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NATIONAL OUTCOME MEASURES FOR EARLY CHILDHOOD DEVELOPMENT—PHASE 2

Scoping paper

Australian Government
Australian Institute of Health and Welfare

Authoritative information and statistics to promote better health and wellbeing

National outcome measures for early childhood development—phase 2

Scoping paper

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Abbreviations

ABS	Australian Bureau of Statistics
ACARA	Australian Curriculum, Assessment and Reporting Authority
AEDC	Australian Early Development Census p63 in full & with abbrev.
AIFS	Australian Institute of Family Studies
AIHW	Australian Institute of Health and Welfare
CEaCS	ABS Childhood Education and Care Survey
COAG	Council of Australian Governments
DSS	Department of Social Services
ECD	Early Childhood Development
GSS	General Social Survey
HSBC	Health Behaviour in School-aged Children survey
HILDA	Household, Income and Labour Dynamics in Australia survey
IRSD	Index of Relative Socio-economic Disadvantage
LSAC	Longitudinal Study of Australian Children
LSIC	Longitudinal Study of Indigenous Children
NAPLAN	National Assessment Program—Literacy and Numeracy
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NSOS	National Schools Opinion Survey
OECD	Organisation for Economic Co-operation and Development
SEIFA	Socio-Economic Indexes for Areas
SLAS	School Liking and Avoidance Scale
WHO	World Health Organization

Summary

This report constitutes Phase 2 of the National Outcome Measures for Early Childhood Development project. Developing an indicator-based reporting framework for early childhood development will enable monitoring of achievements against the Early Childhood Development Outcomes Framework outlined in the National Early Childhood Development Strategy, *Investing in the early years* (the ECD Strategy), released by the Council of Australian Governments (COAG) in July 2009.

The ECD Strategy is designed to guide Australia's comprehensive response to evidence about the importance of early childhood development, and the benefits—and cost-effectiveness—of ensuring that all children experience a positive early childhood from before birth through the first 8 years of life.

Phase 1 of the National Outcome Measures for Early Childhood Development project recommended 20 indicator topic areas for reporting against the Early Childhood Development Outcomes Framework included in the ECD Strategy. Indicators with data sources were recommended for 13 of the 20 topic areas. This work was published in the report *National outcome measures for early childhood development: development of an indicator-based reporting framework* (AIHW 2011b).

The main focus of Phase 2 was to review potential indicators and/or data sources for the remaining 7 topic areas that required additional work at the end of Phase 1. Five topic areas required indicator development (child behavioural problems, peer relationships, cultural appropriateness, school engagement and parenting quality/capacity) and 2 topic areas required investigation of potential data sources (social and emotional wellbeing, and family social networks).

Forty potential indicators have been put forward in this report as being conceptually suitable across the 5 topic areas that required indicator development. There are 8 indicators with available data sources across 4 of the 5 topic areas. However, for the 'school engagement' topic area, none of the indicators discussed have an available data source.

Further consideration should be given as to whether the 8 indicators with available data are the most appropriate for the constructs measured, whether options should be explored for incorporating identified indicators with no available data source into existing surveys, or whether a new national early child development survey should be established to collect the necessary data for reporting against the Early Childhood Development Outcomes Framework.

For the 2 topic areas requiring investigation of data availability—'social and emotional wellbeing' and 'family social networks'—suitable data should become available during 2015.

1 Introduction

This scoping paper constitutes phase 2 of the National Outcome Measures for Early Childhood Development project. It builds on work carried out as part of phase 1, which resulted in the publication by the Australian Institute of Health and Welfare of the report *National Outcome Measures for Early Childhood Development: development of an indicator-based reporting framework* (AIHW 2011b).

Background

The Council of Australian Governments (COAG) released the National Early Childhood Development Strategy, *Investing in the early years* (the ECD Strategy) in July 2009. The Strategy will guide Australia's comprehensive response to evidence about the importance of early childhood development, and the benefits—and cost-effectiveness—of ensuring that all children experience a positive early childhood from before birth through the first 8 years of life (COAG 2009).

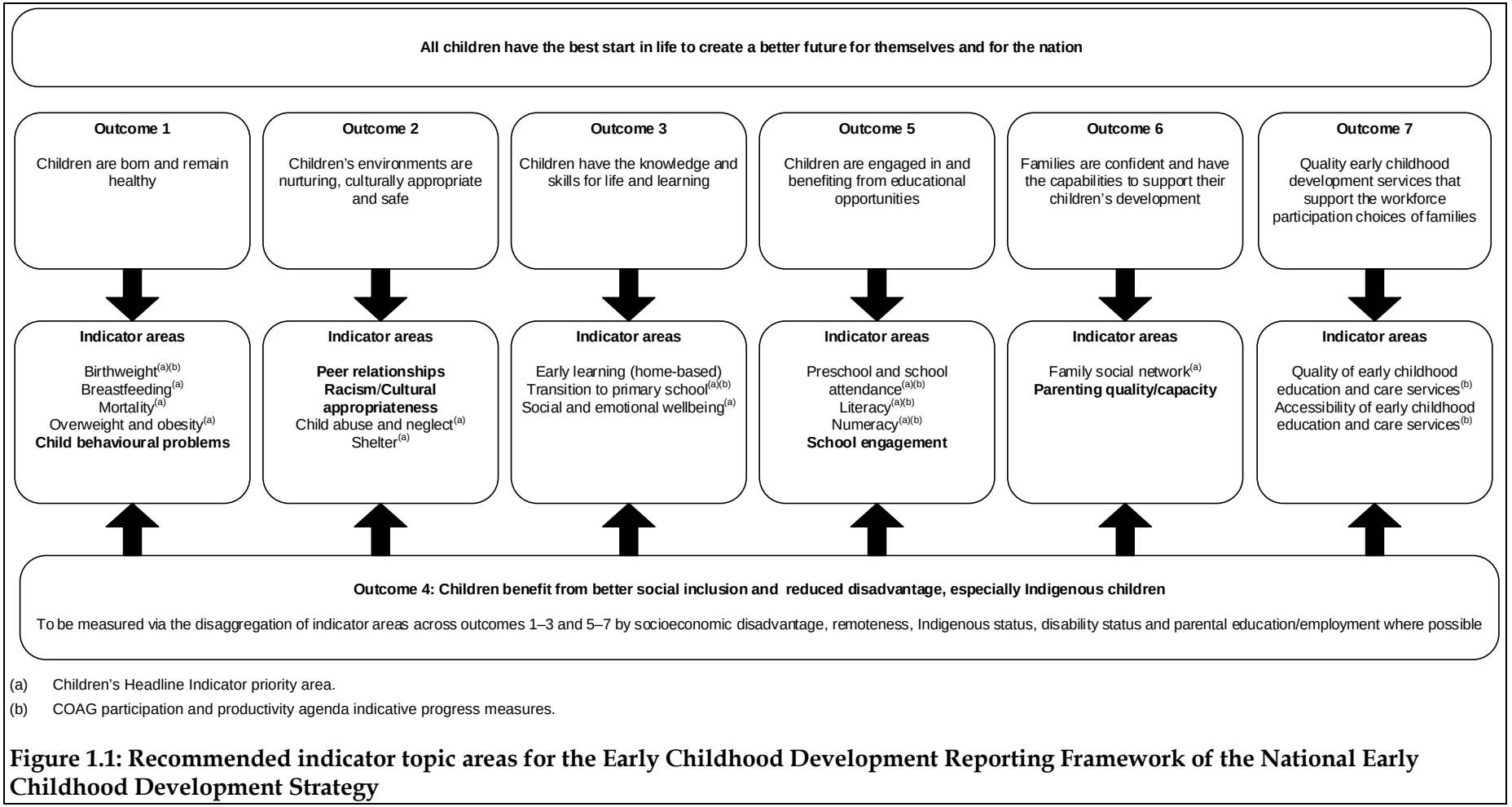
One of the key reform priorities in the ECD Strategy is to build better information and a solid evidence base. The National Information Agreement on Early Childhood Education and Care was established to progress this, with data sharing being integral to the Agreement. The Agreement remains in place until February 2015 and, subject to a review, for a further period as agreed by all parties.

Establishing national outcome measures for early childhood development was seen as essential in building and developing the evidence base. An associated project is the National Early Childhood Development Researchable Dataset, where the aim is to create a linked national dataset on children from birth to the early years of schooling (AIHW 2014b).

The ECD Strategy includes an Early Child Development Outcomes Framework (ECD Outcomes Framework), which reflects the early childhood reform priorities agreed by COAG in 2008. The Framework focuses on what Australia needs to achieve to fulfil the vision that 'by 2020 all children have the best start in life to create a better future for themselves and for the nation'. The Framework has 7 outcomes, of which 5 focus on the developmental pathway of the child, and 2 recognise the importance of the family:

- Children are born and remain healthy.
- Children's environments are nurturing, culturally appropriate and safe.
- Children have the knowledge and skills for life and learning.
- Children benefit from better social inclusion and reduced disadvantage, especially Indigenous children.
- Children are engaged in and benefiting from educational opportunities.
- Families are confident and have the capabilities to support their children's development.
- Quality early childhood development services [are established] that support the workforce participation choices of families.

In 2009–10 the AIHW was engaged to develop a set of national outcome measures for early childhood development. The first phase of this project resulted in the publication by the AIHW of the report *National Outcome Measures for Early Childhood Development: Development of an Indicator-based Reporting Framework* (AIHW 2011b). The report recommended 20 indicator topic areas for reporting against the ECD Outcomes Framework (Figure 1.1).



(a) Children's Headline Indicator priority area.

(b) COAG participation and productivity agenda indicative progress measures.

Figure 1.1: Recommended indicator topic areas for the Early Childhood Development Reporting Framework of the National Early Childhood Development Strategy

At the conclusion of Phase 1, indicators with data sources (anticipated to be available for reporting by 2016) were recommended for 13 of the 20 topic areas.

Five topic areas required further work to conceptualise and establish the most important aspects for children's health, development and wellbeing. These 5 topic areas were: child behavioural problems, peer relationships, cultural appropriateness, school engagement, and parenting quality/capacity.

For a further 2 topic areas (social and emotional wellbeing, and family social network), data sources needed to be found.

A summary of the data development and reporting status of the 20 indicator topic areas, which includes developments since Phase 1, is outlined in Table 1.1.

Table 1.1: Data development and reporting status of indicator topic areas for reporting against the ECD Outcomes Framework

Data currently available or expected to be available in 2016				
Birthweight	Breastfeeding	Mortality	Overweight and obesity	Child abuse and neglect
Shelter[(a)]	Early learning	Transition to primary school	Preschool and school attendance[(b)]	Literacy
Numeracy	Quality of early childhood education and care services[(c)]	Accessibility of early childhood education and care services		
No national data source currently available				
Social and emotional wellbeing	Family social network			
Considerable indicator and data development required				
Child behavioural problems	Peer relationships	Racism/Cultural appropriateness	School engagement	Parenting quality/capacity

(a) The operationalisation of this indicator requires further investigation prior to reporting.

(b) Nationally comparable data is expected to be collected from 2015 (for more information see Appendix C, *National Report on Schooling in Australia)*.

(c) Exact date for the availability of a nationally complete set of data is still to be confirmed.

Phase 2

In 2013, AIHW was engaged by the Australian Government Department of Education to undertake a second phase of the project. The aim of Phase 2 was to build on the previous work by undertaking the following tasks:

- review all the indicators proposed as part of the ECD Outcomes Framework in the light of policy developments at the time of assessment to ensure their relevance
- develop performance indicator specifications for the 13 indicators which have been defined and for which data sources are available, or expected to become available
- investigate and scope the development of indicators which were not defined and/or for which no data source was found in Phase 1 (7 indicators)
- assess the feasibility of these indicators for further development and for reporting against the ECD Outcomes Framework

- develop a report which includes performance indicator specifications and the outcomes of data development activities.

The relationship between the work completed as part of Phase 1, and the new work undertaken as part of Phase 2 is conceptualised in Figure 1.3 below.

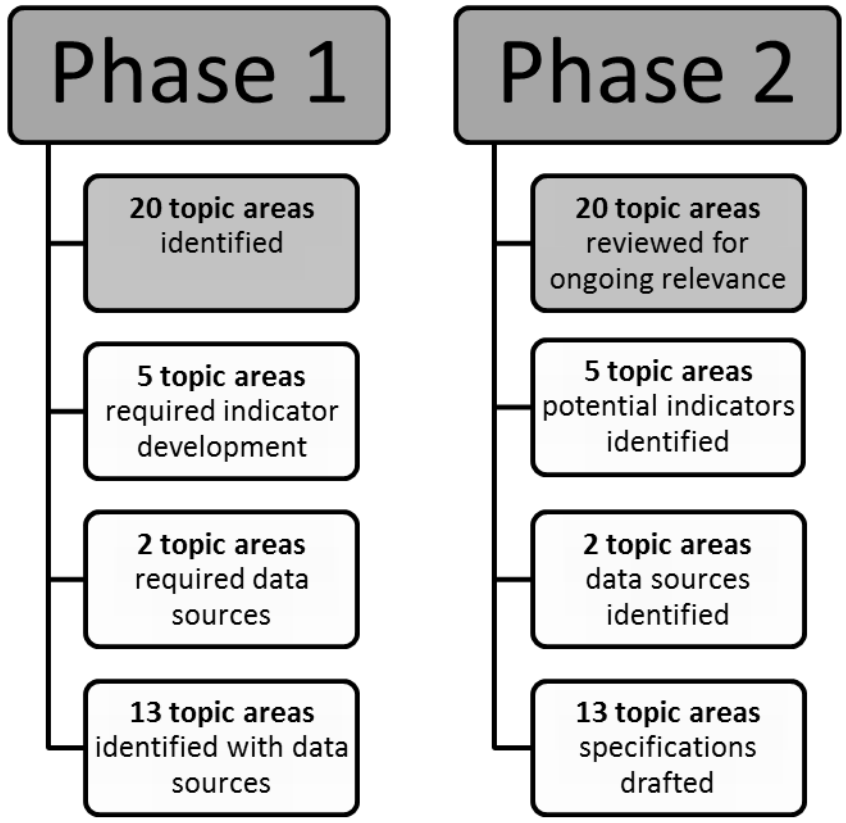


Figure 1.3: Relationship between Phases 1 and 2 of the National Outcome Measures for Early Childhood Development project

This report constitutes the scoping paper resulting from the work undertaken in 2013, and is structured as follows:

Chapter 2 investigates and scopes the development of indicators that were not defined during Phase 1 (5 indicators) and/or for which there were no data (2 indicators). The chapter sets out a number of potential options for reporting against the ECD Outcomes Framework, and assesses the feasibility of reporting against these measures, including the data development needed.

Chapter 3 provides technical indicator specifications for the 13 indicators already defined in Phase 1, and for which data sources are available or are expected to become available.

For both the indicator development task and the drafting of technical specifications, alignment with revised indicators in various National Agreements and National Partnership Agreements was sought to ensure relevance to policies at the time of assessment. These are discussed in various relevant sections of Chapters 2 and 3. New data sources resulting from government initiatives instigated after the completion of Phase 1 are also discussed in relevant sections of Chapters 2 and 3.

2 Indicators to be developed

This chapter investigates and scopes the development of possible indicators for the 5 topic areas for which no indicator was defined during Phase 1 of the Project. It also provides an update on data availability for 2 indicators which were defined in Phase 1, but for which no data were then available.

For the 5 topic areas requiring indicator development, the topic areas are defined and conceptualised, potential options for reporting against the ECD Outcomes Framework are set out, and the feasibility of reporting against these measures is assessed, including any data development needed.

The 5 indicator topic areas requiring further development are:

- Behavioural problems (Outcome 1: Children are born are remain healthy)
- Peer relationships (Outcome 2: Children's environments are nurturing, culturally appropriate and safe)
- Racism/cultural appropriateness (Outcome 2: Children's environments are nurturing, culturally appropriate and safe)
- School engagement (Outcome 5: Children are engaged in and benefiting from educational opportunities)
- Parenting (Outcome 6: Families are confident and have the capabilities to support their children's development).

Details on how these topic areas were selected are provided in *National outcome measures for early childhood development 2011* report (AIHW 2011b).

The 2 indicator topic areas requiring national data sources to enable reporting are:

- Social and emotional wellbeing (Outcome 3: Children have the knowledge and skills for life and learning)
  - Indicator: Proportion of children scoring 'of concern' on the Strengths and Difficulties Questionnaire
- Family social networks (Outcome 6: Families are confident and have the capabilities to support their children's development)
  - Indicator: Proportion of children aged 0–12 years whose parent or guardian was usually able to get help when needed.

The 5 topic areas requiring indicator development are discussed in turn first (Sections 2.1 to 2.5). The 5 indicator areas are at differing stages of development, and have differing data collection and reporting issues. Consequently, each is treated slightly differently. The topic areas of peer relationships, school engagement and parenting yielded a large number of potential indicators, but only those directly relevant to the age group 0–8 are included in the chapter discussion. A full overview of potential indicators for these areas is included in the Appendix B table.

The final sections of this chapter (Sections 2.6 and 2.7) provide an update on the 2 indicators for which no data were available during Phase 1.

Process to define an indicator

The following initial steps were undertaken to determine suitable indicators for each of the above 5 topic areas requiring indicator development. This process was based on the indicator data development work undertaken for the Children's Headline Indicators (AIHW 2010b, AIHW 2010c, AIHW 2012b, AIHW 2014a):

- A review of the literature to establish a definition and conceptual basis for the indicator topic area, and associations between the indicator topic area and outcomes for children. The literature reviews for each of the 5 indicator topic areas built on those provided in the Phase 1 report (AIHW 2011b).
- A review of relevant national and international frameworks and indicator reports to select potential indicators. The frameworks consulted were those used during Phase 1 of the project. (See Table A2.1 of *National outcome measures for early childhood development 2011* [AIHW 2011b] for more details.)

Selection criteria

The following selection criteria were proposed for potential indicators:

- appropriateness to the ages 0–8
- worth measuring—that is, does it reflect how Australian children are faring for a broad conceptual issue
- relevant to Australian Government and state and territory government policy agendas at the time of selection
- sensitive to intervention and amenable to change
- clear in meaning, easily interpreted, and based on sound empirical evidence
- able to be reported on using data collected, analysed and reported in a statistically reliable and valid way, and measured consistently and repeatedly over time
- capable of reflecting differences and diversity (that is, disaggregations).

During the Phase 1 Workshop participants recommended not to include self-report measures in the reporting component for the ECD Outcomes Framework. Differences in maturation mean many children cannot reliably and validly answer some questions, so the use of subjective measures among children aged 0–8 years was regarded as problematic. Consideration could be given to reviewing this approach for some topic areas, as some indicators, particularly in relation to peer relationships and bullying, have previously used self-report measures for children at the upper end of this age range.

In deciding on a particular indicator or construct for inclusion in the framework, decisions also need to be made on whether to select single- or multiple-item measures. Single-item measures can be more easily inserted into an existing data collection and associated data collection processes. However, they also tend to be less robust than composite scores because they measure only a single aspect of the indicator topic area (although they may have indirect links with other aspects of the indicator topic area).

2.1 Child behavioural problems

Background

Indicator area: Child behavioural problems (previously Mental Health)

Outcome 1: Children are born and remain healthy

At the *Workshop on the development of an indicator-based reporting framework for early childhood development* held in 2010 (hereafter referred to as the 'Phase 1 Workshop') there was strong support for the term 'mental health' to be dropped and the focus redirected to 'behavioural problems in children'. The decision was based on agreement that mental health is a complex indicator with many measurement, collection and reporting challenges to assess the mental health of children. A measure that is commonly used for mental and behavioural disorders is hospital separations. However, this was considered particularly unsuitable for children, as it would only capture children who are hospitalised for mental health problems. Child mental health problems are more likely to be treated outside of hospitals by general practitioners and other child health professionals. Further, while many mental health problems manifest in childhood and adolescence, clinical diagnosis of these problems does not emerge until later in life. Hence, information based on clinical diagnosis of a condition/disorder may not be the most appropriate measure among children.

