

# **INTEGRATING HEALTH PROMOTION IN EARLY CHILDHOOD EDUCATION AND CARE SETTINGS**

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## About us

The Mitchell Institute for Education and Health Policy at Victoria University is one of the country's leading education and health policy think tanks and trusted thought leaders. Our focus is on improving our education and health systems so more Australians can engage with and benefit from these services, supporting a healthier, fairer and more productive society.

The Australian Health Policy Collaboration is led by the Mitchell Institute and brings together leading health organisations and chronic disease experts to translate rigorous research into good policy. The national collaboration has developed health targets and indicators for preventable chronic diseases, designed to contribute to reducing the health impacts of chronic conditions on the Australian population.

## Process

The Mitchell Institute's policy evidence briefs are short monographs highlighting the key evidence for emerging policy issues. We work with our partners in the Australian Health Policy Collaboration to seek expert advice on topics, content and context.



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# Executive Summary

Increasing incidence of chronic disease and mental illness threatens to overwhelm Australia's health budget in the coming decades, and cause significant disability and burden for millions of Australians and their families. Many of these conditions have their roots in the health attitudes and behaviours formed in early childhood. Health promotion in early childhood is therefore an essential strategy to improve population health.

Education is a driver of good health and a universal and cost-effective platform for health promotion. In Australia, substantial attention and investment have been directed towards health promotion in schools (especially over the past four decades) and maternal and child health (over the past century). Opportunities to integrate health promotion into other parts of Australia's early childhood education and care (ECEC) system are now emerging, as the ECEC sector evolves. Research in this area is undergoing significant growth, but remains underdeveloped.

More than half of Australian children aged 2-4 are enrolled in ECEC, and more than 90% of children attend preschool in the year before they start school. Many ECEC services involve families and communities in service provision. ECEC settings represent an area of significant, untapped opportunity to improve health outcomes at population level, providing avenues for collaboration across all levels of government, and across health and education portfolios.

Evidence suggests that health promotion interventions in ECEC settings can be effective, particularly where parents and experts are engaged, where programs and implementation are high quality, and where interventions are embedded and sustained. But data also show that there is room for improvement in how children's services – and the sector as a whole – approach and embed health promotion in ECEC programs.

All levels of government are engaged in some aspect of ECEC provision, across multiple departments. This briefing focuses on areas where the Australian Government, working in partnership with the states and territories, could leverage its capacity, expertise and investment to lift the consistency and quality of health promotion across the ECEC sector by:

- Investing in innovation and research, with a particular focus on families of greatest disadvantage, and collaboration between health and ECEC systems and providers.
- Working with key stakeholders to develop a model of excellence in health promotion in ECEC, including national investment in tools and content to support this.
- Integrating a focus on ECEC, and ECEC strategies, into the national health strategies currently being developed.

## Context

Australia faces a number of critical and growing health challenges that threaten to overwhelm the health budget in the coming decades, and cause significant disability and burden for millions of Australians and their families. Almost half of Australians have a chronic disease, which is the major cause of premature death (ABS, 2018 & AIHW, 2015a). Two-thirds of Australian adults and a quarter of children are overweight or obese (AIHW, 2019a). One fifth of adults suffer from poor mental health (ABS, 2007). And around two thirds of Australians are diagnosed with skin cancer over their lifetime (Cancer Council, 2019). Approximately one third of the burden of disease could be prevented by addressing modifiable risk factors such as overweight/obesity and physical inactivity (AIHW, 2016).

Behaviours that contribute to health problems are formed in early childhood, and data indicates that many Australian children do not develop health-promoting behaviours in the early years. For example, only 34% of Western Australian children aged 2-5 meet recommended levels of physical activity (Christian et al, 2018), and insufficient physical activity (combined with other factors) contributes to high levels of obesity among Australian children (AIHW, 2019a). Excessive sugar consumption and poor oral hygiene are causing high levels of tooth decay in young children (AIHW, 2019b); nearly half of all Australian children aged 5-6 have suffered from dental decay (AIHW, 2011).

The costs of failure to prevent childhood illness to families and the economy, in terms of hardship and expenditure, are significant. Recent research by The Front Project estimated the annual cost of treating preventable health conditions in children at \$1.1 billion for physical health and \$1.3 billion for mental health (Teager, 2019). This only measured expenditure on children and young people, and only for a single year; the cost of intervening late can extend and increase into adulthood.

These behaviours, and health problems, often develop and impact in later childhood, and into adulthood (Singh et al, 2008 & Kay-Lambkin et al, 2007). Conversely, healthy behaviours and lifestyles developed early on can contribute to good health later in life, and can positively impact related outcomes, for example education (AMA, 2010). Promoting healthy behaviour during early childhood is therefore an essential component of preventive health (Kolbe, 2019 & Broder et al, 2017).

