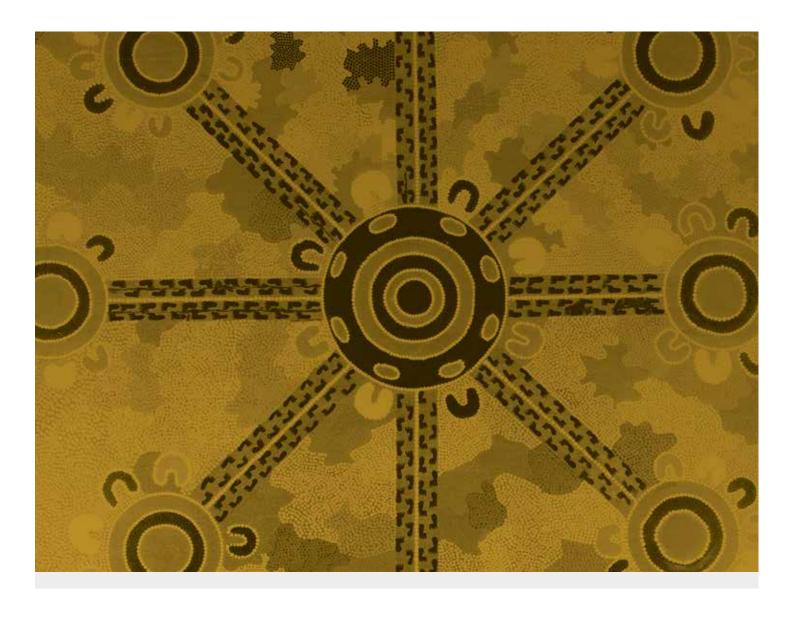
Weisleder A, Fernald A. (2013). "Talking to Children Matters. Early Language Experience Strengthens Processing and Builds Vocabulary" *Psychological Science* Published online before print September 10, 2013, doi: 10.1177/0956797613488145

World Bank (2005). Repositioning nutrition as central to development: A strategy for large scale action. New York: World Bank.

World Health Organization. (2008). Closing the Gap in a Generation: Health equity through action on the social determinants of health. Geneva: WHO Commission on the Social Determinants of Health.

Young MS and Richardson LM (2007). Early Childhood Development: Measurement to Action. Washington DC: World Bank.

Zubrick SR, Silburn SR, De Maio JA, Shepherd C, Griffin JA, Dalby RB, Mitrou FG, Lawrence DM, Hayward C, Pearson G, Milroy H, Milroy J, Cox A. (2006). *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People*. Perth: Curtin University of Technology and Telethon Institute for Child Health Research.





42 Macquarie Street Barton ACT 2600

Telephone: 02 6270 5400 Facsimile: 02 6270 5499

www.ama.com.au