Workshop participants proposed that behavioural problems can be measured using the Strengths and Difficulties Questionnaire (SDQ), a parent or teacher-completed questionnaire, thus allowing for interventions to be focused at the parent level. There is also an SDQ questionnaire available for self-completion by young people aged around 11–17 (Goodman 1997, Goodman 2005). However, this is not suitable for the age group considered in this report.

Since the publication of *National outcome measures for early childhood development: development of an indicator-based reporting framework* (AIHW 2011b), data development work on the social and emotional wellbeing indicator for the Children's Headline Indicators has been undertaken (see *Social and emotional wellbeing: development of a Children's Headline Indicator* 2012). The SDQ has also been recommended as the most suitable instrument for the social and emotional wellbeing indicator in the ECD Outcome Framework.

This chapter provides an overview of the definitional, measurement, collection and reporting challenges associated with an indicator on child behavioural problems. In particular, it assesses the feasibility of using the SDQ as a measurement tool for behavioural problems in the context of its existing function as a measurement tool for social and emotional wellbeing.

Definition and conceptualisation

The emotional attachments that children form during the first years of life are regarded critical for future healthy social and emotional functioning. A child's behaviour and emotional responses provide an indication of his/her social and emotional health (Barlow and Underdown 2005).

The term 'mental disorder' is generally not applied to young children because of questions about whether it is valid for this age group. There is a lack of strong evidence for stability and prognostic significance of preschool problems, especially in children under the age of 3 (Gardner & Shaw 2008). A key factor is the considerable variation in children's development trajectories which lead to large ranges in appropriate behaviour for a particular age.

Child behavioural problems can be broadly categorised as either 'externalising' or 'internalising'. Externalising behaviours, sometimes referred to as disruptive behaviours, refer to outward manifestations of the problem by the child. This includes oppositional defiance, hyperactivity, aggression and attentional symptoms (Bayer et al. 2009; Parry 2005; Gardner & Shaw 2008).

Children with 'internalising' behaviours, also referred to as emotional problems, experience inner emotional distress that may not be perceived by others. These behaviours include anxiety, shyness and withdrawal from peers, and depression (Bayer et al. 2009; Reid et al. 2008). These children may also have problems with interpersonal relationships, problem-solving skills or parental attachment issues (Reid et al. 2008). Emotional and behavioural problems have been cited as the most disabling of childhood health problems (Stewart-Brown 2005) and among the most prevalent chronic health conditions (Pastor et al. 2012).

Children's behaviour and emotional problems are partly inherited and partly a result of their environment (Bayer et al. 2009). Some researchers regard parenting style as the most important environmental factor, with harsh and abusive parenting contributing to externalising problems, and over-involved and protective parenting to internalising problems (Bayer et al. 2009). Intervention and preventative programs aim to develop children's behavioural skills, improve parenting styles, and teach parents how to manage their children's behaviour as well as increase their own wellbeing (Reid et al. 2008; Bayer et al. 2009).

Child behavioural problems and children's outcomes

Behavioural problems can have immediate negative consequences for children's functioning at home as well as at preschool or school in terms of relationships with family and peers (Reid et al. 2008). They are also a risk factor for school performance (Janus 2010). Emotional health plays an important role in preparing children to engage in cognitive tasks (Brauner et al. 2006).

In the longer term, emotional and behavioural problems that are not dealt with during the early years can become more serious and develop into full-scale, severe, long-term mental health problems. In adolescence this can also lead to juvenile delinquency and school dropout (Brauner et al. 2006; Reid et al. 2008; Janus 2010). Later in adulthood they can lead to further problems such as depression, substance abuse, family violence, criminality and family breakdown (Bayer et al. 2009).

Potential indicators and measurement tools: SDQ

The Strengths and Difficulties Questionnaire (SDQ) is a brief behavioural screening questionnaire measuring child mental health problems that can be administered to parents and teachers of children aged 4–17 and to young people aged 11–17 (Goodman 1997). A self-report version has also been developed for young people aged around 11–17. The SDQ contains 25 attributes, some of which are positive, and others negative. These 25 items are divided into 5 scales: emotional symptoms, conduct problems, hyperactivity, peer problems and pro-social behaviour. Scores from the first 4 scales can be summed to create a total difficulties score. The SDQ was originally designed as a screening tool for behavioural problems and risk of diagnosable mental health problems, but has also been used as a population measure of behavioural and emotional problems. The total difficulty score is a measure of overall child mental health problems that has been shown to have good psychometric properties in studies from around the world.

The SDQ is also an appropriate instrument for use among Indigenous people. A modified version of the SDQ was developed for use in the Western Australian Aboriginal Child Health Survey, as well as in Footprints in Time: the Longitudinal Study of Indigenous Children (LSIC), and in the Study of Environment on Aboriginal Resilience and Child Health.

Table 2.1 Psychological attributes of the SDQ (children aged 4–10, parent or teacher report)

Emotional symptoms scale	**Peer problems scale**
Often complains of headaches, stomach aches or sickness	Rather solitary, prefers to play alone
Many worries or often seems worried	Has at least one good friend
Often unhappy, depressed or tearful	Generally liked by other children
Nervous or clingy in new situations, easily loses confidence	Picked on or bullied by other children
Many fears, easily scared	Gets along better with adults than with other children
Conduct problems scale	**Pro-social scale**
Often loses temper	Considerate of other people's feelings
Generally well behaved, usually does what adults request	Shares readily with other children (for example toys, treats, pencils)
Often fights with other children or bullies them	Helpful if someone is hurt, upset or feeling ill
Often lies or cheats	Kind to younger children
Steals from home, school or elsewhere	Often volunteers to help others (parents, teachers, other children)
Hyperactivity scale	
Restless, overactive, cannot stay still for long	
Constantly fidgeting or squirming	
Easily distracted, concentration wanders	
Thinks things out before acting	
Good attention span, sees chores or homework through to the end	

Further information is available from < www.sdqinfo.org/>.

Social and emotional wellbeing and SDQ

Research into a suitable measure for a social and emotional wellbeing indicator was undertaken for the Children's Headline Indicators framework. Twenty-two measures were chosen from a range of data sources including administrative sources, survey self-report items, and screening tools. Of these, 6 were considered in more detail, with the SDQ emerging as the most suitable instrument despite their being no national data source. It was recommended that there be ongoing monitoring of data developments in relation to the SDQ and of any new surveys and instruments that may emerge in relation to social and emotional wellbeing (AIHW 2012b).

Social and emotional wellbeing is also an indicator topic area proposed for reporting against the ECD Framework; therefore the same measurement instrument (SDQ) is being proposed for two different topic areas (social and emotional wellbeing, and mental health/behavioural problems). (*Note:* The Children's Headline Indicators do not include a mental health/behavioural problems indicator area).

Social and emotional wellbeing is a concept that is closely related to child mental health and/or behavioural problems, but is essentially broader in scope. Many researchers have noted that children's social and emotional wellbeing may affect their mental and physical health, education and skill attainment, social competence, and relationships (Bernard et al. 2007; AIHW 2009; Pitcl et al. 2006; Story et al. 2008 cited in AIHW 2011b).

There is no universally agreed definition of 'social and emotional wellbeing'—research on it as a holistic concept is still in its early stages. For Children's Headline Indicator purposes, it has been defined as 'The way a person thinks and feels about themselves and others. It includes being able to adapt and deal with daily challenges (resilience and coping skills) while leading a fulfilling life'. The emphasis is on the behavioural and emotional strengths of children, as well as how they respond to adversity (AIHW 2012b).

The absence of mental health disorders is a feature of positive children's social and emotional wellbeing; however, the concept is broader than this and relates to positively thriving (AIHW 2012b).

While the SDQ was originally designed as a screening tool for behavioural problems and mental illness, according to Hamilton and Redmond (2010) it is now used extensively as an indicator of social and emotional wellbeing (see also Beccaria et al. 2011; White et al. 2013).

For Children's Headline Indicator reporting, the SDQ was found to have a strong conceptual basis in terms of social and emotional wellbeing, as it assesses both individual internal and relational aspects. It also incorporates positive and negative attributes through its 5 scales (see AIHW 2012b for further details). One of the drawbacks of the SDQ is that because it includes 25 items, inclusion in surveys already covering a wide range of other topics can be problematic.

In terms of other child reporting frameworks, the SDQ has been used to measure either mental health, defined in terms of 'childhood behavioural problems', or social and emotional wellbeing. The *NSW Child Health Survey 2009–10* uses the SDQ to measure mental health in terms of 'childhood behavioural problems'. The Survey does not include social and emotional wellbeing as a separate indicator. The indicator-based report *State of Victoria's children 2010* uses the SDQ as a measure of social and emotional wellbeing. Mental health is also a separate indicator in this report; however, that measure is based on mental health disorders such as autism spectrum disorders, anxiety, and substance use disorders. The age range for this report (0–17 years) is broader than that used for ECD, thereby making the inclusion of mental disorders appropriate.

To date the social and emotional wellbeing indicator for the Children's Headline Indicator framework has not been reported due to a lack of data. Suitable data are expected to become available from the child and adolescent survey component of the National Survey of Mental Health and Wellbeing (the 'Young Minds Matter' survey) which is being conducted during 2013–14. The Diagnostic Interview Schedule for Children Version 4 (DISC-IV), in combination with the Strengths and Difficulties Questionnaire (SDQ), are the principal instruments used to measure the mental health status of children and adolescents aged between 4 and 17 years in this survey. However, if and when this survey will be repeated is currently unknown. The last iteration of the survey was conducted in 1998–99. While this means that, historically, this survey has not been run very frequently, it remains the best available source at present for collecting data based on the SDQ.

Reporting feasibility

The SDQ has been found to be an appropriate measure for both child behavioural problems and social and emotional wellbeing, which suggests a possible overlap between the 2 conceptual domains. It is recommended that the SDQ only be used for one of these indicator topic areas. One of the conceptual domains could be reviewed, and a different measurement tool could be used for either mental health or social and emotional wellbeing.

Following are some options for consideration.

- The child behavioural problems/mental health topic area could be conceptualised in terms of mental health or mental illness with a review of the original list of indicators proposed for mental health in Phase 1 of the project such as mental health hospitalisations or use of mental health services. There may be potential in looking at some of the specific mental health problems identified in the Child and Adolescent Survey Component of the National Survey of Mental Health and Wellbeing (the 'Young Minds Matter' survey). This survey is being conducted by the Telethon Kids Institute during 2013–14, and is funded by the Department of Health. It incorporates household-based, face-to-face interviews with primary carers of children and adolescents aged 4–17. This will be supplemented by information obtained directly from the young people aged 11 or older. Note that the national survey sample will not allow for disaggregation of most variables by state/territory or remoteness, or for other sub-populations. Analyses and publication of survey data are expected in 2015.
- Another option is to use the 'Rates of contact with primary mental health care by children and young people' indicator from the *Fourth National Mental Health Plan: An agenda for collaborative government action in mental health 2009–2014.* The data source is the number of GP Mental Health Care Plans provided for children and young people, as identified from Medicare data. Medicare-funded mental health services provide a main vehicle for delivering mental health services in primary health care settings, but other primary mental health care services are also available, such as those provided by community health centres, health nurses, Headspace, school counsellors, and university and TAFE counselling services. A component of the mental health care provided by state and territory specialised public mental health services could also be considered primary mental health for young people, but this cannot be reliably differentiated from other care types. While selecting this indicator would result in alignment with the *Fourth National Mental Health Plan*, as a measure of mental health service provision it is an input rather than an outcome measure.
- While there are alternative measurement tools for behavioural problems (for example the Child Behavioural Checklist), these essentially measure the same construct. The Child Behavioural Checklist is also quite lengthy.
- Using an alternative measure for social and emotional wellbeing could be considered. Domains of the Australian Early Development Census (AEDC) could be used (such as the social competence and emotional maturity domains). However, this option would require further investigation. The AEDC is a census of children that measures how they are developing as they enter school. The AEDC option was not pursued for the Children's Headline Indicators because the AEDC is restricted to children aged 4–5. This would pose less of an issue for reporting against the ECD Outcomes Framework where the age group in question (0–8) is younger than for the Children's Headline Indicators (0–12). However, it would mean that the indicator would be narrow in its focus through being limited to a particular child development stage (4–5 within the 0–8 range). Further

consideration would be needed on whether it is appropriate for this indicator to focus on a specific age within the 0–8 range, and whether this still meets the intent of a social and emotional wellbeing indicator as conceptualised in Phase 1. Using a different measure to the SDQ for social and emotional wellbeing would also mean that the indicator would not align with the Children's Headline Indicators. Alignment was considered an important criterion during Phase 1. Also, use of the social competence domain of the AEDC is also being proposed as a possible data source for an indicator relating to the 'Peer relationships' topic area (see Section 2.2.)

- A project currently under way involving an audit of jurisdictions' screening tools for children aged 0–12 may yield a suitable data source for either child behavioural problems or social and emotional wellbeing. The project is being led by the South Australian Department for Education and Child Development (DECD) on behalf of the Standing Committee on Child and Youth Health (SCCYH). A proposal for the project which aims to identify current national and state practice in the use of screening, monitoring and assessment tools for children aged birth to 12 years, has been approved by the Australian Health Ministers' Advisory Council (AHMAC) and the Australian Education, Early Childhood Development and Youth Affairs Senior Officials Committee (AEEYSOC). The proposal has been developed and progressed through the national committee processes which support the work of COAG on health and education. A report on the findings from this project is expected in 2015.
- The Australian Child Wellbeing Project (ACWP), conducted by a team of researchers at Flinders University of South Australia, the University of New South Wales, and the Australian Council for Educational Research, was reviewed as a possible source for identifying alternative instruments and/or data sources for child behavioural problems or social and emotional wellbeing which could be considered for this indicator. The project is a child-centred study in which children's perspectives are being used to design and conduct Australia's first major nationally representative and internationally comparable survey of wellbeing among children aged 8–14 (Years 4, 6 and 8). The project focuses on young people in general, and disadvantaged young people in particular. However, the age range of the children concerned has minimal overlap with this project.

2.2 Peer relationships/bullying

Background

Indicator area: Peer relationships/bullying

Outcome 2: Children's environments are nurturing, culturally appropriate and safe

At the Phase 1 Workshop, preliminary considerations for this indicator topic area included measuring positive peer relationships or the prevalence of bullying. Workshop participants proposed that peer relationships could include reporting by parents and teachers on whether a child is generally liked by other children, and the existence of friendships. Relevance to the 0–8 age group was raised as an important issue in determining measurement component(s) for this indicator topic area.

Definitions and conceptualisation

'Peer relationships' is a broad concept encompassing constructs such as peer acceptance and friendships. Core components of 'peer relationships' include social skills and social competence. Peer victimisation (or bullying behaviour and victimisation) is conceptually related to peer relationships, both being subsumed under the broader category of peer experiences. Much of the literature on peer relationships focuses on older children or adolescents.

Peer acceptance

Gilford-Smith and Brownell (2003) define peer acceptance (or sociometric status) as the degree to which children are socially accepted by other children in their peer group, that is, whether they are liked or disliked. Sociometric categories that are generally identified include 'popular' children, who are well-liked by many peers and seldom disliked; 'rejected' children, who are often disliked and not well-liked; 'controversial' children who are both liked and disliked; and 'neglected' children who receive very few liked or disliked nominations (Gilford-Smith & Brownell 2003).

The literature suggests that peer acceptance begins early in life. As early as age 4, children in group settings have been observed to experience peer relationships in the form of positive interactions with selected peers (Gilford-Smith & Brownell 2003). Some children aged 3 and 4 already have trouble being accepted by their peers (Hay 2005).

A number of factors affect a child's peer acceptance, including their relationships with parents and siblings, the parents' own relationship, and the family's levels of social support. However, the child's own behaviour is the most direct factor. Children who show pro-social skills tend to be liked, and accepted by their peers (Hay 2005). Aggression can be a deterrent to peer acceptance, although it may be the absence of pro-social behaviour, rather than aggression, that is the underlying cause of peer rejection (Hay 2005).

Friendships

While peer acceptance tends to focus on group-based interactions and an individual child's acceptance within the larger peer group, friendships are defined as 'dyadic relations between 2 children' (Gilford-Smith & Brownell 2003). They are 'voluntary, intimate, dynamic relationships founded on cooperation and trust' (Gilford-Smith & Brownell 2003). Children who are unpopular, rejected, or isolated in the larger peer group may still have friends, while

some highly-accepted and widely-liked children may have few or no friendships (Gilford-Smith & Brownell 2003).

By age 4, children are generally able to have best friends. As the child grows up, friendships change both behaviourally and conceptually (Gilford-Smith & Brownell 2003). The friendships of preschool children manifest themselves as 'sustained bouts of positive, highly charged, coordinated play, especially fantasy play in dyads or very small groups'. In middle childhood, as interpersonal awareness increases, friendships are based on shared norms and personal qualities and 'are evident in animated conversation, games, and contests'. Sullivan (1953) proposed that in late childhood and pre-adolescence, children form 'chumships' with a single, favoured peer (cited in Gilford-Smith & Brownell 2003).

Factors associated with children's peer and friendship status include personal attributes such as temperament, emotion regulation, and social cognitive prowess, and other factors such as family relationships, parenting style, and cultural norms and values (Rubin et al. 2005).

Social competence and social skills

Social competence refers to the ability to engage in developmentally appropriate social interaction. It is defined by personal attributes such as cooperative and pro-social behaviour, helpfulness, and the ability to initiate and maintain positive relationships and resolve conflicts (Denham et al. 2009; Humphrey et al. 2010; Squires 2003).

Social skills are the 'building blocks of social competence'. They are 'learned sequences of individual behaviours' that facilitate positive social interactions and establish peer relationships (Slee 2008). These essential social skills are taught informally through modelling, and formally include self-control, being able to reflect empathy, interacting positively with others and expressing feelings sensitively (Slee 2008). Young children exhibiting good social skills are able to successfully enter peer groups, effectively resolve conflicts, and maintain play, thereby building strong and enduring peer relationships (AIHW 2011b).

Bullying

Bullying or peer victimisation, although also part of peer experience, is quite a different construct. According to Rigby and Smith (2011), the generally agreed definition of bullying is 'a general form of aggressive behaviour in which there is an imbalance of power favouring the perpetrator(s) who repeatedly seek to hurt or intimidate a targeted individual'.

Bullying can take a number of forms and either be overt (for example, punching or kicking or name-calling and insulting) or covert (for example, spreading rumours or deliberately excluding a person) (SSSC Working Group 2014). Cyberbullying is seen as a growing problem. It is described as a form of covert bullying which is carried out through the use of technology such as on the internet, and through emails, blogs, social networking sites and mobile phones (Cross et al. 2009).

Bullying in Australian schools is widely recognised as a problem, with 27% of Year 4 to Year 9 Australian students reporting being bullied at least every few weeks (defined as frequent) either overtly or covertly during the last term. Hurtful teasing was the most prevalent type of bullying followed by having hurtful lies told about them (Cross et al. 2009).

Most studies on bullying focus on older children. Studies have found the prevalence of verbal and relational victimisation is higher than that of physical and cyber victimisation (Wang et al. 2010). Cyberbullying appears to be related to age, or access to technology, and is more likely to occur among older students (Cross et al. 2009).