Reducing rates of preventable chronic disease is most effectively achieved through a comprehensive approach to preventive health. Such an approach identifies and addresses the underlying causes of poor health; provides social, physical and policy environments that support good health; is adequately resourced; and maximises universal platforms in all sectors (Doggett, 2019 & Sweet, 2019). Education is a key component of preventive health; a driver of good health; and a universal, cost-effective platform for health promotion (WHO, 2016 & WHO, 1999). Over the past three decades, substantial attention and investment have been directed towards health promotion in schools (Education and Training Committee, 2010) and maternal and child health (MCH) has undergone significant development and investment over the past century (Clark, 2016; NSW Kids and Families, 2015; Sheard, 2005).

In contrast to schools and MCH, health promotion in other parts of Australia's ECEC sector has not had the same level of focus, research and investment. As a sector, the potential for ECEC to promote and influence health is substantial (Nekitsing et al, 2018 & Finch et al, 2016). More than half of children aged 2-4 are enrolled in ECEC, and more than 90% of children aged 4-5 attend preschool (Productivity Commission, 2019). In addition to providing access to most children in these age groups, ECEC services often engage closely with parents and carers, in some cases integrating their involvement into the day-to-day running of services. In terms of unique reach, ECEC bridges and overlaps the period when children's engagement with the MCH system ceases (typically 3.5 years), and when they enter school. Many ECEC services also work with children much more intensively compared with the MCH system, with Australian children attending ECEC for an average of 27 hours per week (Productivity Commission, 2019).

The levers to better integrate high quality health promotion into Australia's ECEC system already exist. A strong sense of wellbeing is one of five learning outcomes in the Early Years Learning Framework (EYLF), which guides early education and care in the years before school. ECEC services are also assessed and rated on health and wellbeing by regulatory authorities in each jurisdiction<sup>1</sup>. Recent data shows that of all quality areas, health and safety<sup>2</sup> is one of the areas in which services are least likely to be rated 'Exceeding National Quality Standard', and more likely than others to be rated 'Working Towards National Quality Standard' (ACECQA, 2019a). This suggests that while the majority of services may be meeting health and safety standards, there is significant room for improvement of health and safety education and practice in many ECEC services.

Many early educators and services are already providing health education, offering opportunities for children to practice good health, and attempting to actively engage with families, and there is substantial appetite among educators for improving their own knowledge and practice (Sims et al, 2011 & Cleland et al, 2018). The challenge lies in lifting the quality of health promotion, and the health literacy of our youngest Australians, through more systematic integration of health promotion across the ECEC sector. With several national health strategy planning processes currently underway, along with growing interest in health literacy (Sport Australia, 2019), an examination of the way health promotion and health literacy undertaken in ECEC settings is timely and useful, with genuine potential to impact on health outcomes over the coming decades.

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<sup>1</sup> Assessments are undertaken on a rolling basis, i.e. services are not assessed on an annual basis, and therefore quarterly data includes all current ratings, regardless of when services were last assessed.

<sup>2</sup> The EYLF and National Quality Standard emphasise different aspects of health, wellbeing and safety. The EYLF learning outcome is 'children have a strong sense of wellbeing', which incorporates social and emotional wellbeing, as well as health and physical wellbeing. The National Quality Standard's Quality Area 2 relates specifically to Children's Health and Safety (with multiple Quality Areas contributing to children's social and emotional wellbeing).

# Overview of the ECEC sector

Australia's ECEC system is complex, particularly compared with the school system. Education and care for babies and young children is delivered by a range of services, including preschools, long day care centres, occasional care providers and family day care providers. ECEC is delivered by a mix of provider types, including government and non-government schools, non-government and community-run organisations, and profit-making and non-profit companies and individuals. Some of these providers offer only one type of service, for example preschool, while others provide a mix of services for a wide range of age groups (Productivity Commission, 2019).

Nearly 19,000 government-approved children's services operate in Australia, including more than 11,000 that deliver preschool programs (Productivity Commission, 2019). Government-approved services are accessed by the majority of Australian children and families, with a clear trend of increasing participation over the past decade. Most 2-4 year-olds (55% of 2-year-olds and 62% of 3-year-olds) attend some form of ECEC service (Productivity Commission, 2019). Examination of trends in provision of ECEC for the 0-5 age group shows increasing usage. In 2009, 33.9% of Australian children aged 0-5 years were in some form of childcare, increasing to 43.6% in 2018 (Productivity Commission, 2019 & Productivity Commission, 2010). The increase in children enrolled in preschool is even larger: increasing from 69.5% in 2008-09 to 90.1% in 2017 (Productivity Commission, 2019 & Productivity Commission, 2010).

ECEC settings provide a unique opportunity to reach children, while also engaging parents and carers. Research shows that engagement of parents and carers is critical to improving children's health behaviours (Bryant et al, 2017; Smith et al, 2019 & Gadsen et al, 2016). Some services attempt to embed parental participation in their education and care programs, which provides opportunities for parents and educators to share knowledge and work together to support their child's development, and may also provide opportunities to directly engage families in health promotion. However, cost and convenience are a barrier to participation for many families (Department of Family and Community Services, 2011).