Peer relationships/bullying and children's outcomes

Peer relationships

Positive peer relationships have a wide range of benefits for children as they develop, as well as for their future (Gilford-Smith & Brownell 2003; Rubin et al. 2005). Warm and strong peer relationships result in emotional stability and reduced behavioural disorders, and play a large role in determining wellbeing and good mental health. Peer support also has a protective effect against health risk behaviours and the development of psychological problems later in childhood (Denham 2007; Denham et al. 2003; Guralnick 2010; Springer et al. 2006 cited in AIHW 2011b).

Strong peer relations in early childhood are a predictor of positive peer relations in later life, including adulthood (Gilford-Smith & Brownell 2003). Children who could engage in complex play with peers as toddlers went on to be more competent in dealing with other children in the preschool years and in middle childhood (Hay 2005). Children who were without friends in kindergarten continued to have difficulties with peers at the age of 10. However, it is not clear whether the early peer problems cause the later problems, or whether both are caused by other risk factors that impact on successful peer relationships (Hay 2005).

Nevertheless, children with problematic peer relations may have negative experiences as they transition to school, which can then impact negatively on their academic success (Hay 2005). Children with early socialisation problems are also at risk of delinquency, and problems with mental health, unemployment and alcohol later in life (Slee 2008:245)

Early identification and treatment of poor social skills is regarded as a promising strategy in preventing the later development of antisocial behaviour in adolescence or adulthood (Slee 2008).

Various studies have indicated the increasing importance of peer relationships as children enter adolescence, and the important intermediary role of the family environment and effective parenting skills to support children in their relationships with peers (Brown et al. 1993; Cassidy et al. 1992; Martin & Huebner 2007).

Bullying

Research indicates that children with depressive symptoms and anxiety have an increased risk of being bullied (Fekkes et al. 2006). Many psychosomatic and psychosocial health problems follow an episode of bullying victimisation (Fekkes et al. 2006). Other negative consequences of bullying include higher absenteeism in children who are bullied, lower academic achievement, and consequent lower vocational and social achievement, physical symptoms, anxiety, social dysfunction, depression, school failure, feeling unsafe at school, and alcohol and substance use (Lodge 2008; Spector & Kelly 2006 cited in AIHW 2011b). Bullying also contributes to maladjustment of children at school (AIHW 2011b).

Potential indicators and measurement tools

As stated above, many of the indicators/measurement tools in this area have been developed for an older age group than the age range targeted in the ECD Project (0–8 years). These indicators for older age groups have been included in Appendix B in order to provide as broad an overview as possible of the types of existing indicators currently in use;

however, they are not discussed further in this report as their applicability and/or adaptation to a younger age group would need to be assessed.

Table 2.2 provides an overview of the constructs and sources of measurement instruments that will be discussed in this section. They have been chosen on the basis of their direct relevance to the early childhood development years.

Table 2.2: Peer relationships/bullying: constructs and sources of measurement instruments

Construct	Source of measurement instrument[(a)]
Peer acceptance	Longitudinal Study of Australian Children (LSAC)
Peer problems	Strengths and Difficulties Questionnaire (SDQ)
Social competence	Australian Early Development Census (AEDC)
Opportunities for social interaction	Search Institute Developmental Assets
Parental encouragement—spending time with friends	Search Institute Developmental Assets
Bullying	Bullying Prevalence Questionnaire
	Peer relationships assessment questionnaire
	Olweus Bully/Victim Questionnaire
	LSAC
Feelings of safety	Schools survey

(a) More information on sources is given in the text.

Peer acceptance

The Longitudinal Study of Australian Children (LSAC) scale on peer acceptance uses child self-report to measure children's perceptions about various aspects of being accepted and liked at school by their peers. Questions include 'Are the children at school nice to you?' 'Do the children at school ask you to play with them?' (AIFS 2012).

Potential indicator: Proportion of children who are liked by their school peers (self-report).

- The questions are appropriate for ages 6–8 years.
- The questions relate to peer acceptance only, and so only measure one aspect of peer relationships, albeit an important one. The LSAC itself is not a suitable data source as it constitutes longitudinal data. However, the peer acceptance question module is brief (2–3 questions) and could be relatively easily included into an existing survey.
- Should this indicator be selected, adaptation for parent-report would be required, noting that Phase 1 has parent-report as a recommendation.

Peer problems

The Strengths and Difficulties Questionnaire (SDQ) is a brief behavioural screening questionnaire. It includes 5 scales: emotional symptoms, conduct problems, hyperactivity, peer problems and pro-social behaviour. The peer problems subscale is intended to capture how well the child interacts with other children and includes questions relating to peer acceptance (generally liked by other children), friendship (has more than one friend), and bullying (whether the child is picked on). The questionnaire is designed for parent or teacher reporting (Goodman 1997, Goodman 2005).

Potential indicator: Proportion of children scoring in the 'of concern' range on the peer problems subscale of the SDQ.

- The questionnaire is appropriate for 4–8 year olds (it can be used for ages 4–17).
- The peer problems scale is a composite scale that includes many of the constructs underlying peer relationships found in the literature review (such as peer acceptance, friendship and bullying). This means that it is a good measure of peer problems in several areas, but this breadth means that less information is collected for each construct. For example, the questions relating to bullying are necessarily briefer than those used in the more detailed bullying questionnaires discussed later in this section.
- While the complete SDQ is a tool that has been well validated internationally and used in Australia (it has been proposed as the measurement tool for social and emotional wellbeing), the peer problems subscale does not appear to be generally used on its own. The validity of using the subscale in this way needs further investigation.
- Data may become available for reporting via the Child and Adolescent Mental Health Survey (see Section 4.6 on social and emotional wellbeing for more information).

Social competence

The Australian Early Development Census (AEDC) is a population measure of children's development as they enter their first year of full-time school (at age 4–5). It is based on a teacher-completed checklist for each child (Department of Education 2014).

The measures include 5 areas (also referred to as domains): physical health and wellbeing; social competence; emotional maturity; language and cognitive skills (school-based) and communication skills; and general knowledge.

The social competence domain includes: overall social competence; responsibility and respect; approaches to learning; and readiness to explore new things. Data are collected via teacher report. Construct validity has been tested for the AEDC's social competence domain and sub-domain scores, and have shown moderate to strong correlation with the results from the SDQ scales of pro-social behaviour, peer problems, conduct problems and relationship quality based on teacher reports of children in the Longitudinal Study of Australian Children (LSAC) (Brinkman et al. 2007).

Potential indicator: Proportion of children developmentally vulnerable on the social competence domain of the AEDC.

- The data are age-appropriate, but limited to 4–5 years (average age 5 years and 7 months). However, it is a relevant age at which to be measuring children's social competence for intervention purposes.
- The data relate to the construct of social competence, which is an important aspect of and requirement for developing peer relationships. However, if selected, redefining the indicator area as 'social competence' rather than 'peer relationships' may be warranted.
- Data are available and regular, with data collection currently planned for 3-yearly intervals. They can be disaggregated by Indigenous status, remoteness and socioeconomic status.
- The AEDC is currently the data source for the 'Transition to primary school' indicator topic area (see Chapter 3). All 5 domains are used for the indicator: Children who are developmentally vulnerable on one or more domains of the AEDC.
- The validity of using the AEDC subscale in this way needs further investigation.

Opportunities for social interaction

The US Search Institute's Developmental Assets is a set of positive experiences, relationships, opportunities and personal qualities that young people need to grow up healthy, caring and responsible (Search Institute 2005). One of the 'Assets' is 'Providing opportunities for children to interact positively with other children'.

Potential indicator: To be determined. Questionnaires based on the Search Institute 'Assets' are not publicly available.

- The 'Providing opportunities for children to interact positively with other children' Asset is appropriate for 3–8 year olds (Assets have been designed for ages 3–5, and 5–9).
- The importance of having opportunities for children to interact positively is relevant to the indicator area of peer relationships, in terms of providing opportunities to develop social skills and relationships. However, the construct does not actually measure the *outcomes* of these interactions. As such it is a process/input measure rather than an outcomes measure.
- No Australian data source has been found, and further research would be needed to establish what questions are contained in the relevant Framework of Developmental Assets questionnaire before determining a specific indicator.

Parental encouragement—spending time with friends

Another Search Institute Developmental Asset is 'Parental/caregiver monitoring the child's friends and encouraging time spent with those who set good examples' (Search Institute 2005).

Potential indicator: To be determined. Questionnaires based on these Assets are not publicly available.

- The parental encouragement Asset is appropriate for 3–8 year olds (Assets have been designed for ages 3–5, and 5–9).
- The Asset is related to the construct of friendships; however, it is narrow in scope and does not appear to relate to the quality of the actual friendships. It is a process rather than an outcomes measure.
- Basing an indicator on this Asset would require further research to determine how this would be measured. Survey instruments for the Search Institute Developmental Assets are not publicly available.
- No Australian data source has been found, and further research would be needed to establish what questions are contained in the relevant Framework of Developmental Assets questionnaire before determining a more specific indicator.

Bullying

Four questionnaires that measure the prevalence of bullying are discussed here in turn. Measurement aspects of bullying that need to be considered include the types of bullying, its severity and regularity, and adverse effects. Whether cyberbullying needs to be explicitly included in the survey scale should also be considered.

Bullying Prevalence Questionnaire

This 20-item self-report questionnaire is intended to provide a quick approximation of the prevalence of bullying in a school. It provides assessments of the prevalence of behaviours

and attitudes among students that reflect a tendency to bully others, be bullied by others and to act pro-socially. Questions include being called names, picked on, left out on purpose, made fun of, and being hit or pushed around. The bullying frequency scale is: never; once in a while; pretty often; and very often (Rigby & Slee 1993).

Potential indicator: Proportion of children who are bullied 'pretty often' or 'very often'.

- The questionnaire is age-appropriate, having been used for primary school children. The exact age(s) of the children surveyed needs to be clarified.
- The questionnaire can report on bullying frequency, but not the effects of bullying.
- The questionnaire was developed for the Australian context.
- The questionnaire is designed for schools' own use; the appropriateness of this school-based questionnaire for a population-based measure would need to be assessed.
- There is currently no national data source that could be used for national reporting.
- Should this indicator be selected, adaptation for parent-report would be required, noting that Phase 1 has parent-report as a recommendation.

Peer Relations Assessment Questionnaire—Revised (PRAQ)

The Peer Relations Assessment Questionnaire—Revised (also known as PRAQ for primary students) is designed for schools, and targeted at students from the first year of school to Year 5. It is a multi-dimensional survey that collects information about the general wellbeing and happiness of children at school, the quality of their relationships with peers, the nature and prevalence of bullying, and readiness to seek help. There is also a parent survey which collects information on: happiness of children at school, prevalence of bullying/being bullied at school, and how the child may have been affected by bullying. An accompanying teacher survey focuses largely on bullying (Rigby 2014).

Potential indicator: To be determined, as PRAQ questionnaire is not publicly available.

- The questionnaire is very age-appropriate as it has been specifically designed for lower primary school children (a separate survey exists for senior students). It also caters for pre-literate children by allowing them to respond to illustrations rather than text.
- Although the questionnaire is multidimensional, and broadly covers the concept of peer relationships, it would seem to have a focus on bullying. The questionnaire was developed by Rigby, and is more extensive and targeted version than Bullying Prevalence Questionnaire discussed above.
- The questionnaire collects data on cyberbullying.
- The questionnaire is quite detailed, takes 10–15 minutes to complete, and was developed for the Australian context.

Olweus Bully/Victim Questionnaire

The Revised Olweus Bully/Victim Questionnaire consists of 40 questions for the measurement of bully/victim problems such as: exposure to various physical, verbal, indirect, racial, or sexual forms of bullying/harassment; various forms of bullying other students; where the bullying occurs; pro-bully and pro-victim attitudes; and the extent to which the social environment (teachers, peers, parents) is informed about and reacts to the bullying (Olweus 1994). The reliability for this questionnaire has been assessed as extensive (Hamburger et al. 2011).

- The questionnaire's intended population is 8–16 year olds, and so has limited overlap with the age range of the ECD Outcomes Measures project.
- It is unclear at this stage whether the questionnaire collects data on bullying frequency for individual children.
- The questionnaire has reportedly been widely used (AIHW 2009). There does not appear to be any national Australian data source that has used this questionnaire.
- Should this indicator be selected, adaptation for parent-report would be required, noting that Phase 1 has parent-report as a recommendation.

Longitudinal Study of Australian Children (LSAC)

The bullying measure used in the LSAC draws on the Perceptions of Peer Support Scale (PPSSC) (AIFS 2012). The measure refers to victimisation only, and asks the study child whether they have experienced 1 or more of 4 types of bullying situations at school: 'Do any of the kids pick on you'; 'Say mean things to you?'; 'Hit you?'; and 'Say bad things about you to others?'. The LSAC has asked children aged 8-9 years about the frequency of the bullying, with options ranging from 'never' to 'always'.

Potential indicator: The proportion of children who are 'always' bullied at school.

- These questions have limited age appropriateness, being applicable (for the ECD project) to 8 year olds only.
- The LSAC itself is not a suitable data source, as it is longitudinal data. However, the peer acceptance question module is brief (2–3 questions) and could be included in an existing survey relatively easily compared with the more detailed questionnaires described earlier.
- The LSAC has also asked 10–11 year olds about how the bullying was done (with text messaging and emails an option) (Example question: 'Did another child pick on you by shoving, pushing or hitting you?' 'Yes/No').
- Should this indicator be selected, adaptation for parent-report would need to be considered, noting that Phase 1 has parent-report as a recommendation.

Feelings of safety

The National Schools Opinion Survey (NSOS) is a set of national parent and student survey items that were approved by the Standing Council on School Education and Early Childhood in April 2012 (from 1 July 2014, SCSEEC became known as the Education Council). The NSOS included responding to statements on feelings of safety at school such as 'I feel safe/my child feels safe' (ACARA 2013b).

Potential indicator: The proportion of parents who report that their child feels safe at school.

- The survey question is quite general, and there do not appear to be any parameters/ definitions in place for respondents to qualify any of the meanings of items, or their responses to survey questions. It is a reasonable assumption that 'feeling safe' would include any issues of bullying in the school environment, but feeling safe is clearly broader than just absence of bullying.
- The survey is intended to include primary school children, and is based on parental report for this age group.
- At this stage there is no mandatory national collation of data for this survey. However, the survey does provide a potential mechanism for accessing school-age children and

their parents. Details around the practical feasibility of national reporting based on this survey would require further investigation.

Reporting feasibility

Based on the literature review and review of potential indicator sources, the following comments/options are provided for further consideration.

Construct selection

The concepts of peer relationships and bullying are multifaceted, and decisions need to be made on whether to choose one construct and measure, or multiple indicators to measure the various domains included as part of these concepts. It may also be that different measures are required for different age groups.

Current data availability

In terms of data availability, the social competence scale of the AEDC is the only construct for which reliable and ongoing data are currently available. Consideration needs to be given to the suitability of a social competence construct for an indicator area initially conceived as peer relationships.

The Child and Adolescent Survey Component of the National Survey of Mental Health and Wellbeing (the 'Young Minds Matter' survey), mentioned earlier, includes the SDQ, and data are expected to be available in 2015. There are currently no plans for the survey to be conducted more frequently or regularly.

Either of these measures could be considered proxies until a more suitable data source becomes available.

Inclusion of items in existing surveys

The review suggested questionnaires or question modules that could be incorporated into existing data collection vehicles.

The most promising modules for this purpose would seem to be (in terms of their brevity) the SDQ peer problem scale, or either one of the acceptance or bullying modules from the LSAC, noting the shortcomings mentioned earlier. A decision would need to be made as to the most appropriate construct in relation to peer relationships. As mentioned previously, although the SDQ as a whole is a well-validated and internationally-used tool, including in Australia, the validity of using an individual subscale warrants further investigation.

If the inclusion of items in existing surveys option were to be pursued, further investigation of possible data collection vehicles may be required. The nature of the indicator topic area means that a survey rather than administrative data would be the most appropriate data collection method.

A suitable national data collection vehicle has not yet been found; however, these ABS surveys warrant further consideration and investigation: the annual Multi-Purpose Household Survey; the triennial Family Characteristics survey; or the 4-yearly General Social Survey (GSS). The Household, Income and Labour Dynamics in Australia survey (HILDA) is not considered a suitable source as it is a longitudinal study.

Other potential vehicles include any existing surveys managed by the Early Childhood or Schools divisions of the Australian Government Department of Education, or state- and

territory-based population health surveys, provided that they all have suitable surveys using survey methods that could ensure comparable data.

Development of a child health survey

If a detailed questionnaire is preferred to a single construct and measure, the most suitable option may be to develop a new early childhood health and wellbeing survey.

This survey could be designed to capture data relating to peer relationships as well as for other indicator areas where there is currently limited data availability (potentially, for example, racism, school engagement and parenting). Ideally, the survey would be a national household survey that uses children as the counting unit (and allows for parent reporting), captures demographic information, and allows for disaggregation by specific population groups (such as socioeconomic disadvantage, remoteness, Indigenous status, disability status and parental education/employment).

2.3 Racism

Background

Indicator area: Racism (Cultural appropriateness)

Outcome 2: Children's environments are nurturing, culturally appropriate and safe

At the Phase 1 Workshop, there was general agreement that an indicator on race-based discrimination (hereafter referred to as racism) should be included under the indicator topic area 'cultural appropriateness'. An interim indicator was proposed for Indigenous discrimination, with the ABS National Aboriginal and Torres Strait Islander Social Survey (NATSISS) proposed as the most suitable data source. The most recently available iteration of the NATSISS is 2008, which for the first time included parent-reported data on the bullying and unfair treatment of Indigenous children on the basis of their Indigenous identity. Further work would be required to broaden the scope of this indicator to include other racial/ethnic/cultural groups, such as refugee and migrant children and families.

Definition and conceptualisation

The United Nations defines racism as 'any distinction, exclusion, restriction or preference based on race, colour, descent, or national or ethnic origin which has the purpose or effect of nullifying or impairing the recognition, enjoyment or exercise, on an equal footing, of human rights and fundamental freedoms in the political, economic, social, cultural or any other field of public life'.

More simply put, racism is the unfair treatment of an individual or group because they belong to a socially defined racial group (Ziersch et al. 2011). It is a mechanism which creates, maintains or exacerbates an unequal distribution of opportunities and risks between different racial groups (Pachter & Coll 2009; Berman & Paradies 2010).

Berman and Paradies (2010) describe racism as occurring at 3 different conceptual levels:

- internalised racism
- interpersonal racism
- systemic racism.

Internalised racism occurs when an individual accepts and incorporates racist ideologies (that is, negative evaluations about their own race) into their own world view, while interpersonal racism refers to experiences of racism in social interaction. Finally, systemic (or institutional) racism occurs when 'the production and control of, and access to, material, informational and symbolic resources within society serve to maintain or exacerbate the unequal distribution of opportunity across ethnoracial groups'. While these levels can be defined separately, they are also interrelated and in practice racism can occur on all 3 levels simultaneously (Berman and Paradies 2010).

Racism can be expressed through 'stereotypes (racist beliefs), prejudice (racist emotions/affect) or discrimination (racist behaviours and practices)' (Paradies 2006). It can be expressed verbally such as through: offensive or hurtful comments or jokes, name-calling or verbal abuse; harassment or intimidation; or media or online commentary that 'inflames hostility towards certain racial groups' (Australian Human Rights Commission 2012). It can also be manifested through physical abuse and violence. The direct or indirect exclusion of certain racial groups from accessing services, participating in employment, education, sport

and social activities is also defined as a form of racism (Australian Human Rights Commission 2012).