Australian, state and territory governments are all involved in aspects of ECEC funding and delivery, with specific and sometimes overlapping responsibilities (Press & Hayes, 2000). The Australian Government works with states and territories to provide all Australian children with access to affordable, quality education in the year before school, including co-funding for this service (Nous Group, 2019). Funding for childcare subsidies, and for part of the costs of regulation, are also provided by the Australian Government. In addition to co-funding preschool, state and territory governments provide additional subsidies for eligible children to attend preschool for two years, either through universal or targeted programs. Regulation, funding for services, and infrastructure support are provided by state and territory governments. Many local governments are also involved in planning, infrastructure support, delivery and funding, though the role of local government varies across jurisdictions.

Responsibility for ECEC services may be located within different government portfolios. Following recommendations from the Starting Strong II report (OECD, 2006), many governments in Australia moved to locate the administration of ECEC within education departments. Previously, non-preschool components of ECEC were often located in health

and community services agencies, and the move was intended to strengthen the focus of all ECEC services on early learning. The exception is Western Australia, where regulation of ECEC remains with the Department of Communities, while preschool is located in the Department of Education. Within the Australian Government, ECEC is located in the Department of Education.

## Health promotion in ECEC settings

The definition of health promotion used in this briefing comes from the Ottawa Charter – the process of enabling people to increase control over and improve their health – and considers how this process is and could be supported in ECEC settings (WHO, 1986). It also draws on the work of Ewles and Simnett, who define the term as ‘promoting the health and wellbeing of individuals, communities and whole population groups...[by] improving, advancing, supporting, advocating for, empowering and placing health higher on personal, public and political agendas’ (Scriven, 2017: 17). This briefing focuses on areas of relevance to children in the years before school, considering the prevalence of health challenges to this cohort, or where evidence indicates that early childhood knowledge and health practices influence health outcomes later in life. These areas include sun safety, physical activity, oral health, nutrition, social and emotional wellbeing, and hygiene.

As previously mentioned, health and safety is one of the quality areas in which ECEC services are least likely to excel, and most likely to only meet minimum standards (ACECQA, 2019a). This section provides an overview of relevant policy and data to indicate the current state of health promotion across the ECEC sector, and opportunities for improvement:

- **Services are required to address health, and assessment of services is performance-based, not prescriptive.** Professional practice in the early years is guided by the Australian Early Years Learning Framework (EYLF). All government-approved ECEC services are required to base their programs for children on the EYLF, or on another approved learning framework (such as the Victorian Early Years Learning and Development Framework, which sets out the same outcomes as the EYLF). Outcome 3 of the EYLF is that ‘all children have a strong sense of wellbeing’. In the context of this Framework, ‘wellbeing includes good physical health, feelings of happiness, satisfaction and successful social functioning’. Outcome 3 includes two elements: ‘Children become strong in their social and emotional wellbeing’ and ‘children take increasing responsibility for their own health and physical wellbeing’ (Department of Education, 2009).

The EYLF explicitly addresses the importance of learning about health. It also addresses links between health, wellbeing and learning. The EYLF adopts a flexible, child-led approach to curriculum, compared with the more structured learning in schools (Press & Hayes, 2000). The challenge for health promotion in ECEC therefore lies not in instructing educators on what to teach children about health promoting knowledge and behaviours. Instead, it involves supporting them to develop their own confidence and competence to provide stimulating and impactful health education, and supporting children to develop their own health knowledge, skills and behaviours (Cleland et al, 2018). Australian research undertaken with Queensland ECEC



educators has demonstrated the effectiveness of professional development in significantly increasing educator knowledge of nutrition and physical activity guidelines, as well as inclination to change their practices in this area, including through partnership with families (Cleland et al, 2018).