Interpersonal racism has been described as the most 'straightforward' form of racism to measure—although the process of capturing the health effects of experiences of racism is less clear (Paradies et al. 2008). Measuring interpersonal racism through self-report means that Indigenous people and other population groups are given the opportunity to report these experiences 'as they perceive them' (Paradies et al. 2008). It is this form of racism that is proposed for measurement in the ECD Outcomes Measures Framework.

A distinction has also been made between direct (overt) or indirect (covert or hidden) racism. Direct racism is based on treating racial or ethnic groups differently, thereby creating an unequal distribution of power, resources or opportunities. Indirect racism refers to equal treatment that impacts racial or ethnic groups differently, thereby also causing an unequal distribution of power, resources or opportunities (Ferdinand et al. 2013). An example of indirect racism is a policy that requires all employees to have their heads uncovered while working. Such a policy negatively affects those people for whom head coverings are worn for religious or traditional reasons (Ferdinand et al. 2013).

Racism and children's outcomes

The topic of racism and its impact on children's health and development is a relatively recent area of research interest. Currently, the studies that do focus on young people tend to look at older children and adolescents (Priest et al. 2013; Paradies 2006; Pachter & Coll 2009; Priest et al. 2011; Mansouri et al. 2009).

A recent international systematic review on racism and child and youth health and wellbeing (Priest et al. 2013) was the first to be conducted in this field. The review found that studies in this area have predominantly been conducted with adolescents in the United States, and have been focused on African-American, Latina/o and Asian populations. Nonetheless, the review found that various studies with children and young people across a range of ages, countries, and racial/ethnic backgrounds, all showed associations between racism and poor health and wellbeing. Mental health problems such as depression and anxiety were most commonly reported by the included studies, with statistically significant associations with racial discrimination found in over 75% of mental health outcomes examined. Statistically significant associations were also found between racial discrimination and positive mental health (such as self-esteem, resilience), behaviour problems, wellbeing, and pregnancy/birth outcomes.

Racism is therefore seen as an important determinant of child and youth health and wellbeing, especially for children from minority racial or ethnic groups, such as those from Indigenous, refugee and migrant backgrounds. Children and young people are considered particularly vulnerable to racism's harmful effects (Pachter & Coll 2009; Paradies 2006b; Sanders-Phillips 2009; Williams & Mohammed 2009).

Exposure in childhood to either direct racism (Coker et al. 2009; Nyborg & Curry 2003; Simons et al. 2002; Szalacha et al. 2003) and/or vicarious racism (Kelly et al. 2013; Priest et al. 2010) has been linked to poor child health, wellbeing and development.

Structural racism also impacts on children's wellbeing through reducing access to resources needed for optimal health (Sanders-Phillips 2009), and internalised racism has been associated with poor child health (Chambers et al. 2004).

Racism can therefore negatively influence the development and adjustment of children and young people, with potential consequences throughout the life course. In addition, children of parents affected by racial discrimination (that is, children experiencing vicarious racial discrimination) are at increased risk of developing emotional and behavioural problems through less supportive parenting and/or changes in racial socialisation (Mays et al. 2007; Sanders-Phillips 2009).

There is emerging evidence that there is a dose-response relationship between experiences of racism and health outcomes, where the greater the frequency and intensity of someone's experience of racism, the worse the health consequences. These effects are also cumulative over time (Priest et al. 2013). There is also evidence that experiences of racism through the life course can have lasting health implications, and there are likely to be lag times between exposure to racism in childhood and later negative health outcomes (Priest et al. 2013; Williams & Mohammed 2009; Ziersch et al. 2011).

Racial discrimination can affect health and wellbeing through several pathways:

1. restricted access to social resources such as employment, housing and education, and/or increased exposure to risk factors (such as unnecessary contact with the criminal justice system)
2. negative affective/cognitive and other patho-psychological processes
3. allostatic load and other patho-physiological processes
4. reduced uptake of healthy behaviours (such as exercise) and/or increased adoption of unhealthy behaviours (such as substance misuse) either directly as stress-coping or indirectly via reduced self-regulation
5. direct physical injury caused by racist violence

(Brondolo et al. 2011; Brondolo, Hausmann et al. 2011; Gee et al. 2009; Harrell et al. 2011; Paradies 2006b; Pascoe et al. 2009).

Australian studies examining racism and its effects for children and young people are relatively few, although more have been conducted in recent years. A study on young Aboriginal people (16–20 years) in remote areas of Northern Territory found that experiences of racism were associated with anxiety, depression, risk of suicide and overall poor mental health (Priest et al. 2011). These findings were consistent with international studies and Australian studies with other Aboriginal and Torres Strait Islander people. The Western Australian Aboriginal Child Health Survey found that youth experiences of racism were related to a number of health outcomes, including emotional and behavioural difficulties, substance use and low self-esteem among males (Zubrick et al. 2005). A study of Aboriginal young people in urban Melbourne found significant associations between racism, mental health outcomes and self-reported general health (Priest et al. 2011).

A few recent studies have researched racism and wellbeing among refugee and migrant children and youth. Mansouri et al. (2009) is one of few studies that focused on migrants and refugees in addition to Indigenous students aged 12–19. The study found that 80% of participants from non-Anglo-Australian backgrounds reported experiences of racism; for the majority this occurred on an occasional basis. Students in senior years (11 and 12) were the most likely group to report racism and had lower health scores. Female students were more likely than male students to have poorer health and wellbeing. The majority reported that they took no action. The most commonly recorded impact of experiences of racism in the survey were feelings of anger and frustration, and that they didn't belong. However, another

frequently reported impact was that the experience of racism made some students feel stronger, thereby engendering a sense of resilience and group-specific solidarity. An Australian study of refugee youth (Correa-Velez et al. 2010) found racism to be a determinant of subjective wellbeing. A study of Australian primary school children from Middle Eastern and Asian backgrounds showed the negative effects of discrimination on the children's adjustment (Runions et al. 2011).

Racism inflicted on parents or primary caregivers can have flow-on effects to children. Racism can be related to poor parental psychological function/psychological distress, which in turn impacts on parenting styles and practices (Pachter & Coll 2009). Caregiver-reported racism has also been associated with risk factors for poor child outcomes, including preterm birth and low birthweight, parental stress, reduced maternal support, interpersonal sensitivity and satisfaction with child rearing, higher levels of uninvolved parenting, and depression in children aged 10–12 years, common childhood illnesses and cognitive development (Priest et al. 2013; Kelly et al. 2013; Priest et al. 2011a; Pachter & Coll 2009; Sanders-Phillips 2009; Sanders-Phillips et al. 2009).

Potential indicators/measurement options

The review of international and national frameworks relating to children showed a paucity of data on child experiences of racism, making the NATSISS a valuable and unique data source in this regard (see description below).

Bullying/unfair treatment due to Indigenous identity

The National Aboriginal and Torres Strait Islander Social Survey (NATSISS)

The NATSISS includes a discrimination and bullying module which asks a proxy (parent or guardian where possible) whether their child is bullied or treated unfairly at preschool/school because of their Indigenous identity, the type of perpetrator and type of bullying, and the effects of bullying on the child, including school progress.

Potential indicator: Proportion of Indigenous children bullied at preschool/school because of their Indigenous identity.

- The questions are relevant to the ECD age range (0–8)—the NATSISS discrimination and bullying module applies to children aged 2–14.
- The construct of 'bullying/unfair treatment' on the basis of Indigenous identity focuses specifically on behaviours, and may be more widely acceptable if discussing racism is sensitive or difficult. It has a clear conceptual basis, and the meaning is also clear.
- The scope is restricted to the preschool/school context, whereas the literature suggests that children experience racism in other settings beyond the school context, such as healthcare, public transport, sports, shops and communities.
- The data do not include a specific timeframe for the bullying if it occurred (for example, in the last 3 or 12 months), nor the frequency. Data on the severity of bullying are available in terms of whether the child changed school because of bullying. However, there are likely to be other unmeasured confounders influencing this, such as whether there is another school nearby that is accessible, the ability of the family to negotiate a change, and so on.
- The NATSISS is run reasonably regularly (currently a 6-yearly cycle).

- If the NATSISS is used, a comparable data source for refugees and migrants groups will be needed. The most immediately obvious source is the GSS—however; there may be issues with the sample coverage of overseas-born populations. The next GSS, scheduled for 2014, will not include any modules relating to children. ABS may reconsider this for the 2018 iteration, and a submission could be put forward for such a module to be included.

Longitudinal Study of Indigenous Children (LSIC)

The data collected in the LSIC are similar to that collected in the NATSISS. The parent is asked whether the study child has been bullied or treated unfairly at preschool/kindergarten or school because they are Indigenous, and how the parent dealt with this. The parent is also asked whether the family unit has experienced racism, discrimination or prejudice, and how often.

Potential indicator: Proportion of children who have been bullied at preschool/school because of their Indigenous identity.

- The questions are appropriate for the ages 6–7, having been used for LSIC Wave 2 – cohort K.
- The construct of 'bullying/unfair treatment' on the basis of Indigenous identity is the same as that for the NATSISS.
- The data do not include a specific timeframe for the bullying if it occurred (for example, in the last 3 or 12 months), nor the frequency. As with LSAC and the NATSISS, the context is restricted to the school environment.
- The question could be adapted to report on refugee and migrant groups, for example asking whether the child has been bullied or treated unfairly at preschool/kindergarten or school because of their cultural identity. Note the LSAC collects information about country of birth and Indigenous status, and asks questions on bullying and being bullied, but does not ask whether the bullying is based on ethnicity or Indigenous status. There are no questions in the LSAC about discrimination.
- The LSIC also includes questions relating to whether families have experienced racism, discrimination or prejudice. Frequency of occurrence is included. This is a potential alternative area for consideration—however, it should be noted that generalised questions may result in underreporting of racism.

Discrimination based on cultural background

During Phase 1 of the project, Indigenous health expert Dr Naomi Priest (University of Melbourne) provided input on potential questions for this indicator. Two versions of a single core question relating to discrimination prevalence were proposed, with corresponding response alternatives of self-report or parent/proxy report on behalf of a child:

- Have you felt discriminated against in the last 12 months because of your cultural background?
- Has your child been discriminated against in the last 12 months because of his/her cultural background?

There are strong arguments for including location and frequency of discrimination indicators if possible, such as:

- situations or places where discrimination was felt/experienced

- frequency of discrimination in the last 12 months.

Potential indicator: Proportion of children who have felt discriminated in the last 12 months because of their cultural background.

- The relevant age range for these questions must be considered. Eight-year-olds have been included in studies on racism. If this indicator is selected, the question mode will need to be determined—child self-report, or changing the child question to be parent-report, noting that Phase 1 recommended parent-report.
- The question has a broad scope in terms of including all three population groups at the centre of this indicator—Indigenous, refugee and migrant. As a single-item question, it would be relatively straightforward to add to a new data source/survey. However, a multi-item question is likely to be more robust. The question is also conceptually broader in scope than those used in the NATSISS and LSIC. It is also broader in scope in terms of the location of the experiences of racism.
- The question proposed includes frequency of discrimination and gives a timeframe.
- If a second indicator for this topic area can be included, there is a strong rationale for including carer experience of discrimination, both in terms of impact of carer experience of discrimination on child outcomes, as well as on carer mental health, parenting capacity, and health behaviours such as drug use.

Child cultural awareness

The Search Institute's Developmental Assets is a set of positive experiences, relationships, opportunities and personal qualities that young people need to grow up healthy, caring and responsible (Search Institute 2005). The Developmental Assets has demonstrated reliability and validity in America; however, it is not clear if it has been used in Australia.

One of the Assets for young children is 'Cultural awareness and sensitivity—the child begins to learn about her or his own cultural identity and to show acceptance of people who are racially, physically, culturally, or ethnically different from her/him'.

Potential indicator: To be determined (requires analysis of Developmental Assets survey questions, which are not publicly available).

- The construct is relevant to the age range (designed for ages 3–5 and 5–9).
- The construct measures a child's cultural acceptance. As such it relates to the broader indicator area of cultural appropriateness rather than racism.

Indigenous adult experiences of racism

The Measurement of Indigenous Racism Experiences (MIRE) has been developed for adults and aims to measure internalised, interpersonal and systemic racism. It is a 31-item questionnaire designed to assess self-reported racism across a range of dimensions, together with responses/reactions to racism among Indigenous populations (Paradies and Cunningham 2008).

The survey assesses interpersonal racism across 9 mutually exclusive settings, as well as cognitive, affective and behavioural reactions to interpersonal racism. It includes a 4-item internalised racism scale and 3-item systemic racism scale, and assesses respondents' race-consciousness. It also assesses the salience of a respondent's ethnoracial identity within their social group and among strangers. The instrument has been tested in terms of its content, construct and convergent validity among Indigenous Australians aged 15 and over,

and the survey developer has suggested that it may be suitable for use among other ethno-racial groups as well.

- As the survey instrument does not appear to have been designed or tested for children, it would only be appropriate for the ECD project if parent/caregiver racism was chosen as an indicator. The feasibility of adapting the survey for children would need to be explored and assessed further.
- The level of detail in the survey means that it would need to be an independent survey, and this may deter its use as a population measure.

Experiences of racism survey

- The Experiences of Racism survey instrument was developed for use among people aged 18 and over, and includes 33 survey items covering internalised racism, systemic and interpersonal racism (Ferdinand et al. 2013). As with the MIRE, this survey instrument does not appear to have been designed or tested for children. The feasibility of adapting the survey for children would need to be explored and assessed further.
- The level of detail in the survey means that it would need to be an independent survey, and this may deter its use as a population measure.

Adult migrant discrimination

The Scanlon Foundation report, *Mapping social cohesion, 2011,* provides data on Australians reporting experiences of discrimination based on skin colour, ethnic origin or religion in the previous 12 months (Markus 2011). The underlying survey also asks about the impact of the racist experiences. However, the survey relates to adults only (ages 18 and over). As the focus of the study is the relationship between immigration and social cohesion, Indigenous Australians are not specifically targeted.

Consideration could be given to exploring the possibility of having questions relating to children's experiences in the survey, or potentially the family's experiences collected via parental report.

Reporting feasibility

Particular challenges associated with a measure for this indicator are the adequate representation of Indigenous, refugee and migrant populations in the sampling of mainstream surveys.

Current data availability

Currently, the best option for interim reporting is the NATSISS. The feasibility of including similar questions to those in the NATSISS in the GSS could be explored, noting the issues with this source described earlier.

Inclusion of items in existing surveys

Currently the Scanlon Foundation survey (used for its *Mapping social cohesion* report) only collects data on adult experiences. However, it may be a potential vehicle for collecting parent-report data on children's experiences. Indigenous people are not specifically targeted, so there would be issues with sample size. This data source would not be directly comparable with ABS data.

The HILDA is not considered a suitable vehicle, due to its longitudinal nature. It does currently include a narrow set of questions relating to racial discrimination. However, these are restricted to adults' perceived experiences of employment discrimination (based on sex, age, ethnicity, religion and parenting responsibilities).

Development of a child health survey

As mentioned in Section 2.2 on peer relationships, consideration could be given to developing a new early childhood health and wellbeing survey that specifically targets the indicators that do not have current data sources. Should that option be pursued, it could include complementary questions on racism experienced by Indigenous children, as well as by refugee and migrant child populations.

2.4 School engagement

Background

Indicator area: School engagement

Outcome 5: Children are engaged in and benefiting from educational opportunities

In Phase 1, there was support for retaining this indicator area because:

- there is policy interest in 'disengagement'
- school engagement is linked with factors such as social and emotional wellbeing and the social inclusion agenda more broadly.

At the Phase 1 Workshop, participants suggested that an indicator for this topic area be based on information provided by the child, and using questions on whether a child likes school, for example 'Is school fun?' and 'Are you happy at school?'

Definition and conceptualisation

School engagement incorporates behavioural, emotional, and cognitive dimensions, which interact to determine child outcomes. Behavioural engagement may involve positive conduct (such as adhering to rules and not behaving disruptively, including skipping school), active involvement in learning tasks (paying attention and participating in discussions), and participation in school-related activities. Emotional engagement incorporates student emotional reactions to the teacher and school, such as interest, anxiety, boredom, or happiness/sadness, and overlaps with student attitudes and motivation. Cognitive engagement involves investment in learning (including motivation), self-regulation and strategic problem-solving, and preference for challenges (Birch & Ladd 1997; Buhs & Ladd 2001; Finn & Rock 1997; Fredricks et al. 2004; Lippman & Rivers 2008; Stipek 2002).

Engagement is determined by a complex interaction of child-, family-, school- and social-context-related factors. Child-related factors such as gender, temperament, parenting practices and the home environment affect engagement levels. School-related factors such as the school climate, class structure, type of school, teacher support, curriculum content and delivery, and the peer environment encountered at school also play a critical role in engagement levels (Adermann & Campbell 2008; Birch & Ladd 1997; Buhs & Ladd 2001; Croninger & Lee 2001; French & Conrad 2003; Fredricks et al. 2004; Fullarton 2002; Guthrie & Wigfield 2000; Heaven & Newbury 2004; Hyman et al. 2003; Jennings 2003; Jimerson 2003; Kindermann et al. 1996; Ladd et al. 1999; Lippman & Rivers 2008; Marsh 2000; Ogbu 2003; Ryan & Patrick 2001; Skinner & Belmont 1993; Subrahmanyam & Greenfield 2008; Valeski & Stipek 2001; Vetiska et al. 2000).

The Victorian indicator report, *The state of Victoria's children 2010,* makes a distinction between the concepts of student engagement and learning engagement. While the definition of student engagement adheres to the definition presented above (that is, that it has behavioural, cognitive and emotional dimensions), learning engagement is defined as something broader. It is about making the most of opportunities for learning, that is, increasing one's skills and knowledge, irrespective of one's academic grade. It is something that can occur in either a formal or informal setting and is a lifelong process. As such it is not about academic or vocational success, or intelligence. *The state of Victoria's children 2010*

includes measures relating to engagement with formal school learning. As the concepts share some similarities with student engagement, they are discussed below.

School engagement and child outcomes

Children with higher engagement levels typically demonstrate better academic achievement throughout school, and are also more likely to complete secondary school, which is important for positive life outcomes such as higher income levels and better health (Alexander et al. 1997; Finn & Rock 1997; Fredricks et al. 2004; Heaven & Newbury 2004; Jennings 2003; Jimerson 2003; Lippman & Rivers 2008; Marks 2000; Mehan 1996; Sinclair et al. 2003).

In addition to academic development, engagement can also affect socio-emotional development, as students who are more engaged and succeeding in their school work tend to have higher levels of wellbeing. A lack of school engagement can result in: negative behaviour (such as breaking rules and being disruptive); lack of involvement in learning tasks and other school-related activities; boredom; sadness; and limited investment in learning, including lack of motivation and self-regulation (Birch & Ladd 1997; Buhs & Ladd 2001; Finn & Rock 1997; Fredricks et al. 2004; Jennings 2003; Jimerson 2003; Lippman & Rivers 2008, cited in AIHW 2011b: 21).

School engagement may also carry other non-school related benefits for students, such as lower rates of delinquency, substance use, and teenage pregnancy. These risky behaviours have all been associated with increased school truancy and lower educational engagement (Lippman & Rivers 2008; McAra 2004; Pillow 1997).

Students from lower socioeconomic backgrounds, minority groups, and families with lower levels of parental education demonstrate lower levels of school engagement. Socially disadvantaged students also experience much more severe consequences when disengaged, often dropping out of school, and consequently facing very limited life opportunities. In Australia, Indigenous populations are the most educationally disadvantaged, and have significantly lower levels of school attendance, engagement, and retention (Adermann & Campbell 2008; Fullarton 2002; National Research Council & Institute of Medicine 2004; Ogbu 2003).