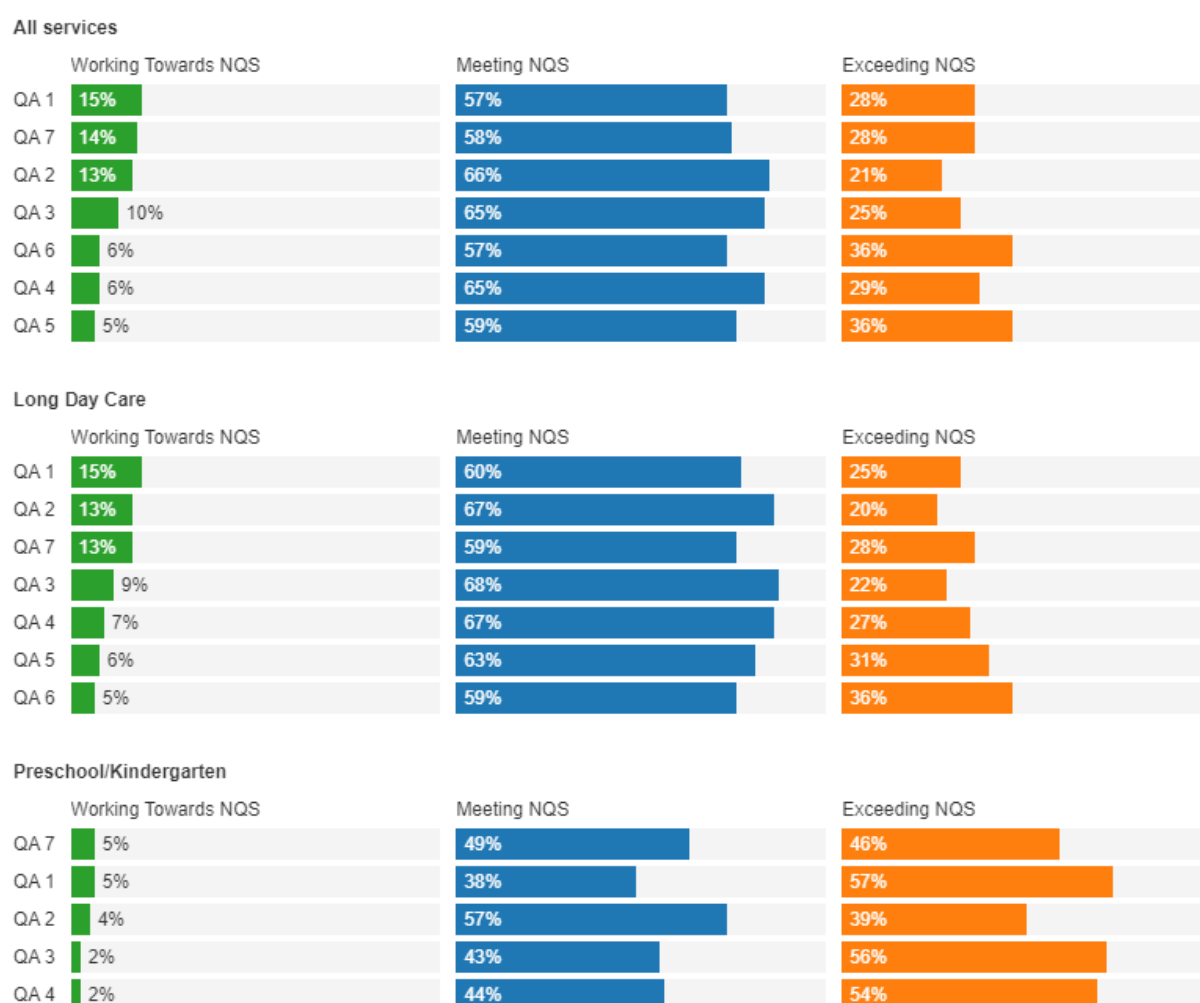
- **The National Quality Standard (NQS), linked to the EYLF, requires all services to meet health and safety standards, and services are assessed and rated against the NQS.** Quality Area 2 (QA2) is children’s health and safety, comprising sub-areas of health and wellbeing; and child protection and physical safety (see appendix for more detail). The areas of assessment of health for QA2, all of which relate to health promotion, are:
  - Each child’s wellbeing and comfort is provided for, including appropriate opportunities to meet each child’s need for sleep, rest and relaxation.
  - Effective illness and injury management and hygiene practices are promoted and implemented.
  - Healthy eating and physical activity are promoted and appropriate for each child.

Taking a broad view of health promotion (see page 7) means that other standards are also relevant to this discussion, on the basis that they relate to children’s social and emotional wellbeing. While this briefing focuses primarily on QA2 to ensure a focused and manageable analysis, it is worth noting the particular importance of the physical environment (QA3), relationships with children (QA5) and collaborative partnerships with families and communities (QA6) to health promotion, as well as the contribution of other quality areas.

- **Data shows that there is room for improvement in promoting health in ECEC settings.** While 87% of all children’s services meet or exceed the NQS relating to health and safety (Quality Area 2), it is the least likely of all standards to be rated ‘Exceeding NQS’, and the third most likely (out of seven) to be rated ‘Working Towards NQS’ (ACECQA, 2019). This suggests that services’ work in this area focuses more on compliance or achievement of minimum standards, and less on excellence. Analysis by ACECQA notes that ‘much of the focus of Quality Area 2 is on the minimum standards’ (ACECQA, 2016, p. 49). It also notes ACECQA’s role in providing guidance and support materials, as well as professional development support. Taken together, this suggests an opportunity to develop, promote and support a shared understanding of what excellence in health promotion looks like within an ECEC setting.

- Families most likely to need support, and most likely to benefit, are missing out on high quality ECEC, including quality health promotion.** Evidence shows that provision of high quality ECEC benefits all children, but the effects are strongest for children experiencing disadvantage (Taggart, 2015). However, children and families living in low socio-economic status (SES) communities and in rural and remote areas are more likely to experience poor health (AIHW, 2019c), and less likely to receive high quality ECEC (including health promotion) compared with children in high-SES areas (Torii et al, 2017). The gap between service quality in relation to health and safety is particularly large for services in rural and remote areas of Australia, compared with services in urban areas (ACECQA, 2016). There are also significant gaps between service types, as shown in Figure 1.