Potential indicators and measurement tools

Although the research endorses the importance of school engagement for children's developmental outcomes, the review of national and international indicator frameworks shows that few indicators have been developed to measure this construct at the population level. A common measure is school attendance. This is used at the national level, but has also been used by Victoria (*The state of Victoria's children 2010*) and Tasmania (*Kids come first report 2009*) (see Appendix B). Other measures of school engagement based on administrative data include school absences, reported truancy, school retention, attainment rates and suspensions. These would seem to be of more relevance to older students than those in the ECD years, and none of the frameworks reviewed used these measures to report on 5–8 year olds.

The state of Victoria's children 2010 provides a detailed chapter on engagement with learning. Included are a number of measures related to personal, emotional and school factors, and student behaviour. Personal factors included student motivation, aspirations and learning confidence, while emotional factors included levels of enjoyment, interest, boredom or frustration at school. School factors included teacher support and effectiveness, the school

culture and student involvement in decision making. Student behaviour included classroom behaviour.

Of the constructs discussed above, the most promising construct for the age group 0–8 years is the child's affective attitude towards school. Although the Victorian report does not include young children in its reporting of this measure, suitable questions are contained in the LSAC and the National Schools Opinion Survey (NSOS). The construct also has currency in some international frameworks, such as the Search Institute's Developmental Assets and Elementary School Success Profile (ESSP) (see descriptions below). It is also used in the Health Behaviour in School-aged Children (HBSC) international survey reporting on young people (ages 11, 13, 15).

School enjoyment

The Longitudinal Study of Australian Children (LSAC)

The LSAC scale on school engagement measures children's enjoyment of school based on the School Liking and Avoidance Scale (SLAS). The scale has four sub-scales (15 items) relating to school-liking, school avoidance, teacher-liking and peers (AIFS 2012).

Potential indicator: Proportion of children who have a high score on the SLAS.

- The questions are appropriate for ages 6–8, and were used in LSAC Waves 2 and 3 – K cohort.
- The SLAS measures children's positive and negative affective reactions towards school and the school environment, which are considered elements of emotional engagement (Skinner et al. 2008). This is a component of overall school engagement. Together with behavioural aspects, emotional aspects of engagement have been found to contribute to academic achievement (Ladd & Dinella 2009).
- The LSAC also asks about positive feelings about school of the older 10–11 age group as a measure of belonging and membership. Its applicability to younger ages would need to be investigated. The measure is based on positive affect/general satisfaction (from the Longitudinal Surveys of Australian Youth (LSAY)) and the scale included 'my school is a place where I feel safe and secure'.
- Should this indicator be selected, adaptation for parent-report would be required, noting that Phase 1 has parent-report as a recommendation.

National School Opinion Survey (NSOS)

A number of survey items included in the NSOS relate to school engagement. These include 'My child likes being at this school' and 'Teachers motivate my child to learn'.

Potential indicator: Proportion of children who like being at their school.

- The survey is intended to include primary school children and will be a parent-report for this age group.
- The survey is currently used for individual school reporting. At present, schools are required under the National Education Agreement and the Schools Assistance Act to report on student, parent and staff satisfaction in their annual reports (ACARA 2013b). While there is no mandatory national collation of the data from this survey, the survey does provide a potential mechanism for accessing the views of school-age children and their parents.

- Details around the practical feasibility of national reporting based on this survey would require further investigation.

Search Institute's Developmental Assets

The US Search Institute's 'Developmental Assets' are building blocks of healthy development that help children to grow up healthy, caring and responsible 'Developmental Assets' (Search Institute 2005).

The following Assets are included for 3–5 year olds:

- The child responds to new experiences with curiosity and energy
- The child fully participates in a variety of activities that offer opportunities for learning.

The following Assets are included for 5–9 year olds:

- Child is enthused about learning and enjoys going to school
- Child is encouraged to have and feels a sense of belonging at school.

Potential indicator: To be determined. Questionnaires for these Assets are not publicly available.

- The Assets are age appropriate for 3–8 year olds (having been designed for ages 3–5, and 5–9).
- No Australian data source has been found, and further research would be needed to establish what questions are contained in the questionnaire, before determining a more specific indicator.

Social and emotional environment of school

The ESSP survey tool is intended for use by school practitioners in order to discern any negative influences or issues within their students' social and emotional environment that are contributing to academic or behavioural problems. It also aims to pinpoint assets that may be leveraged to reduce these risks (School success profile 2009). There are three surveys: one each for students, teachers and families. The ESSP has undergone some reliability and validity testing and was found to have sound psychometric properties (Bowen 2006). It is unclear at this stage whether the tool would be suitable as a population measure.

One of the 'social environment' dimensions in the ESSP is 'school' which includes the following:

- Teachers who care: 6 items assess the child's perception that the teacher is responsive to him/her in the class and cares about him/her.
- A fun place to learn: 4 items assess whether the child looks forward to going to school and learning new things.
- A fun place to be with other children: 5 items assess whether the child has friends to talk to, play with, and go to lunch with at school, and whether the child looks forward to being with other children at school.

Potential indicator: To be determined.

- The age relevance is small, as it is restricted to Grades 3–5 (approximately 8–10 years).
- No Australian data source has been found, and further research would be needed to establish what questions are contained in the questionnaire, before determining a more specific indicator.

Reporting feasibility

Based on the review of potential indicator sources above, the following comments and options are provided for further consideration.

Existing data sources

The NSOS is a potential data source should it be possible for national data to be collated from this survey. This option would require further investigation, and is unlikely to be feasible in the short term.

Inclusion of items in existing surveys

The strongest alternative to the NSOS is to include the SLAS as used in the LSAC in an existing survey. As this score only has 4 dimensions, it would be relatively easy to do this. Other alternatives would be to include a single item such as 'Is school fun?' or 'Are you happy when you are at school?' However, these single items are likely to be less reliable than a composite SLAS score.

If the option of including one of the single or multi-item questions into an existing data collection mechanism were to be pursued, finding appropriate data collection vehicles would need further investigation. Because this is an affective dimension indicator area, a survey rather than administrative data would be the most appropriate type of data collection.

A suitable national data source has not yet been found. However, the National Schools Statistics Collection (NSSC), from which the ABS's *Schools Australia* report is derived, may warrant further consideration and investigation, in addition to the 3 ABS surveys proposed for further investigation for the peer relationships indicator topic area (the Multi-Purpose Household Survey, the Family Characteristics Survey and the GSS). The LSAC itself is not suitable as it is a longitudinal survey.

Other potential vehicles include any existing state- and territory-based population health surveys. At present, apart from Victoria, it is not known whether other states and territories have suitable surveys. If they do, survey methods would need to be considered to ensure that comparable data could be produced.

Development of a child health survey

As mentioned in Sections 2.2 and 2.3 on Peer Relationships/Bullying and Racism respectively, consideration could be given to developing a new early childhood health and wellbeing survey that specifically targets the topic areas that do not have current data sources. Should that option be pursued, it could also include questions relating to school engagement.

2.5 Parenting quality/capacity

Background

Indicator area: Parenting quality/capacity

Outcome 6: Families are confident and have the capabilities to support their children's development

The indicator topic area of parenting quality/capacity is particularly broad, and is conceptualised in different ways in the academic literature as well as in international and national child reporting frameworks. Phase 1 Workshop participants suggested that 1 option worth investigating further was to use questions from the LSAC on parenting quality, such as parental self-efficacy. This suggestion has been included as one of the options in the section 'Potential indicators and measurement tools'.

Definition and conceptualisation

Bronfenbrenner's ecological model of child development recognises parents as one of the most immediate and direct environmental influences on children (AIHW 2012b). Parenting quality and style includes the way in which a parent interacts with, cares for, instructs, and responds to their child (Collins et al. 2000). However, the concept of parenting is broad, complex and multidimensional, with no consensus on a definition as to what constitutes good parenting (Waters et al. 2002).

Constructs discussed in this section are, as the title of the section suggests, divided into *parenting quality* and *parenting capacity*. Parenting quality encompasses parenting behaviours and styles, parental engagement and parental school engagement. Parenting capacity encompasses parental self-efficacy and parental mental health.

Parenting quality

Parenting behaviours and styles

The Centre for Community Child Health (2007) argues that it is the everyday parent-child interactions that are 'the most critical aspect of parenting'. They define 'good parenting' by identifying a number of 'core parenting factors' that have been frequently associated with positive child developmental outcomes. These include: parental involvement, responsiveness, warmth, sensitivity, acceptance, predictability, consistency, and the absence of harsh, punitive forms of discipline.

It has been argued that what constitutes positive parenting also changes as a child develops. In the initial months, there is a need to focus on creating secure and lasting attachment with children through supportive and nurturing parenting. As the child's needs become more complex in the second and third years of life, more nuanced responses to the child are required. This stage of development requires parents to be supportive and positive as well as instructive and directive. When the child is between three and five, nurturing and control are most important (Bowers & Strelitz 2012).

Lucas and others (2011) describe parenting as a 'complex set of behaviours that characterise how parents interact on a daily basis with their children, and the beliefs and attitudes that underpin these behaviours'. In the LSAC study, 6 dimensions of parenting were included: warmth, hostility, inductive reasoning, consistency, overprotection and self-efficacy.

Lucas and others (2011) also make a distinction between parenting behaviours or practices, and parenting styles. The latter are defined as 'multidimensional patterns of behaviour'. Two commonly-cited parenting styles in the literature are authoritative and authoritarian styles.

An authoritative style has been defined as a 'combination of demanding and responsive parenting behaviours, including setting and enforcing clear standards of behaviour, actively supervising children and maintaining structure in their daily life and making demands appropriate to their developmental stage' (Waters et al. 2002). Parental involvement or 'involved/nurturant-involved parenting' is associated with an authoritative parenting style. An authoritative style is generally associated with positive outcomes for children.

An 'authoritarian' parenting style has been described as being characterised by high levels of control and low levels of acceptance. This style of parenting is generally associated with more negative child outcomes.

Parental engagement

Both the amount of time parents have for engaging with their children and how that time is used are important criteria for parental engagement (Smart et al. 2008; Vinson 2009; Zubrick et al. 2000). Waters and others (2002) refer to the amount of time parents spend with their children as an important health determinant and indicator of child wellbeing, recognising the fact that time pressures on parents are increasing, which can have an adverse effect on developmental outcomes (Waters et al. 2002:37).

Parental school engagement

A working definition of parental school engagement, provided by Emerson and others (2012) is that it 'promotes shared responsibility for education among parents and teachers, where the learning process transcends the school environment and the formal curriculum'. A distinction can be made between the broader concept of 'engagement' and the narrower concept of 'involvement'.

Parental school engagement includes: providing children with a supportive and stimulating home environment for learning; having high expectations for children to achieve academically and in other ways; a positive parenting style; helping with school work; tackling non-academic challenges that children face at school; and linking schoolwork to current events. Parental school engagement will change and adapt to the child's needs as they move through the school system and beyond (Emerson et al. 2012).

Parental school *involvement* refers only to parental activities that take place in the school such as volunteering, parent-teacher meetings and conferences, and attending school events (Hill & Taylor 2004, cited in Emerson et al. 2012).

However, sometimes the two terms (engagement and involvement), as well as the term 'parental participation', are used interchangeably in the literature (Weiss et.al 2009; Desforges & Abouchaar 2003, cited in Emerson et al. 2012).

Differences in parental school engagement definitions, the lack of a standardised approach and a lack of agreed measures of parental school engagement have made it difficult to quantify its influence on child outcomes (Emerson et al. 2012).

Parenting capacity

Parenting capacity refers to the ability of parents to provide experiences and environments that are conducive to health and wellbeing of their children (Waters et al. 2002:33). Key

constructs associated with parenting capacity for the purposes of this report are parental self-efficacy and parental mental health.

Parental self-efficacy

Parental self-efficacy refers to how parents rate their own capacity or competence as parents (Zubrick et al. 2008). A parent's sense of efficacy and belief in their ability to help their children impacts on whether a parent sees him/herself as being able to contribute meaningfully to their children's education, and consequently how involved they become with their children's education (Gutman & Akerman 2008, cited in Emerson et al. 2012).

Parental mental health

Mental health problems can impact on parenting practices by affecting a parent's ability to cope with the normal stresses of life. This can then have flow-on effects to a child.

Parenting quality/capacity and child outcomes

The quality of the parent-child relationship is regarded as one of the best predictors of children's wellbeing (CCCH 2007; Mooney et al. 2009; Waters et al. 2002).

The literature suggests that, beginning in infancy, the social environment affects ongoing child health and wellbeing. Beginning with infancy, 'secure' infant-mother attachment and maternal parenting skills are particularly important for short- and long-term child health and wellbeing. Secure attachment gives the child the necessary emotional security to explore his/her environment (Waters et al. 2002). Secure attachment has been associated with persistence at challenging activities, social competence in the preschool years, self-reliance and greater problem solving ability in kindergarten (Waters et al. 2002). Evidence also suggests that children who have a secure attachment to both parents in infancy are more sociable and socially competent than those who had a secure attachment to only one parent (Waters et al. 2002).

Parenting skills that have been found to be strongly associated with positive child outcomes for early and middle childhood include parental warmth, responsiveness to children's needs, parental consistency, setting developmentally appropriate rules, boundaries and expectations for children's behaviour, and the absence of irritable or hostile parenting (Wake et al. 2007 cited in AIFS 2012).

Parents also play an important role in developing their children's social skills and relationships, and this is thought to affect peer relations in adolescence (Waters et al. 2002).

It is argued that children benefit from their parents and other family members in a variety of ways, including from intellectual stimulation and by learning values that can contribute to enhanced life skills (for example, learning that working hard and acquiring a good education will benefit you in the future). This is facilitated by having a close relationship with a parent who is committed to guiding his or her children.

Parents also provide educational and financial resources as well as connections with other adults in the community, and with resources such as schools and the labour market, all of which are vital for the healthy development of children (Waters et al. 2002).

Parenting styles

An authoritative style of parenting is associated with positive outcomes throughout childhood, including better cognitive ability, better school outcomes, fewer conduct

problems, better self-esteem, better psychological adjustment, improved resilience, and better social competence and peer relations.

An 'authoritarian' parenting style, however, and harsh discipline and/or hostile parenting, are strong predictors of various negative outcomes for the child, particularly delinquency and aggressive behaviour problems, including bullying (Zubrick et al. 2008, Rhoades & O'Leary 2007).

Parental discipline practices that are harsh or excessively lax are associated with children's externalising behaviour problems (Rhoades & O'Leary 2007). While harsh and hostile parenting can lead to an escalation in the frequency of these behavioural problems over time, a decrease in harsh or inconsistent parenting can lead to a decrease in these problems. This suggests that these disciplinary styles of parenting are amenable to change by teaching parents to be firm and consistent (Rhoades & O'Leary 2007).

Harsh parenting styles may be perpetuated across generations, as patterns of aggressive childhood behaviour often extend into adulthood and determine that individual's parenting strategies (Ahmed & Braithwaite 2004; Amato & Rivera 1999; Dadds et al. 2003; Durrant et al. 2004; Heaven & Newbury 2004; Ispa et al. 2004; Landry et al. 2002; Pettit et al. 1997; Power 2004; Lugo-Gil & Tamis-Lemonda 2008; Runions & Keating 2005; Shears & Robinson 2005).

Parental engagement

The amount of time available for parent-child engagement and how that time is used are both important for child development. Spending time and engaging with children by talking, playing and reading, helps children to develop language and cognition, and literacy and numeracy skills. It also strengthens a sense of personal identity, emotional security and social competence, which are important qualities for school-readiness (Smart et al. 2008; Vinson 2009; Zubrick et al. 2000; Glascoe & Leew 2010).

Parental school engagement

Parental interest and involvement in their children's education has been associated with stronger academic engagement, intrinsic motivation to study, academic self-efficacy and achievement (Fan & Williams 2010, cited in AIFS 2012).

Parental self-efficacy

Parental self-efficacy has been linked with: parenting quality and parenting styles such as warmth, hostility and consistency; parental psychosocial wellbeing; family conflict; and children's outcomes. Results from the LSAC support these findings, showing that parents who were more confident of their parenting abilities were less likely to have children with negative outcomes (Zubrick et al. 2008).

Parental mental health

The mental health of parents is a critical aspect of parenting capacity. Psychological distress can lead to parental behaviours that are less nurturing, less sensitive to a child's needs, and more hostile (CCCH 2007). Evidence suggests that mental health problems in parents, particularly mothers (who are usually the primary carers), are associated with an increased risk of emotional and social problems in children (Mooney et al. 2009). One way in which parental mental health problems can affect children is by disrupting parent-child interactions and affecting parenting practices and styles (Zubrick et al. 2008). Some research shows an association between parental mental health problems and parental hostility, itself a predictor of poor child outcomes (Zubrick et al. 2008).

Children living with a parent with a mental health problem may be at increased risk of social, psychological, behavioural and physical health problems, as well as cognitive development problems (Manning & Gregoire 2009). They are also more likely to experience a psychological disorder during adolescence or adulthood (Weissman et al. 2006).

Parenting programs

As the quality of parenting has a major effect on children's development, parenting programs can significantly improve children's mental health and wellbeing, and reduce behavioural problems, by improving parental knowledge, skills and confidence. Research has shown that adverse effects resulting from a lack of positive parenting can be apparent by 6 months of age, and time compounds the effect, so that the older the child is, the larger the performance gap; this indicates a need for early intervention (Glascoe & Leew 2010).

Potential indicators and measurement tools

The multifaceted nature of the parenting indicator topic area means that there is no single tool that captures it in its entirety. Appendix B provides an overview of all potential indicators found in frameworks that align with the parenting concepts and constructs described in the literature. Only those that are relevant for the age group 0–8 are included in the discussion here.

Positive parenting behaviours

The following are positive parenting behaviours associated with positive outcomes for children. As such, they constitute positive measures.

Warmth and affection

The Parental Warmth and Affection Scale used in the LSAC is based on 6 questions relating to how often parents express affection, have warmth and intimate times with the child, and feel close to the child. The data are collected via a self-report form completed at interview (AIFS 2012).

Potential indicator: Proportion of parents who often show warmth and affection.

- The questions are appropriate for ages 0–8.
- Questions capture a positive dimension of parenting. This has been deemed an important aspect in the literature and is applicable across the 0–8 age range required for reporting against the ECD Outcomes Framework.
- The LSAC itself is not a suitable data source as it is a longitudinal survey. However, the parental warmth and affection question module is relatively brief and could be included in an existing survey relatively easily.
- LSAC's parental warmth scale is derived from the Child Rearing Questionnaire (CRQ) (only 6 of the original 9 items are used). The CRQ has been used quite extensively and shows predictive relationships with children's internalising and externalising behaviours (Bradley et al. 1998; Pettit & Bates 1998, cited in AIFS 2012).
- Because this measure comprises multiple items, it is potentially more difficult to add to an existing survey.

Parental praise and doing something special with their children

Measures of positive parenting used by the Canadian Council on Social Development, and reported in *Progress of Canada's children and youth 2006* use the following as measures of positive parenting behaviours.

Potential indicators: Proportion of parents who praise their children every day; Proportion of parents who do something special with their children every day

- The indicators are age appropriate for 0–8 year olds (having been used in relation to 0–11 year olds)
- The importance of praising one's child every day is seen as positive parenting behaviour in the literature, and increases the child's self-esteem (Raising Childrens Network 2013).
- As single-item measures, it would be relatively easy to add a question to pertaining to either potential indicator to a suitable data collection vehicle.

Closeness of parent-child relationship

The US National Survey of Children's Health 2003 asks parents to rate the closeness of their relationship with their child on a scale of 'very close' to 'not close at all' (Data Resource Center for Child and Adolescent Health 2012).