Figure 1 NQS ratings for Australian ECEC services by quality area and service type



Source: ACECQAb, 2019

- **Some jurisdictions and organisations are in the process of extending existing workplace and school health programs to include ECEC providers.** One example is the Victorian Government's Achievement Program, based on the World Health Organization's Health Promoting Schools model, and developed in conjunction with the Victorian Department of Health and Human Services, and the Department of Education and Training. Another area is mental health, where a national approach contrasts with individual state/territory approaches that have traditionally dominated health education (see Box One for detail).

## Box One: Joining up health education approaches

Over the past five years, it has become apparent that there is a substantial difference between how Australia approaches mental health in early childhood and school education, and the approach taken to improve physical health. Both mental and physical health have traditionally been the primary responsibility of state and territory governments, driving strategy, programs and provision, with support from the Commonwealth.

This has resulted in a plethora of separate health promotion programs operating in each state and territory, often with similar aims, targeting similar audiences. Nutrition and physical activity programs include Munch & Move, Supporting Nutrition for Australian Childcare (SNAC), Smart Moves and Smart Choices, and Crunch&Sip (to name a few). Sun protection programs under the auspices of the SunSmart program are managed and delivered as separate state/territory-based programs, with varying levels of funding and capacity.

This patchwork of state and territory-based programs also characterised Australia's approach to mental health promotion in childhood until very recently. In 2014 the National Mental Health Commission reported on its Review of Mental Health Programmes and Services, finding 'a patchwork of services, programmes and systems for supporting mental health [including prevention and education]', and recommending development of 'a system-wide framework for child and adolescent mental health' (National Mental Health Commission, 2014, p. 13).

The Government's response committed to working across portfolios to develop 'a single integrated end to end school based mental health programme ... [to] support promotion and prevention ... and help to build resilience skills. The consolidated approach will build on the success of KidsMatter and MindMatters, covering the continuum from early childhood to secondary school' (Department of Health, 2015, p. 15).

The resulting initiative, BeYou, will significantly streamline approaches to mental health in education settings, in contrast to Australia's approach to physical health. This will test the assumption that health education is primarily the responsibility of state and territory governments. There is a sound rationale for questioning this assumption, given the vast amount of resources invested in developing and running separate systems, that seek to address the same health challenges. But how this approach works in practice, and integrates effectively with education and health services provided by the state, remains unknown at this stage.

- **Service policies are better developed in some areas of health promotion than others.** Health policies in some areas (e.g. sun protection) are mandated by regulation by several health areas, but in other areas are not (e.g. physical activity, and infant feeding and nutrition (McGuire et al, 2018; Christian et al, 2018)). This can make a difference to both the existence and implementation of health policies in children's services. A recent study found that only 16% of 104 ECEC services in Perth had developed and were implementing a policy on physical activity (Christian et al, 2018). The same study also found that only 64% of children in ECEC met US

recommendations for 15 minutes of physical activity per hour, every hour (Christian et al, 2018)<sup>3</sup>. The first comprehensive analysis of infant feeding policies and the NQF revealed inadequacies in both public policy and service policies, and substantial scope for increasing the ECEC sector's capacity to improve infant health and wellbeing (McGuire et al, 2018).

Australian studies have identified a need for more comprehensive and accessible health resources for services and educators (Wallace et al, 2019 & Christian, personal communication, 18 October 2019). A recent rapid synthesis concluded that ease of implementation and the quality of guidelines were critical to whether or not health care guidelines result in practice change and improved health outcomes (Clinton et al, 2018). This suggests that improvements to the health promotion resources provided to educators, underpinned by research into how they are used, may have significant effect on quality of practice (Wallace et al, 2019).

- **Integration of health promotion in ECEC services has demonstrated effectiveness, but varies between jurisdictions.** Integrated services that focus on supporting highly disadvantaged and traumatised children, have demonstrated significant results in disadvantaged communities. One example is the former Kids First Child and Family Centre in Heidelberg West, Victoria (also known as the Early Years Education Project); another is Tasmania's Children and Family Centres (or CFCs, see Box Two). These initiatives have demonstrated impact across a range of areas, from improving health and wellbeing of children and parents, through to language and cognitive gains for children (Fordham, 2011 & Hopwood, 2018).

Although integrated services are likely to appeal to many families due to convenience, accessibility, and for social reasons, they can be expensive to establish and operate. However, where deep and persistent disadvantage exists, they are likely to represent a good return on investment. In communities not facing high levels of disadvantage, more cost-effective measures to integrate health expertise and parental involvement exist, are examined in the following section.

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<sup>3</sup> Australian physical activity guidelines are for total physical activity in a 24 hour period. Because children attend ECEC for different durations, it is problematic to expect them to achieve these guidelines while at ECEC. This report refers to US recommendations on the amount of active time per hour in ECEC, and work is currently being undertaken in Australia to develop similar guidelines, suited to the Australian context.

## Box two: Tasmania's Child and Family Centres

Established as a whole-of-government response to children and families' service needs, Tasmania's Child and Family Centres (CFCs) aim to improve the health, wellbeing, education and care of Tasmanian children under five, by improving service quality and accessibility in and tailored to local communities.

CFCs are located in areas of high socio-economic disadvantage, co-designed with communities, and provide a range of services in education, health, children and youth, and community development. The approach to setting up and running CFCs was guided by the EYLF (Taylor et al, 2017).

Research has demonstrated strong outcomes in promoting children's physical, cognitive and emotional development, and evidence of 'extraordinary trajectories of change for parents' in areas such as the quality of parent/child relationships, parenting skills, and development of community connections (Hopwood, 2018).

CFCs sought to go beyond co-location to achieve genuine integration, noting that professionals tended to focus on specific aspects of children's development and families' needs, in a way that was not characterised by a holistic, ecological view of the child. A comprehensive learning and development strategy sought to equip professionals and community members with the supports and skills to collaboratively achieve CFC outcomes (Prichard et al, 2015).

Tasmania's CFCs provide an excellent model for working with families, integrating health expertise into education settings (and vice versa), and maximising families' pathways into both health and early learning (Taylor et al, 2017).

- **Shifting from compliance to excellence in health promotion in ECEC.** The NQS data indicates ample scope to increase the proportion of services achieving 'Exceeding NQS' ratings in supporting children's health and safety. This may involve encouraging services to move from a focus on the minimum standards (ACECQA, 2016), to striving for excellent practice that actively involves children in understanding and managing their own healthy and safe behaviours. Practice that exceeds the NQS may also include actively involving families in supporting children's learning about health and safety in the home, and encouraging health promotion for the entire family. The ACECQA themes for Exceeding NQS practice provide other suggestions for how services can lift their promotion of children's health and safety to the highest level of practice (ACECQA, 2018).

Other government resources can also help ECEC services determine benchmarks for high standards of practice. A good example of this is the Victorian Achievement Program's work on physical activity and active play benchmarks (Victorian Government, 2012). ECEC services can use these resources as foundations for their promotion of children's health and safety, while recognising that the highest quality practice involves thoughtful, intentional interactions between educators and children about health and safety issues, not just following standard procedures.

# The evidence

The evidence base on the role and impact of ECEC services in promoting health, and improving health outcomes, is rapidly growing, and has developed substantially in recent decades. Research has clearly demonstrated the significance of the first five years on development and health outcomes through childhood and into adulthood (Moore et al, 2017), and a substantial amount of policy attention is being paid to the role of ECEC in supporting good health (Logan et al, 2015 & Department of Health, 2019). This section provides an overview of relevant research; where gaps remain, and current efforts to address these.

**Disadvantage worsens health outcomes, but ECEC can reduce its effects.** Families experiencing disadvantage are at greater risk of developing chronic disease, which limits life opportunities (Boyce and Hertzman, 2018). These families benefit from more intensive assistance to protect and improve their health, wellbeing and development. For children in these families, engaging in high quality ECEC significantly improves healthy development (AIHW, 2015b) and even reduce rates of hospitalisations in childhood (Cattan et al, 2019). There is also evidence that interventions focusing specifically on health may have particularly strong and positive effects among socioeconomically disadvantaged groups and ethnic minority children (Chang et al, 2019 & Craike et al, 2018).

**The evidence base on health promotion in ECEC contains significant gaps, and high-quality policy research is particularly underdeveloped.** In ECEC settings, published literature on the practices and outcomes associated with health promotion is scarce (Hodder et al, 2017 & Rodriguez-Ayllon, 2019). This challenge is not only pertinent to the ECEC sector; research on school-based health literacy programmes in peer-reviewed literature also remains limited, despite health promotion programs being embedded in schools for many years (Peralta, 2017 & Wolfenden et al, 2017).

There is a particular paucity of evidence that considers the breadth of issues relevant to policy-making, including costs, potential adverse effects, and the impact of interventions that are time-bound compared with sustained interventions (i.e. embedded in programs) (Finch et al, 2016). Some research in this area has emerged over recent decades, and is enabling evidence-informed policy-making, but substantial gaps remain. Addressing these gaps would contribute to operational enablers identified in the National Action Plan for the Health of Children and Young People 2020-2030, which relate to strengthening the evidence base, strategic cohesion and stakeholder collaboration (Department of Health, 2019).

**The evidence base, albeit limited, shows that embedding health promotion in ECEC policy and practice is an area worthy of investment.** Numerous studies have measured positive effects of physical and mental health interventions on young children (Pikora et al, 2016; Cushing et al, 2014; Bellon et al, 2015 & Pozuelo et al, 2018). A particularly compelling component of the evidence base is the cost-effectiveness of intervening early, compared with the high costs of addressing preventable health problems later on, in adolescence and adulthood (Moore, 2017 & The Front Project, 2019).

Benefits have been measured in terms of reducing health problems and increasing health-related competencies (Durlak, 1997). Several evidence reviews show that interventions can be effective for increasing physical activity and reducing sedentary behaviour (Wang et al,

2018 & Downing et al, 2018). One of the highest profile and longest running programs in Australia, SunSmart, has demonstrated significant impact on sun protection behaviours and reduced rates of melanoma (see Box Three).