Potential indicator: Proportion of parents who report feeling very close to their children.

- The indicator has limited age-appropriateness for reporting against the ECD Outcomes Framework, applying to ages 6–8 (it has been used for ages 6–17).
- Closeness of children to their parents is an indicator of positive and nurturing relationships, for which evidence of a causal relationship has been reported (Waters et al. 2002). However, it is based on parents' subjective evaluation of the quality of the relationship. The LSAC measures are somewhat more robust, being based on actual behaviours, albeit self-report.
- As a single-item measure, it would be relatively easy to add to a suitable existing data collection vehicle.

Talking with children about things that matter

The US National Survey of Children's Health 2003 asks parents to what degree they can share ideas and talk about things that really matter with their children (Data Resource Center for Child and Adolescent Health 2012).

Potential indicator: Proportion of parents who report being able to talk about things that really matter 'very well' with their children.

- The indicator has limited age-appropriateness for reporting against the ECD Outcomes Framework, applying to ages 6–8 (it has been used for ages 6–17).
- Good communication is recognised as an important parenting skill, as discussing important topics with children shows parental interest and concern in their lives (Bandy & Moore 2008). Talking about topics such as academic performance, puberty and drug use can provide children with knowledge to lead more productive and safer lives. However, this is less age-appropriate for reporting against the ECD Outcomes Framework.
- As a single-item measure, it would be relatively easy to add to a suitable existing data collection vehicle.

Parents who have met their children's friends

The US National Survey of Children's Health 2003 asks parents how many of their children's friends they have met (Data Resource Center for Child and Adolescent Health 2012).

Potential indicator: Proportion of parents who report meeting all or most of their children's friends.

- The indicator has limited age-appropriateness for reporting against the ECD Outcomes Framework, applying to ages 6–8 (it has been used for ages 6–17).
- Knowing their children's friends can keep parents aware of their children's social behaviours and pre-empt children getting involved in negative social activities. Research has found that parental monitoring of their children's friendships tends to raise more socially adept children (Bandy & Moore 2008).
- As a single-item measure, it would be relatively easy to add to a suitable existing data collection vehicle.

Consistent parental discipline

The Consistent Parenting Scale used in the LSAC uses 5 items, and was designed to assess the consistency of parental discipline once the children reached 4 years of age. Sample items are: 'How often does this child get away with things that you feel should have been punished?'; 'When you give this child an instruction or make a request to do something, how often do you make sure that he/she does it?'; and 'When you discipline this child, how often does he/she ignore the punishment?' (AIFS 2012).

Potential indicator: Proportion of parents who use consistent disciplinary practices.

- Age range: for the 4 year old age group.
- Inconsistency is thought to contribute to children's behavioural problems (Patterson et al. 1989; Saunders et al. 2000 cited in AIFS 2012).
- Because this measure comprises multiple items, it is potentially more difficult to add to an existing survey.

Parental school engagement

Talking with children about school

In the LSAC, as part of the Home Activities Index, parents are asked how often they talk to their children about his/her activities at school/kindergarten/pre-school/day-care (AIFS 2012).

Potential indicator: Proportion of children whose parents talk to them daily/frequently about their day at school/kindergarten/pre-school/day care.

- The questions are age-appropriate for children aged 4–8 years.
- As this is 1 of 7 items relating to home activities, the validity of using this single item from a multi-item scale would need to be assessed.

Helping with homework

In the LSAC, the Parental Involvement with Child Scale involves asking parents how often they check or help their children with homework (AIFS 2012).

Potential indicator: Proportion of children whose parents regularly assist with homework.

- The questions are appropriate for ages 6–8.

- The construct is narrower than the previous construct, 'Talking with children about school'. The construct is also less clear in meaning. Parental assistance with homework could be seen as a measure of the child's ability to work independently or cope with homework rather than parental interest.
- As this is 1 of 8 items relating to parental involvement, the validity of using this single item from a multi-item scale would need to be assessed.

The ABS Childhood Education and Care Survey (CEaCS) asks whether parents have been actively involved in any informal learning activities. One of the response options relates to assisting with homework or other educational activities.

Potential indicator: Proportion of children whose parents assisted with homework or other educational activities in the last week.

- The questions relate to parents of children aged 3–8.
- Although similar to the construct used in the LSAC, this one is broader in that it includes 'other educational activities'.
- It has a more clearly defined reference period (in the last week).

Negative parenting behaviours/practices

The following are negative parenting behaviours associated with negative outcomes for children. As such, they constitute negative measures.

Hostile parenting

The Hostile Parenting Scale included in LSAC consists of 5 items, and was designed to elicit information on parent's feelings of anger and/or frustration towards their child. Parents are asked to respond to statements (for example, 'I have raised my voice and shouted at this child') on a 10-point semantic differential scale (ranging from '1—not at all' to '10—all the time').

Potential indicator: Proportion of parents who exhibit hostile parenting.

- The indicator is appropriate for ages 4–8 years.
- Hostile parenting has been consistently associated with children's behavioural problems (Patterson et al. 1989; Saunders et al. 2000 cited in AIFS 2012).
- Because this measure comprises multiple items, it is potentially more difficult to add to an existing survey.

Ineffective discipline practices

The Parenting Scale, developed by Arnold et al. (1993) is a 30-item self-report scale which takes about 10 minutes to complete. It is designed to measure actual dysfunctional discipline practices. Parents rate probabilities of using specific discipline strategies in response to misbehaviour. The ineffective styles include laxness, over-reactivity and verbosity. The tool is a recommended measure in the measures database of the Ontario Centre of Excellence for Child and Youth Mental Health (2014).

Potential indicator: Proportion of parents who use ineffective discipline practices.

- The questionnaire is appropriate for ages 18 months to 4 years.
- The construct has a narrow and negative focus, and only applies to a particular age range.

Parental self-efficacy

The LSAC includes 3 measures of parental self-efficacy: the Global Parenting Efficacy Scale; the Parenting Self-Efficacy Scale—Infants; and the Parenting Self-Efficacy Scale—Children. The Global Parenting Efficacy Scale asks parents to rate their overall ability as a parent on a 5-point Likert scale ranging from 1 'not very good' to 5 'very good'. The Parenting Self-Efficacy Scale—Infants and Parenting Self-Efficacy Scale—Children ask parents to rate their ability in relation to specific behaviours relevant to either infants or children (AIFS 2012).

Potential indicator (based on Global scale): Proportion of parents who rate their parenting skills as ' very good'.

- The Global Parenting Efficacy Scale is appropriate for all ages 0–8. The Parenting Self-Efficacy Scale—Infants is appropriate for ages 0–1, and the Parenting Self-Efficacy Scale—Children for ages 1–8.
- The Global Parenting Efficacy Scale has the advantage of being applicable to all age groups, and being derived from a single question, thereby simplifying data collection (Zubrick et al. 2008). However, the separate indicators are more objective, being based on actual behaviours.

Parental mental health

The Key National Indicators of Children's Health, Development and Wellbeing, as reported in *A picture of Australia's children 2012* (AIHW 2012a), include the following indicator.

Potential indicator: Proportion of parents with mental health problems, and who have co-resident children.

- The indicator is appropriate for ages 0–8 (has been used for 0–14 in the Key National Indicators framework).
- The measure of mental health used is based on the Short Form 36 Health Survey (SF-36), a 36-item questionnaire that measures 8 subjective domains of health. For *A picture of Australia's children 2012*, data from the HILDA were used. However, as this is a longitudinal data collection, it is not an ideal data source. Further research could be undertaken into the feasibility of using data from the child and adolescent component of the National Survey of Mental Health being conducted during 2013–14.
- An alternative tool is the Kessler K6 screening scale used in the LSAC to measure parental psychological distress. This measure is widely used in general purpose health surveys, due to its brevity, strong psychometric properties and ability to discriminate cases with a diagnosis based on the DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, 4th Edition) from non-cases (cited in AIFS 2012).

Parental support

The 2009–10 NSW Child Health Survey included a question on the need for parental support services, recognising that parental support services can influence a range of health and social outcomes for children (NSW Ministry of Health, Centre for Epidemiology and Evidence 2012).

Potential indicator: Proportion of parents/carers of children who feel the need for parental support services.

- The question is appropriate for ages 0–8 (the NSW survey reports on parents of children aged 1–15).

- Available data are for NSW only; however, a similar question could be included in a national survey.
- Consideration could also be given to adapting the question to reporting on unmet need for services.

Reporting feasibility

Based on the review of potential indicator sources above, the following comments/options are provided for further consideration.

Inclusion of items in existing surveys

The review above covered several single-item questions and multi-item modules that could be incorporated into existing data collection vehicles. A large number relate to parenting behaviours. In view of the recommendation made in Phase 1 for positive indicators where possible, indicators related to positive parenting practices may be more appropriate.

Consideration should also be given to whether it is preferable to use items applying to the whole 0–8 year age range (such as parental warmth and global parental self-efficacy). Other factors to be considered include policy relevance (for example, parental school engagement).

If the option of including one of the single- or multi-item questions in an existing data collection mechanism were to be pursued, finding appropriate data collection vehicles may require further investigation. Like the peer relationships indicator topic area, the nature of the parenting indicator area means that a survey rather than administrative data would be the most likely data collection method.

A suitable national data source has not yet been found; however, the GSS and Family Characteristics surveys conducted by the ABS warrant further consideration and investigation. The HILDA is not considered a suitable source as it is a longitudinal study.

Other potential vehicles include any existing surveys managed by the Department of Education, or state- and territory-based population health surveys. If all states and territories have suitable surveys (unknown at present), the survey methods in each would need to be considered to ensure comparable data.

Development of a child health survey

As mentioned in Sections 2.2, 2.3 and 2.4 on Peer Relationships/Bullying, Racism, and School Engagement respectively, consideration could be given to developing a new early childhood health and wellbeing survey that specifically targets the topic areas that do not have current data sources. Should that option be pursued, it could also include questions relating to parenting quality/capacity.

2.6 Social and emotional wellbeing

The indicator on social and emotional wellbeing has been defined for the Children's Headline Indicators as:

> *The proportion of children scoring 'of concern' on the Strengths and Difficulties Questionnaire* (AIHW 2012b).

To date, this indicator has not been reported against for the Children's Headline Indicators due to a lack of data. Suitable data may become available from the child and adolescent survey component of the National Survey of Mental Health and Wellbeing ('the Young Minds Matter Survey') which is being conducted during 2013–14. The scope of this second national survey will include children and adolescents aged 4 to 17 years inclusive. It is not expected that the national survey sample will allow for disaggregation of most variables by state/territory, remoteness or other sub-populations.

The survey incorporates household-based, face-to-face interviews with primary carers of children and adolescents aged 4–17. Information will be supplemented by information obtained directly from young people aged 11 years or older. Field work to be conducted during 2013, and analyses and publication of data are expected in 2015.

At this stage it is unclear if and when the survey will be repeated; the last iteration of the survey was in 1998–99.

2.7 Family social network

The indicator on family social network is a priority area in the Children's Headline Indicators. Funding was received from the then Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA), now the Department of Social Services (DSS), to undertake indicator development (along with *Social and emotional wellbeing* and *Shelter*). An information paper was published in 2010 (AIHW 2010b) and the following indicator was proposed:

> *Proportion of **children** aged 0–12 whose **parent or guardian** was usually able to get help when needed.*

The indicator has not yet been reported on due to the lack of a suitable national data source. Nor have the computation description and disaggregations been developed, as these are dependent on the data source.

The 2014 GSS includes the following new question:

> *When I need someone to help me out, I can usually find someone*.

The GSS interview process randomly selects one person aged 18 years or over from each participating household. This means that children are not interviewed and the interviewee may or may not be a parent/guardian of a child in the household. However, the new question potentially provides data for the following proxy indicator:

> *Proportion of **households with children** in which the **household respondent** was usually able to get help when needed.*

The age range for 'children' in the above proxy indicator is still to be determined. While the Children's Headline Indicators focus on 0–12, it is not clear at present whether data on children from the GSS will be available by single years of age, or whether there will be 5-year age groupings only.

2.8 Summary

Topic areas requiring indicator development

This chapter has focused in the first instance on the 5 topic areas for which no indicators were specified during Phase 1. It has defined and conceptualised each of the topic areas based on a literature review, proposed several indicators, sourced from existing frameworks/surveys, that measure the various constructs, and provided an initial evaluation of the feasibility of reporting against these indicators. These findings are summarised in Table 2.3.

As the table shows, there are many options for reporting against the ECD Outcomes Framework; however, only a few currently have data available. Whether these reporting options are the most appropriate in terms of the constructs they measure requires further consultation with stakeholders.

For the **child behavioural problems** indicator topic area, conceptualisation of the indicator area was challenging. The most appropriate construct, 'internalising and externalising problems' makes the Strengths and Difficulties Questionnaire (SDQ) the most suitable measurement tool. This is problematic given that the same measure has been proposed for the social and emotional wellbeing indicator topic area.

An alternative is to reconceptualise the indicator in terms of mental health problems, and use the Diagnostic Interview Schedule for Children Version 4 (DISC-IV) or the indicator Contact with Primary Mental Health Care by Children and Young People. For the former, data are expected to become available in 2015 (although this will not be a regular data source). For the latter, operationalisation of the data source needs further investigation.

A third alternative is to use the social competence and emotional maturity domains of the AEDC, noting that this also has a strong conceptual basis in terms of social and emotional wellbeing (AIHW 2012b). Predictive validity studies for this source require further investigation.

For the **peer relationships/bullying** indicator topic area, a possible indicator for the 'peer problems' construct is 'Children scoring in the "of concern" range on the peer problems subscale of the Strengths and Difficulties Questionnaire (SDQ)'. As indicated elsewhere in the chapter, data based on the SDQ are expected to become available in 2015 via the Child and Adolescent Component of the National Survey of Mental Health and Wellbeing (the 'Young Minds Matter' survey), although regular ongoing reporting of this source is not expected. The validity of using only one subscale from the SDQ requires further investigation. For the 'social competence' construct, the AEDC's social competence domain is a possible indicator. Predictive validity studies for this source require further investigation.

For the other 8 potential indicators or measurement tools suggested in the peer relationships/bullying topic area, none currently have nationally comparable data available. Should these potential indicators be regarded as measuring constructs more relevant to the topic area, further data development work will be needed.

For the **racism** indicator topic area, the NATSISS has been confirmed as a suitable source for reporting on an indicator concerning bullying due to a child's Indigenous identity. There is currently no equivalent source for children with a refugee or migrant background. The remaining 5 potential indicators and measurement tools suggested for this topic area do not have national data sources.

For the **school engagement** indicator topic area, none of the 4 potential indicators suggested have suitable national data sources. The most promising of the indicators in terms of data availability is for the 'school enjoyment' construct, and arises from questions in the National School Opinion Survey (NSOS) used by individual schools for their own annual reporting. However, further investigation into the feasibility of reporting this data at a national level would be required, as there is currently no mandatory national collation of data from this survey.

Finally, for the **parenting quality/capacity** indicator topic area, of the 15 potential indicators suggested, the only indicator for which there is currently a national source is 'children whose parents assisted with homework or other educational activities in the last week'. This indicator relates to the 'parental school engagement' construct, and data are available from the CEaCS.

If decisions are taken that indicators for which there is currently no national data source are more appropriate than others for reporting against the Early Childhood Development Outcomes Framework, additional data development work would be required. It may be possible to include some questions that measure a particular indicator in an existing survey or surveys. Some suggestions have been provided in this chapter. However, the operationalisation of these suggestions/options will need further investigation.

Alternatively, depending on the number of indicators that require new national data sources, consideration could be given to establishing a new national early child development survey. This too would require further investigation.

Topic areas requiring national data sources

The chapter has also reviewed data availability for the 2 indicator topic areas 'social and emotional wellbeing', and 'family social networks'. While data are not yet available for either indicator, it is anticipated that during 2015 data will become available for social and emotional wellbeing indicator from the Child and Adolescent Survey Component of the National Survey of Mental Health and Wellbeing (the 'Young Minds Matter' survey).

It is also anticipated that a proxy for the family social networks indicator will be available from the 2016 iteration of the GSS. Further discussion and decisions are needed on the relative merits of using this proxy until a data source is found that more accurately measures the indicator (as defined in Phase 1).

Table 2.3: Summary of potential indicators and reporting feasibility/options for the 5 topic areas requiring indicator development

Definition/Conceptualisation	Potential indicator and measurement tools	Reporting feasibility/options (Data availability/potential source)
Child behavioural problems		
Internalising/externalising problems	Children scoring 'of concern' on the Strengths and Difficulties Questionnaire (SDQ)	Indicator also proposed for social and emotional wellbeing; recommended that same indicator not be used for both areas.
Mental health problems	Children with a psychiatric diagnosis, based on the Diagnostic Interview Schedule for Children Version 4 (DISC-IV)	Possible source: National Survey of Mental Health and Wellbeing. Regular updated data not expected to be available.
	Contact with Primary Mental Health Care by Children and Young People	Medicare data. Data access/availability requires investigation.
Social and emotional wellbeing	Children 'developmentally vulnerable' on the social competence and/or emotional maturity domain	AEDC. Validity of single subscales for reporting requires investigation. Data available triennially from 2009.
	Children's school readiness	Jurisdictional on-school entry screening tools. Awaiting outcome of Audit by SA DECS on behalf of SCCYH.
Peer relationships/bullying		
Peer acceptance	Children who are liked by their school peers	Requires adaptation for parent-report. No national cross-sectional data (LSAC longitudinal data only).
Peer problems	Children scoring in the 'of concern' range on the peer problems subscale of the Strengths and Difficulties Questionnaire (SDQ)	Possible source: National Survey of Mental Health and Wellbeing. Regular updated data not expected to be available.
Social competence	Children developmentally vulnerable on the social competence domain	AEDC. Validity of single subscales for reporting requires investigation. Data available triennially from 2009.
Opportunities for social interaction	Providing opportunities for children to interact positively with other children	Further investigation of indicator required.
Parental encouragement to spend time with friends	Parental/caregiver monitoring the child's friends and encouraging time spent with those who set good examples	Further investigation of indicator required.
Bullying	*Bullying questionnaires* Bullying Prevalence Questionnaire (Children who are bullied 'pretty often' or 'very often') Peer Relations Questionnaire—Revised Olweus Bully/Victim Questionnaire	Complete surveys relating to bullying only. Require adaptation for parent-report. No national data.
	Children who are 'always' bullied at school	Requires adaptation for parent-report. No national cross-sectional data (LSAC longitudinal data only).
	Parents who report that their child feels safe at school	NSOS. National data not available.

(continued)

Table 2.3 (continued): Summary of potential indicators and reporting feasibility/options for the 5 topic areas requiring indicator development

Definition/Conceptualisation	Potential indicator and measurement tools	Reporting feasibility/options (Data availability/potential source)
Racism	Children who are bullied at (pre)school because of their Indigenous identity	National data for Indigenous children available in the NATSISS, and aligns with LSAC; Question could be adapted for refugee/migrant children; no current source.
	Has your child been discriminated against in the last 12 months because of his/her cultural background?	No national data source.
	Measurement of Indigenous Racism Experiences (MIRE) questionnaire	Requires adaptation for parent-report. No national data source.
	Experiences of Racism Survey	Requires adaptation for parent-report. No national data source.
	Experiences of discrimination based on skin colour, ethnic origin or religion in the previous 12 months	Requires adaptation for parent-report. No national data source on children.
Cultural awareness	Child's acceptance of people who are racially, culturally or ethnically different from him/her	Further investigation required if 'cultural appropriateness' is revisited as an indicator area.
School engagement		
School enjoyment	Children who have a high score on the School Liking and Avoidance Scale (SLAS)	No cross-sectional national data (LSAC longitudinal data only). Requires adaptation for parent-report.
	Children who like being at their school	No national data.
	Child is enthused about learning and enjoys going to school	Further investigation required. No Australian data source.
Social and emotional environment of school	Children who score highly on school as a 'social environment dimension'	Further investigation required. No Australian data source.
Parenting quality/capacity		
Parenting behaviours and styles	Parents who show warmth and affection	No national cross-sectional data (LSAC longitudinal data only).
	Parents who do something special with their children every day	No national cross-sectional data (LSAC longitudinal data only).
	Parents who praise their children every day	No national cross-sectional data (LSAC longitudinal data only).
	Parents who report feeling very close to their children	No Australian data source.
	Parents who report being able to talk about things that matter 'very well' with their children	No Australian data source.
	Parents who report meeting all or most of their children's friends	No Australian data source.
	Parents who use consistent disciplinary practices	No national cross-sectional data (LSAC longitudinal data only).