Although there is limited research examining the link between physical activity and educational outcomes in the early years, a number of studies have demonstrated positive associations between increased physical activity in ECEC settings and cognition and metacognition in children (Alvarez-Bueno, 2017 & Norris et al, 2015).

Many studies have found the involvement of parents to be an important factor to the success of educational and health interventions (Verjans-Janssen et al, 2018; Nigg, 2016 & Craike et al, 2018). Evidence also supports the efficacy of interventions that address the complexity of health conditions and their drivers, and interventions that are sustained or embedded in educational programs (Ward et al, 2017). Other factors influencing success include frequency and structure of interventions or programs; use of theory to guide development; design or delivery by experts; levels of influence; ease of implementation; ongoing support and maintenance; and duration of intervention (Pikora et al, 2016 & Ward, 2017). Some studies have identified a gap between 'real world' interventions (pragmatic interventions) and explanatory interventions (trials undertaken in ideal conditions) (Koppelaar et al, 2011), highlighting that for change to occur, a focus on implementation is critical.

**Limitations of the evidence base are broadly in line with a lack of investment in preventive health and implementation research more broadly, over the past ten years.**

A limited focus on preventive health in Australia over the past five years, since the Australian National Preventive Health Agency was disbanded in 2014, has been a barrier to development of the evidence base, and a more systematic and strategic approach to health promotion within the ECEC system (Prevention United, 2019 & Liu, 2017). There are indications that this is shifting, with work currently underway on a National Preventive Health Strategy and a National Obesity Strategy. Preliminary documents from the National Preventive Health Strategy suggests that the long-term strategy will consider the importance of a lifecourse approach, beginning in the early years. Implementation research is essential to provide empirical support for how to effectively implement health promotion programs in to ECEC settings. Testing implementation strategies and reporting on implementation outcomes will provide essential, but rarely reported evidence to support implementation and intervention scale-up.

## Box Three: SunSmart

SunSmart is one of Australia's biggest public health success stories. Beginning as a small-scale, Melbourne-based program, SunSmart has grown into a national, multi-component skin cancer prevention program with an international reputation for excellence, and a rich evidence base examining its impact (Tabbakh, 2019).

While not an original focus of the program, ECEC services are important implementation partners. Some excellent SunSmart resources have been developed specifically for early childhood educators. *Be SunSmart, Play SunSmart* explores how SunSmart practices can support and promote learning across the EYLF outcomes, including methods of increasing sun protection knowledge and practices through games and group projects. Investment in similar publications, addressing other health challenges, would provide educators with a rich resource to guide program development and practice.

Significant impact has been demonstrated across a number of areas over the past 30 years. Sun protection increased rapidly early on, with a three-fold increase in the use of one or more sun protection behaviours in the 1990s (Montague et al, 2001). Rates of melanoma in younger cohorts that grew up in the Slip! Slop! Slap! Era are levelling (Public Health Association Australia, 2018). Incidence of melanoma in the 60+ age group continue to climb, though earlier detection is leading to better treatment and long-term outcomes (Public Health Association Australia, 2018).

SunSmart has grown and been shared between jurisdictions without the need for Australian Government intervention, with funding coming primarily from state/territory governments and Anti-Cancer Councils. But given the need for sustained funding to ensure ongoing impact on health outcomes, there is a strong argument for a national approach to ensure financial stability, not only in the area of sun protection, but in other public health campaigns.

## Policy options

There are several areas in which greater cooperation between levels of government, and greater investment of health expertise and effort in ECEC provision, would be beneficial. These recommendations focus on areas in which the Australian Department of Health might usefully expand its leadership and convening role, to support and promote best practice by states and territories, and NGOs and to assist in driving a culture of excellence in health promotion across the ECEC sector:

- **Support ECEC providers with high-quality, relevant health promotion resources.** The Department of Health has a strong track record in producing high-quality resources to guide health promotion, and could play a greater role in this area in ECEC. This could include, for example, guidance and support on policy development and implementation in services, as well as guidance related to teaching and learning about specific health areas, in the context of a play-based approach. Many tools exist already, but locating them, and assessing quality and effectiveness, may be challenging.

Future resources should be informed by consultation with ECEC practitioners about how existing resources are being accessed and used. Resources for use with children should be dynamic and age-appropriate, and may include resources using a variety of



media. Development of a single repository is a function that could be undertaken at a national level to support states and territories, and reduce duplication of effort.

- **Investigate the cost-effectiveness of nationally funded health promotion**, where states and territories are currently duplicating work on health issues of national importance. This work is already being done in relation to mental health in childhood – the approach and funding mechanisms should also be considered in relation to other relevant health challenges, for example overweight, obesity, physical activity, nutrition and sun protection. Any multi-media campaigns should consider usability in different settings, and for different audiences, including children of all ages. These could then be included in health promotion in ECEC and schools, to increase reach and impact. Funding should be ongoing rather than programmatic, in order to achieve long-term impact on health outcomes.
- **Monitor and invest in innovation, particularly for disadvantaged communities.** The Australian Government has, in the past, provided additional funding for ECEC services in rural and remote areas. Further investment, potentially incorporating learning from Tasmania’s CFCs, is an option worth exploring in rural and regional communities in Australia (Press & Hayes, 2000). There is also potential for substantial return-on-investment by targeting additional resources to ECEC services in disadvantaged communities to lift the quality of practice in this areas, and improve health outcomes for young children. Fully integrated services represent an effective, place-based and targeted response to disadvantage, and appear to warrant the significant investment involved in their establishment.
- **Increase investment in research, including a focus on the role of ECEC.** As previously outlined, this is a growth area for research, but significant gaps remain. Initiatives such as the First 1000 Days, by a consortium comprising Bupa, the Bupa Health Foundation, the Australian Research Alliance for Children and Youth and PricewaterhouseCoopers, have recommended establishment of platforms and procedures for continuous review of the evidence; dissemination of evidence; research-to-policy translation; and research-to-practice translation (Moore, personal communication, 18 September 2019). Evidence translation can be expedited through investment in implementation-focused research. Practice-to-policy translation is also important, to enable the evidence from educators’ day-to-day practice to help guide change at the system level. Collaboration across levels of government and portfolios in research investment could better target resources to benefit all Australian ECEC services (Teager et al, 2019).
- **Improve links between health and education research in relation to ECEC.** There is strong bipartisan support for development of the National Evidence Institute, which will focus on generating, reviewing and disseminating evidence to inform educators’ practice, system improvement and policy development. The Institute, recommended by the 2017 Review to Achieve Educational Excellence in Australian Schools (the second Gonski Review), is currently under development. Health education and promotion, and

the links between health and education, should be incorporated into the Institute's program of work. Given that this is currently under development, this provides an excellent opportunity for inter-departmental collaboration, building on existing collaboration in this area. Another option to explore is to forge links between the new National Evidence Institute and the Australian Institute for Health and Welfare.

- **Integrate strategies for early childhood and ECEC settings into national health strategies.** The importance of ECEC settings is mentioned in the 2019 National Action Plan for the Health of Children and Young People (Department of Health, 2019). There is also scope for improving the quality of consultation and integration of health promotion in ECEC in emerging strategies such as the National Preventive Health Strategy, the National Obesity Strategy, and the Early Childhood Activity Strategy.

This briefing focuses on potential areas of interest and policy options for consideration by the Department of Health, and therefore does not include a focus on areas where responsibility lies primarily with states and territories, or where wider structural issues sit outside of the Department of Health's remit. This does not discount the critical importance of addressing the underlying causes of disadvantage and poor health, particularly those that impact on young children in their daily lives. This should include, but is not limited to, effectively addressing the social determinants of health; adoption of a range of regulatory measures proven to work elsewhere (for example, a levy on sugar-sweetened beverages (Teng et al, 2019) and reducing promotion of low nutrition foods (Cairns, 2013)); and developing healthier communities and cities that support active lives and social connectedness (Moore, 2011; Lindberg et al, 2016 & National Heart Foundation, 2012).

None of these overarching goals, or even the specific policy options outlined above, are likely to affect any significant change unless they are grounded in a collaborative approach. Achieving better health in early childhood and beyond, and reducing the impact of inequality early on, requires partnerships between governments, ECEC service providers, and communities, underpinned by a shared commitment to fostering healthy, active childhoods throughout Australia.

# Appendix One

## Quality Area 2 of the National Quality Standard: Health and Safety

All standards, quality areas and the overall quality rating are assessed on a four-point scale:

- Exceeding NQS
- Meeting NQS
- Working Towards NQS
- Significant Improvement Required

In addition, a provider with a service that has an overall rating of Exceeding NQS may choose to apply to ACECQA to be assessed for the 'Excellent' rating.

<b>Standard 2.1</b>	<b>Health</b>	<b>Each child's health and physical activity is supported and promoted.</b>
<b>Element 2.1.1</b>	Wellbeing and comfort	Each child's wellbeing and comfort is provided for, including appropriate opportunities to meet each child's need for sleep, rest and relaxation.
<b>Element 2.1.2</b>	Health practices and procedures	Effective illness and injury management and hygiene practices are promoted and implemented.
<b>Element 2.1.3</b>	Healthy lifestyle	Healthy eating and physical activity are promoted and appropriate for each child.
<b>Standard 2.2</b>	<b>Safety</b>	<b>Each child is protected.</b>
<b>Element 2.2.1</b>	Supervision	At all times, reasonable precautions and adequate supervision ensure children are protected from harm and hazard
<b>Element 2.2.2</b>	Incident and emergency management	Plans to effectively manage incidents and emergencies are developed in consultation with relevant authorities, practised and implemented
<b>Element 2.2.3</b>	Child protection	Management, educators and staff are aware of their roles and responsibilities to identify and respond to every child at risk of abuse or neglect.

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