(continued)

Table 2.3 (continued): Summary of potential indicators and reporting feasibility/options for the 5 topic areas requiring indicator development

Definition/Conceptualisation	Potential indicator and measurement tools	Reporting feasibility/options (Data availability/potential source)
	Hostile parenting scale	No national cross-sectional data (LSAC longitudinal data only).
	Parenting scale/parents who use ineffective discipline practices	No national data source.
Parental engagement		
– parental school engagement	Children whose parents talk to them daily/frequently about their day at school/kindergarten/pre-school/day care	No national cross-sectional data (LSAC longitudinal data only).
	Children whose parents regularly assist with homework	No national cross-sectional data (LSAC longitudinal data only).
	Children whose parents assisted with homework or other educational activities in the last week	ABS CEaCS.
Parental capacity		
– parental mental health	Parents with mental health problems, and who have co-resident children	HILDA longitudinal data only.
– self-efficacy	Parents who rate their parenting skills as 'very good'	No national cross-sectional data (LSAC longitudinal data only).
– parenting programs	Parents/carers of children who feel need for parental support services	No known national data source.

3 Technical specifications

The following technical specifications are provided for each of the recommended indicators and detail the operational definitions, primary data sources, proposed disaggregation, and any data issues or limitations associated with the indicators and data sources, in particular inconsistencies between indicator 'ideal' definitions and existing data definitions.

These specifications will guide the analysis and interpretation of data for each indicator recommended for reporting against the ECD Outcomes Framework. An overview of all indicators in the framework is provided in Table 3.1. Of the indicators, it is expected that 7 will be able to be reported on annually from 2014, and 4 can be reported on triennially. For 2 indicators, baseline data are available, but the ongoing availability of current data sources is still to be confirmed. Data sources for the remaining 7 are to be determined (see Chapter 2). Further details on the associated data sources are provided in Appendix C.

Table 3.1: Key national indicators for reporting against the ECD Outcomes Framework

Indicator area	Indicator	Data source(s)	Frequency of collection
Outcome 1: Children are born and remain healthy			
Birthweight	Proportion of live born infants of low birthweight	AIHW National Perinatal Data Collection	Annual
Breastfeeding	Proportion of infants exclusively breastfed to around 4 months of age	National Infant Feeding Survey (2010)	Unknown
Infant mortality	Mortality rate for infants aged less than 1 year	AIHW Mortality Database	Annual
Overweight and obesity	Proportion of children whose BMI score is above the international cut-off points for 'overweight' and 'obese' for their age and sex	ABS National Health Survey	3-yearly
Child behavioural problems	Indicator to be developed[(b)]	To be determined	
Outcome 2: Children's environments are nurturing, culturally appropriate and safe			
Peer relationships/bullying	Indicator to be developed[(b)]	To be determined	
Racism	Indicator to be developed[(b)]—interim indicator proposed for Indigenous discrimination	To be determined	
Child abuse and neglect	Rate of children who were the subject of child protection substantiation in a given year	AIHW Child Protection Data Collection	Annual
Shelter	Proportion of children aged 0–12 years living in households experiencing at least one of the specified aspects of housing disadvantage (homelessness, overcrowding, housing stress, forced residential mobility)[(a)]	ABS Census of Population and Housing	5-yearly
		ABS Survey of Income and Housing	2-yearly
Outcome 3: Children have the knowledge and skills for life and learning			
Early learning (home-based)	Proportion of children aged 0–8 years who are read to by a parent on a regular basis	ABS Childhood Education and Care Survey	3-yearly

(continued)

Table 3.1 (continued): Key national indicators for reporting against the ECD Outcomes Framework

Indicator area	Indicator	Data source(s)	Frequency of collection
Transition to primary school	Proportion of children developmentally vulnerable on one or more domains of the AEDC	Australian Early Development Census (AEDC)	3-yearly
Social and emotional wellbeing	Proportion of children scoring 'of concern' on the Strengths and Difficulties Questionnaire[(a)]	To be determined	
Outcome 5: Children are engaged in and benefiting from educational opportunities			
Preschool and school attendance	Proportion of children attending an early educational program in the year prior to beginning primary school	ABS National Early Childhood Education and Care (from 2012)	Annual
	Attendance rate of children at primary school	ACARA Student Attendance Data Collection	Annual
Literacy	Proportion of children in Year 3 achieving at or above the national minimum standards for reading	ACARA National Assessment Program—Literacy and Numeracy	Annual
Numeracy	Proportion of children in Year 3 achieving at or above the national minimum standards for numeracy	ACARA National Assessment Program—Literacy and Numeracy	Annual
School engagement	Indicator to be developed[(b)]	To be determined	
Outcome 6: Families are confident and have the capabilities to support their children's development			
Family social network	Proportion of children aged 0–12 years whose parent or guardian was usually able to get help when needed[(a)]	To be determined	
Parenting quality/capacity	Indicator to be developed[(b)]	To be determined	
Outcome 7: Quality early childhood development services that support the workforce participation choices of families			
Quality of early childhood education and care services	Proportion of early childhood education and care services that meet the National Quality Standard[(a)]	National Quality Standard and rating system (from 2016)	Annual
Accessibility of early childhood education and care services	Unmet need for early childhood education and care services	Australian Bureau of Statistics Survey of Childhood Education and Care	3-yearly

(a) Data not currently available, not suitable for reporting or operationalisation of indicator requires further investigation prior to reporting.

(b) Further development of the indicator needed before data collection and/or reporting.

Outcome 1: Children are born and remain healthy

Outcome 1 includes 5 indicators. Of these, 2 (birthweight and mortality) are sourced from administrative data collections and can be reported on annually. Two are reliant on survey data. Overweight and obesity can be reported every 3 years; the survey reporting cycle for breastfeeding is unknown. The fifth indicator is yet to be defined.

Birthweight

Under the National Maternity Services Plan 2010 (the Plan), a project to develop a set of nationally consistent and accessible maternity service indicators is in progress. As part of this, data for 10 National Core Maternity Indicators have been published and are available online (AIHW National Perinatal Epidemiology and Statistics Unit and AIHW 2013) and data development for a further 8 indicators has commenced.

Of relevance to the ECD Outcomes Framework is the indicator 'small babies among births at or after 40 weeks gestation'. This indicator relates to the quality of maternity care and differs to that proposed for the ECD Outcomes Measures (Proportion of liveborn infants of low birthweight). Consideration could be given to aligning the ECD indicator with that in the Core Maternity Indicator set. However, the existing ECD indicator currently aligns with the low birthweight indicators in the COAG National Healthcare Agreement and Children's Headline Indicators.

Indicator: Proportion of live born infants of low birthweight

Operational definition	
Numerator	Number of low birth weight (<2,500g) live born infants in reference year
Denominator	Number of births (live born) in reference year
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Socioeconomic status (SEIFA IRSD (Socio-Economic Indexes For Areas, Index of Relative Socio-economic Disadvantage), Remoteness, Indigenous status
Other potential disaggregation	State and territory; Baby characteristics, Sex, Gestational age, Birthweight categories; Maternal characteristics: Age, Country of birth
Data source details	
Data source (and provider)	AIHW National Perinatal Data Collection
Frequency of collection	Annual from 1991 onwards (2011 data available as at July 2014)
Other	
Internationally comparable	Yes with other Organisation for Economic Co-operation and Development (OECD) countries
Computation notes	Low birthweight is defined as less than 2,500 grams. Excludes multiple births, stillbirths and births with unknown birthweight or unknown gestational age. State/territory data excludes Australian non-residents, residents of external territories and records where state/territory of residence was not stated, but these are included in totals for Australia. Analysis by remoteness and SEIFA IRSD based on usual residence of the mother. Analysis by SEIFA IRSD is based on population-based quintiles using Australian cut-offs.
Data issues/limitations	Reporting of Indigenous status of babies is based on maternal Indigenous status only, which is likely to underestimate the number of Indigenous babies. Identification of Indigenous babies will be improved by adding Indigenous status of baby to the Perinatal National Minimum Data Set. The data element was added to the Perinatal National Minimum Data Set for collection in the 2012–13 reference year. A full year of data expected to be available for reporting in 2014 (2012 data) (Li et al. 2013).

Breastfeeding

Indicator: Proportion of infants exclusively breastfed to around 4 months of age

This indicator is currently aligned with the Children's Headline Indicator on breastfeeding. Consideration could be given to revising the indicator so that the duration of breastfeeding is 'to around 6 months' (that is, to 5–<6 months) or to reporting 2 measures. Note, the Australian guidelines are worded slightly differently, and recommend exclusive breastfeeding 'until around 6 months' (see also 'Data issues/limitations' below). At present there are no plans to review the Children's Headline Indicators and this would mean the 2 frameworks would not be aligned.

Operational definition	
Numerator	Number of infants exclusively breastfed to 3–<4 months of age
Denominator	Number of infants in reference year
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Socioeconomic status (SEIFA IRSD), Remoteness, Indigenous status
Other potential disaggregation	
Data source details	
Data source (and provider)	Australian National Infant Feeding Survey 2010
Frequency of collection	Unknown
Other	
Internationally comparable	No
Computational notes	The numerator and denominator listed above are for conceptual purposes. The analysis extracts weighted proportions derived using a non-parametric survival analysis technique, essentially constructed on synthetic 'cohorts' of children to each month of age. This cohort method is consistent with international practice on reporting breastfeeding duration. For further details on the specific methods for exclusive breastfeeding, refer to *2010 Australian National Infant Feeding Survey: indicator results* (AIHW cat. no. PHE 156), p.53. Numerator includes infants who were exclusively breastfeed for 3 full months and ceased exclusive breastfeeding in their fourth month of life (3–<4 months of age). For further information on the age concepts used in the survey, refer to *2010 Australian National Infant Feeding Survey: indicator results* (AIHW cat. no. PHE 156), p.3. Estimates are suppressed when the cell size is smaller than 30, or the numerator is smaller than 5. Standard Errors and Relative Standard Errors are calculated. Analysis by remoteness and SEIFA IRSD based on usual residence.
Data issues/limitations	The World Health Organization (WHO) and the National Health Medical Research Council (NHMRC) recommend that all infants are exclusively breastfed until around 6 months of age. Difficulties in measurement arise in relation to the recommendation of exclusive breastfeeding to around 6 months of age, as solids are often introduced to infants around this time. The age of 4 months has been specified as a Children's Headline Indicator until such time as reliable national data can be collected on exclusive breastfeeding 'until around' 6 months of age. *Exclusive breastfeeding* means that the infant receives only breast milk (including expressed breast milk) and medicines (including oral rehydration solutions, vitamins and minerals), but no water, infant formula or non-human milk. Estimates are based on recall of infant feeding practices. Poor memory, misunderstanding of the question or intentional deception can all contribute to inaccuracies in the data. Although the sample size was reasonable for the national level, any estimates for subpopulations are based on a smaller sample size and are less precise.

	The survey used the Medicare Australia enrolment database; children who were not enrolled at the time of sample selection date were excluded from the survey. Further, only those children who had at least one Medicare service or Australian Childhood Immunisation Register episode in the previous 12 months (including enrolment) were included in the survey.

Infant mortality

Indicator: Mortality rate for infants less than 1 year of age

Operational definition	
Numerator	Number of deaths of live born infants (less than 1 year of age) registered in reference year
Denominator	Number of live births registered in reference year
Computation/Presentation	Number per 1,000
Disaggregation by ECD Outcome 4	Socioeconomic status (SEIFA IRSD) Remoteness, Indigenous status
Other potential disaggregation	State and territory, Sex, Age (neonatal, postneonatal), Leading causes of infant death
Data source details	
Data source (and provider)	AIHW Mortality Database (sourced from the ABS Deaths Collection) ABS Births Collection (ABS Births Australia, Cat. No. 3301.0)
Frequency of collection	Annual from 1975 onwards (2012 available as at July 2014)
Other	
Internationally comparable	Yes with other Organisation for Economic Co-operation and Development (OECD) countries
Computation notes	Analysis by remoteness and socioeconomic status (SEIFA IRSD) based on usual residence
Data issues/limitations	There is considerable variation across the states and territories in the completeness of mortality data for Aboriginal and Torres Strait Islander people. Mortality data for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only are considered to have sufficient coverage based on state/territory of usual residence. Victoria, Tasmania and the Australian Capital Territory are excluded due to small numbers of registered Aboriginal and Torres Strait Islander deaths. Data are aggregated for 3 years for presentation of data by Indigenous status, Remoteness and SEIFA IRSD.

Overweight and obesity

Indicator: Proportion of children whose body mass index (BMI) score is above the international cut-off points for 'overweight' and 'obese' for their age and sex

Operational definition	
Numerator	Number of children whose BMI is above the international cut off points for 'overweight' and 'obese' for their age and sex (5–14 years)
Denominator	Number of children of same age and sex in reference year
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Socioeconomic status (SEIFA IRSD), Remoteness, Disability
Other potential disaggregation	Age, Sex, State and territory, Family type, Culturally and linguistically diverse background

Data source details	
Data source (and provider)	ABS National Health Survey (NHS) (and ABS National Nutrition and Physical Activity Survey (NNPAS) when conducted in parallel)
Frequency of collection	1977–78, 1983, 1989–90, 1995, 2001, 2004–05, 2007–08, 2011–12 (NHS & NNPAS), 2014–15 (pending)
Other	
Internationally comparable	No
Computation notes	Percentage based on: • children aged 5–14 years • **measured** height and weight half-year cut-off points for children (refer to Appendix 4 of the ABS Australian Health Survey 2011–13 (AHS) User Guide). Analysis by state/territory, remoteness and SEIFA IRSD based on usual residence. Analysis by SEIFA IRSD is based on area-based quintiles using Australian cut-offs. Relative Standard Errors are requested/calculated.
Data issues/limitations	In 2011–12, the NNPAS was run for the first time, in parallel with the NHS, as part of the broader AHS. The NHS and NNPAS are comparable and the samples can be pooled to increase the sample size and improve the reliability of estimates, which enables a greater level of disaggregation to be published for the Children's Headline Indicators. Cell suppression may be required if sample size is not sufficient. **Measured** height and weight (as opposed to self-reported) are available from the 2007–08 and 2011–12 surveys only, and are comparable to the 1995 National Nutrition Survey. Data are reported for children aged 5–14 years (age range available from 2007–08 survey). The 2011–12 survey collected data for 2–14 year olds. If subsequent surveys continue to collect data for this expanded age range, then reporting may be extended to include 2–3 year olds.

Child behavioural problems: indicator to be developed—see Section 2.1

Outcome 2: Children's environments are nurturing, culturally appropriate and safe

Outcome 2 includes four indicators. Of these, one (Child abuse) is sourced from an administrative data collection and can be reported on annually. The indicator 'Shelter' draws on two sources, which enable 2- and 5-yearly reporting respectively. Indicators for 'Peer relationships' and 'Cultural appropriateness' are yet to be defined.

Peer relationships: indicator to be developed—see Section 2.2

Cultural appropriateness: indicator to be developed—see Section 2.3

Child abuse and neglect

Indicator: Rate of children aged 0–12 who were the subject of child protection substantiation in given year

Operational definition	
Numerator	Number of children aged 0–12 years who were the subject of child protection substantiations of notifications received during the reference year
Denominator	Number of children aged 0–12 years in reference year (at 31 December)
Computation/Presentation	Rate per 1,000
Disaggregation by ECD Outcome 4	Indigenous status
Other potential disaggregation	Sex, Age, State and territory, Type of abuse
Data source details	
Data source (and provider)	AIHW Child Protection Data Collection (numerator) AIHW Population database (denominator)
Frequency of collection	Child protection data: Annual (from 1991 onwards; 2012–13 available as at July 2014)
Other	
Internationally comparable	No
Data issues/limitations	There are currently no reliable data on the incidence or prevalence of child abuse and neglect in Australia, mainly due to the difficulties in defining measures and collecting data. However, national data are available from the AIHW Child Protection Data Collection for situations where children have come to the attention of child protection authorities; these data are collated by the AIHW from all state and territory governments (see Appendix 3 for more information on this data collection). It should be noted that these data relate to an unknown proportion of all abuse and neglect cases in the community and are therefore not a reliable measure of incidence or prevalence (see AIHW 2010b and earlier issues). In Australia, statutory child protection is the responsibility of the state and territory governments. While the broad processes in state and territory child protection systems are similar, child protection legislation, policies and practices vary. Variations between jurisdictions in recorded cases of abuse or neglect may reflect these differences in each jurisdiction, rather than a true variation in the levels of child abuse and neglect (see Bromfield & Higgins 2005). Trends in substantiation data must also be interpreted with caution as increases may partially reflect increased community awareness and willingness to report concerns, or changes to policies, practices and data reporting methods.

	These differences should be noted when interpreting child protection data across jurisdictions and over time (AIHW 2010a). Caveats apply to various years of data. Categories for reporting Indigenous status vary over time. From 2007–08 to 2009–10 'Other children' includes non-Indigenous children and children without a reported Indigenous status. From 2010–11 onwards, 'Other children' includes non-Indigenous children only.

Shelter

Indicator: Proportion of children aged 0–12 years living in households experiencing at least one of the specified aspects of housing disadvantage (homelessness, overcrowding, housing stress, forced residential mobility)

Operational definition	
Numerator	*Homelessness* Number of children aged 0–12 years who are currently experiencing primary, secondary or tertiary homelessness *Overcrowding* Number of children aged 0–12 years living in households where 1 or more bedrooms are required according to the Canadian National Occupancy Standard *Housing stress* Number of children aged 0–12 years living in low income households paying greater than 30% of household income on rent or mortgage payments *Forced residential mobility* Number of children aged 0–12 years living in households where the main reason for the last move includes at least one adverse circumstance
Denominator	*Homelessness* All children aged 0–12 years *Overcrowding* All children aged 0–12 years *Housing stress* All children living in low income households aged 0–12 years *Forced residential mobility* All children aged 0–12 years
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Remoteness, Indigenous status
Other potential disaggregation	Sex, State and territory, Household composition
Data source details	
Data source (and provider)	ABS Census of Population and Housing (Census) ABS Survey of Income and Housing (SIH)
Frequency of collection	Census: 5-yearly (2011 available as at April 2013) SIH: Annual from 1994–95 to 2003–04 (except 1998–99 or 2001–02), biennial from 2005–06 (2009–10 available as at April 2013)
Other	
Internationally comparable	No
Computation notes	Low-income households refer to the 30% of households in the 2nd–4th income deciles of equivalised disposable income. Either: notice given by landlord, lost job, family conflict, breakdown of marriage/relationship, reduce rent/mortgage.

Data issues/limitations	There is currently no single data collection to support the reporting against all 4 components of this indicator. The 2011 Census can be used to capture data for the homelessness component, and the SIH to capture data relating to overcrowding, housing stress and forced residential mobility. The operationalisation of this indicator requires further investigation prior to reporting.

Outcome 3: Children have the knowledge and skills for life and learning

Outcome 3 includes three indicators. Of these, one (transition to primary school) is sourced from an administrative data collection and one (early learning) from survey data. Both can be reported on triennially. There is currently no national data source for the third indicator, 'social and emotional wellbeing'.

Early learning (home-based)

Indicator: Proportion of children aged 0–8 years who are told stories, or read to by a parent on a regular basis

Operational definition	
Numerator	Number of children aged 0–8 years whose parent told stories, read or listened to them to at least 3 days a week
Denominator	Number of children aged 0–8 years in reference year
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Socioeconomic status (SEIFA IRDS), Remoteness, Indigenous status (from 2011), Parental employment and education
Other potential disaggregation	Sex, Age, State and territory, Frequency of reading
Data source details	
Data source (and provider)	ABS Survey of Childhood Education and Care (CEaCS)
Frequency of collection	3-yearly (2008 and 2011 data available as at May 2013)
Other	
Internationally comparable	No
Data issues/limitations	In the 2011 CEaCS different questions were asked depending on the age of the child. For 0–2 year olds the question related to parents reading from a book or telling stories, and the frequency of this activity. For 3–8 year olds questions related to told stories, read to the child, or listened to the child read. Self-report of reading to infants introduces the possibility of inaccurate estimation of reading frequency to provide a socially desirable response, or difficulties in accurately recalling how often children are read to. Collection of Indigenous status of child commenced in 2011.

Transition to primary school

Indicator: Proportion of children developmentally vulnerable on one or more domains of the AEDC

Operational definition	
Numerator	Number of children developmentally vulnerable on one or more domains of the AEDC (Australian Early Development Census).
Denominator	Number of children in corresponding AEDC population
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Socioeconomic status (SEIFA IRSD), Remoteness, Indigenous status, parental education

Other potential disaggregation	Language background other than English, State and territory, AEDC domains
Data source details	
Data source (and provider)	Australian Early Development Census (AEDC)
Frequency of collection	Triennial from 2009 (2015 data expected to be available in 2016)
Other	
Internationally comparable	No
Computation notes	Children with special needs are excluded from the numerator and denominator due to the substantial developmental needs of this group.
Data issues/limitations	AEDC does not capture children who do not attend school, as teachers complete the checklist only for children who are attending school. AEDC might not capture children who attend school sporadically, as teachers might not have had enough contact with a child to be able to assess them at the time checklists are completed in March.

Social and emotional wellbeing: indicator to be developed—see Section 2.6

Outcome 4: Children benefit from better social inclusion and reduced disadvantage, especially Indigenous children

Outcome 4 does not include any specific indicators. It is to be measured via the disaggregation of indicator areas across outcomes 1-3 and 5-7 by socioeconomic disadvantage, remoteness, Indigenous status, disability status and parental education/employment where possible.

Outcome 5: Children are engaged in and benefiting from educational opportunities

Outcome 5 includes four indicators. Of these, three (preschool/school attendance, literacy and numeracy) are sourced from administrative data and can be reported on annually. The fourth indicator (school engagement) is still to be defined.

Preschool and school attendance

Indicator: Attendance rate of children at preschool

Operational definition	
Numerator	Number of children attending an early educational program in the year prior to beginning primary school in the reference year
Denominator	Number of children enrolled in an early educational program in the year prior to beginning primary school in the reference year
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Socioeconomic status (SEIFA IRSD), Remoteness, Indigenous status
Other potential disaggregation	Age, Sex, Type of program
Data source details	
Data source (and provider)	National Early Childhood Education and Care Collection (ABS)
Frequency of collection	Annual (from 2012)
Other	
Internationally comparable	No
Data issues/limitations	Collection began in 2010, but for the first 2 years experimental estimates only were published due to data quality issues. Note that in 2012, the data collection was not yet fully comprised of unit record data, with one state providing some aggregate data. The level of disaggregation will need to be determined after the data collection is complete. Disaggregations relating to vulnerable and disadvantaged children based on the new National Partnership Agreement on Universal Access to Early Childhood Education (NPUAECE) require further data development work. As at November 2014, specifications for indicators in the NPUAECE had not been finalised. This indicator should be reviewed when the National Partnership Agreement indicator specifications have been finalised to ensure alignment.

Indicator: Attendance rate of children at primary school

Operational definition	
Numerator	Number of actual days (or part-days) that a student actually attends school over the collection period, on a possible school day
Denominator	Total number of possible 'student days' over the first semester as defined by each State and Territory's school calendar
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Indigenous status
Other potential disaggregation	State and territory, Sector (Government, Catholic, Independent), School year level, Sex

Data source details	
Data source (and provider)	Australian Curriculum, Assessment and Reporting Authority (ACARA)
Frequency of collection	Annual from 2007 (although data not suitable for *national* reporting as at July 2014).
Other	
Internationally comparable	No
Data issues/limitations	Student attendance data were first collected in 2007 and there is some variation in how the information is currently collected between states and territories, and across school sectors (government, Catholic and independent). As a result, data are currently not nationally comparable and variations by state and territory and sector may be partly explained by differences in data collection methodology (for further information see ACARA 2013a). Data cannot currently be aggregated across year levels, states and territories, or school sectors, due to these differences in data collection. National Standards for Student Attendance Data Reporting have been developed to collect and report consistent student attendance data across jurisdictional education authorities, and the Catholic and independent sectors. The National Standards will be applicable: • to students in Years 1 to 10 for all government, Catholic and independent schools in Australia • for the 2014 collection period and onwards (dependent on IT system enhancements in some sectors and jurisdictions).

Literacy

Indicator: Proportion of children in Year 3 achieving at or above the national minimum standards for reading

Operational definition	
Numerator	Number of children in Year 3 achieving at or above the national minimum standards for reading
Denominator	Number of children in Year 3 eligible and tested for reading
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Remoteness, Indigenous status, Parental education, Parental employment
Other potential disaggregation	State and territory, Sex, Year level, Tests (reading, writing, spelling, grammar), Language background other than English
Data source details	
Data source (and provider)	Australian Curriculum, Assessment and Reporting Authority (ACARA) National Assessment Program—Literacy and Numeracy (NAPLAN)
Frequency of collection	Annual (from 2008; 2013 available as at July 2014)
Other	
Internationally comparable	No
Data issues/limitations	Average age at a given Year level (Years 3, 5) varies between jurisdictions. In 2013, the proportion of 'not stated' for parental education varied across jurisdictions from 4% to 30%. For Australia overall, it was not stated for 8% of students. For parental occupation, the proportion of 'not stated' varied from 3% to 30% across jurisdictions. For Australia overall, it was not stated for 13% of students. This disaggregation would need be treated with caution. The introduction of the NAPLAN in 2008 means that data cannot be compared with results from previous years Estimated percentage meeting the national minimum standards is based on assessed students. Remoteness categories are based on the MCEECDYA Schools Geographic Location Classification Scale (see ACARA 2013a for details).

	NAPLAN is undertaken during a single week in May, which might result in the non-capture of children who do not attend school, attend school sporadically or whose parents decide they do not want them to sit the test.

Numeracy

Indicator: Proportion of children in Year 3 achieving at or above the national minimum standards for numeracy

Operational definition	
Numerator	Number of children in Year 3 achieving at or above the national minimum standards for numeracy
Denominator	Number of children in Year 3 eligible and tested for numeracy tests
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Remoteness, Indigenous status, Parental education, Parental employment
Other potential disaggregation	State and territory, Sex, Year level, Language background other than English
Data source details	
Data source (and provider)	Australian Curriculum, Assessment and Reporting Authority (ACARA National Assessment Program—Literacy and Numeracy (NAPLAN)
Frequency of collection	Annual (from 2008; 2013 available as at July 2014)
Other	
Internationally comparable	No
Data issues/limitations	Average age at a given Year level (Years 3, 5) varies between jurisdictions. In 2013, the proportion of 'not stated' for parental education varied across jurisdictions from 4% to 30%. For Australia overall, it was not stated for 8% of students. For parental occupation, the proportion of 'not stated' varied from 3% to 30% across jurisdictions. For Australia overall, it was not stated for 13% of students. This disaggregation would need be treated with caution. The introduction of the NAPLAN in 2008 means that data cannot be compared with results from previous years. Estimated percentage meeting the national minimum standards is based on assessed students. Remoteness categories are based on the MCEECDYA Schools Geographic Location Classification Scale (see ACARA 2013a for details). NAPLAN is undertaken during a single week in May, which might result in the non-capture of children who do not attend school, attend school sporadically or whose parents decide they do not want them to sit the test.

School engagement: indicator to be developed—see Section 2.4

Outcome 6: Families are confident and have the capabilities to support their children's development

Outcome 6 includes two indicators. Currently, neither can be reported on ('Family social network' and 'Parenting quality/capacity'). The latter is still to be defined.

Family social network: indicator to be developed—see Section 2.7

Parenting quality/capacity: indicator to be developed—see Section 2.5

Outcome 7: Quality early childhood development services that support the workforce participation choices of families

Outcome 7 includes two indicators. Of these, one (Quality of early childhood education and care services) is sourced from an administrative data collection. The second (Accessibility of early childhood education and care services) is reliant on survey data and can be reported triennially.

Quality of early childhood education and care services

Indicator: Proportion of early childhood education and care services meeting or exceeding the National Quality Standard

Operational definition	
Numerator	Number of early childhood education and care services (that is, family day care and centre-based care) that are rated overall as meeting or exceeding the National Quality Standard
Denominator	Number of early childhood education and care services (that is, family day care and centre-based care) that have received a service rating via assessment
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	Socioeconomic status (SEIFA IRSD), Remoteness
Other potential disaggregation	Jurisdiction, service type; by quality rating level (TBC).
Data source details	
Data source (and provider)	Australian Children's Education and Care Quality Authority (ACECQA) Quality ratings include: Excellent, Exceeding National Quality Standard; Meeting National Quality Standard; Working Towards National Quality Statement; Significant Improvement Required.
Frequency of collection	It is anticipated that data can be reported on annually as ACECQA will be reporting quarterly.
Other	
Internationally comparable	No
Data issues/limitations	The National Quality Framework commenced on 1 January 2012. As at 31 May 2014, 35% of early childhood education and care services included within the scope of the National Quality Framework had received a quality rating. The exact date for all centres to be 'on board' is yet to be confirmed. Centres will generally be assessed every 3 years; national data are to be updated quarterly.

Accessibility of early childhood education and care services

Indicator: Unmet need for early childhood education and care services

Operational definition	
Numerator	Number of children aged 0–12 years who currently require any/additional formal care or preschool
Denominator	Number of children aged 0–12 years old in reference year
Computation/Presentation	Percentage
Disaggregation by ECD Outcome 4	SEIFA, Remoteness (for larger states only), Parental employment/education

Other potential disaggregation	States and territories, Type of care, Quantity of care, Reasons required
Data source details	
Data source (and provider)	ABS Survey of Childhood Education and Care
Frequency of collection	3-yearly (2008 and 2011 data available as at July 2014. Next iteration of survey to be conducted in 2014 with results expected in 2015)
Other	
Internationally comparable	No
Data issues/limitations	Information is also available from the ABS Childhood Education and Care Survey on whether any or additional child care is required in the future (up to 12 months). Level of disaggregation available will be affected by the small sample size and, due to changes in the methodology, comparisons of data over time may be problematic.

Appendix A: Key indicator areas identified in Phase 1

This indicator mapping process resulted in the identification of 42 key indicator areas relevant to early childhood development.

Table A.1: Potential indicator areas mapped to ECD Outcomes Framework (Phase 1)

Children are born and remain healthy				
Antenatal care	Smoking in pregnancy[(a)]	Alcohol and drug use in pregnancy	Birthweight[(a)]	Breastfeeding[(a)]
Nutrition	Immunisation[(a)]	Mortality (infant[(a)], perinatal, under 5 years)	Preventable hospitalisations	Chronic conditions
Developmental checks	Overweight and obesity[(a)]	Physical activity	Dental health[(a)]	Mental health
Children's environments are nurturing, culturally appropriate and safe				
Peer relationships	Parental substance use	Child abuse and neglect[(a)]	Children as victims of violence	Injuries[(a)]
Shelter[(a)]	Electronic media	Environment	Environmental tobacco smoke	Neighbourhood
Children have the knowledge and skills for life and learning				
Social and emotional development/wellbeing[(a)]	Early learning (home-based)	Parental involvement in education	Attending early childhood education programs[(a)]	Transition to primary school[(a)]
Children benefit from better social inclusion and reduced disadvantage, especially Indigenous children				
Family economic situation[(a)]	Parental education	Parental employment	Access to services	
Children are engaged in and benefiting from educational opportunities				
Literacy/Numeracy[(a)]	School attendance[(a)]	School engagement		
Families are confident and have the capabilities to support their children's development				
Family interaction/functioning	Parenting quality	Parental and family health	Teenage births[(a)]	Family social network[(a)]
Early intervention services				
Quality early childhood development services that support the workforce participation choices of families				
Quality of early childhood education service	Accessibility of early childhood education service	Preschool/child care affordability		

(a) Children's Headline Indicator Priority Area.

Appendix B: Potential indicators

The table in this Appendix provide details on all potential indicators identified in relation to the following indicators: Peer relationships/bullying, School engagement and Parenting quality/capacity. No further indicators for Child behavioural problems were sought other than those discussed in Chapter 2, and no further indicators for Racism were found beyond those discussed in Chapter 2.

Table B.1: Potential indicators

Constructs	Possible indicator	Instrument/source	Age range	Data availability (Australia)	Comments
		Peer relationships/bullying			
Peer acceptance	Proportion of children who are liked by their peers	LSAC	6–9[(a)]	Longitudinal survey data	Questions: Are the children at school nice to you?; Do the children at school ask you to play with them? (AIFS 2012).
Peer problems	Proportion of children scoring in the 'of concern' range on the 'peer problems' scale of the SDQ	SDQ Peer Problems Scale	4–16	Expected	Expected source: Child & Adolescent Mental Health. Survey areas covered: Rather solitary, tends to play alone; Has at least 1 good friend; Generally liked by other children; Picked on or bullied by other children; Gets on better with adults than with other children (Goodman 2005).
Social competence	Proportion of children developmentally vulnerable on the AEDC social competence domain	AEDC	4–5	Yes	The social competence domain includes: Overall social competence; Responsibility and respect; Approaches to learning; Readiness to explore new things (Department of Education 2014).
Opportunities for social interaction	Not available	Search Institute Developmental Assets	3–5	No	Developmental Assets include: Parent(s) and caregivers to provide opportunities for the child to interact positively with other children. The Developmental Assets are not an instrument. The Search Institute surveys are not publicly available (Search Institute 2005).
Encouraging spending time with friends	Not available	Search Institute Developmental Assets	5–9	No	Developmental Assets include: Parents monitor the child's friends and encourage spending time with those who set good examples. The Developmental Assets are not an instrument. The Search Institute surveys are not publicly available (Search Institute 2005).

(continued)

Table B.1(continued): Potential indicators

Constructs	Possible indicator	Instrument/source	Age range	Data availability (Australia)	Comments
Connectedness with peers	Student perception of connectedness with peers (scale 1–5)	Victorian Attitudes to School Survey	10–17	Victoria	Reported in *The state of Victoria's children* (2010). Survey Questions: I get on well with other students at my school; I am liked by others at my school; I get on really well with most of my classmates; My friends at school really care about me (Victorian Department of Education and Early Childhood Development 2010).
Connectedness with peers	Average score of how connected children feel with peers (out of 100)	Tasmanian student opinion survey	10–17	Tasmania	Reported in Tasmania *Kids Come First Report 2009*. This is a composite indicator based on questions about how students get on with other students, and if they are liked and cared for by their friends at school (Tasmanian Department of Health and Human Services 2009).
Friendship	Proportion of children who have three or more close friends of the same gender	Health Behaviour in School-aged Children (HBSC)	11, 13, 15	No	Reported in Ireland's *State of nation's children 2012 (*Department of Children and Youth Affairs 2012); *Progress of Canadian children and youth 2006* (Canadian Council of Social Development 2006).
Friendship	Proportion of students who can talk to friends about things that really bother them	HBSC	11,13,15	No	Reported in *Progress of Canadian children and youth 2006* (Canadian Council of Social Development 2006).
Kind/helpful classmates	Proportion of students classmates who are kind and helpful	HBSC	11,13,15	No	Questions: Proportion of young people who agreed/strongly agreed that 'most of the students in my class(es) are kind and helpful' (Currie et al. 2012).
Bullying	No specific indicator provided but generally measures prevalence survey tool	Bullying Prevalence Questionnaire	Used for individual primary schools	No national data	Questions relating to being bullied include: being called names; picked on; left out on purpose; made fun of; and getting hit and pushed around. Includes frequency scale (Rigby & Slee 1993).
Bullying	No specific indicator provided–survey tool	Peer relations assessment questionnaires—Revised for primary (PRAQ–R)	5–10	No national data	Aims to provide information about the quality of children's (Prep to Year 5) relationships with peers, nature and prevalence of bullying and readiness to seek help. Provides information to help teachers assess: general wellbeing/happiness of children at school; quality of children's interpersonal relations with peers; nature and prevalence of bullying among young children; readiness of children to seek help from teachers/parents if they are bullied. Used by schools at their own volition/on voluntary basis (Rigby 2014).

(continued)

Table B.1(continued): Potential indicators

Constructs	Possible indicator	Instrument/source	Age range	Data availability (Australia)	Comments
Bullying	Proportion of children who have been bullied in the past couple of months	Olweus Bully/Victim questionnaire	8–16	Unknown	Revised Olweus Bully/Victim Questionnaire for students consists of 40 questions for the measurement of: bully/victim problems such as exposure to various physical, verbal, indirect, racial, or sexual forms of bullying/harassment; various forms of bullying other students; where the bullying occurs; pro-bully and pro-victim attitudes; and the extent to which the social environment (teachers, peers, parents) is informed about and reacts to the bullying. Includes 'How many "good" friends do you have in your class(es)? (Olweus 1994)'
Bullying	Proportion of children with higher scores on PPSSC	LSAC	8–9	Longitudinal survey data	Survey uses the Perceptions of Peer Support Scale (PPSSC). Bullying at school is measured by 4 items asking the study child the degree to which they may have experienced various types of bullying situations (AIFS 2012).
Bullying	Sub-theme: Social, emotional, behavioural, psychological Unit: Social competence & interpersonal relationships	LSAC	10–11	Longitudinal survey data	LSAC questions are based on the *Growing Up in Ireland Study* question (AIFS 2012).
Feelings of safety	Proportion of children who feel safe at their school	National School Opinion Survey (NSOS)	5–17	No national data	Question: I feel safe at my school (ACARA 2013b).
Bullying	Percentage of children with parents who report that it is 'certainly true' that their child is picked on or bullied by other children	Victorian Child Health and Wellbeing Survey	4–12	Victoria	Survey question to parents asking whether child has been picked on or bullied by other children. Single-item question derived from SDQ Peer problems scale. Frequency not included. Reported in *The state of Victoria's children* 2010 (Victorian Department of Education and Early Childhood Development 2010).
Bullying	Proportion of adolescents who report being bullied/bullied most days	Gatehouse Bullying scale	10–15	Victoria	Scale comprises 12 items assessing overt and covert types of victimisation. Respondents were asked whether they had been teased or called names, had rumours spread about them, been deliberately left out of things, and had recently been physically threatened or hurt (Hamburger et al. 2011).
Bullying	Percentage of children bullied at school at least twice in last 2 months	HBSC	11–15	No	Reported in Currie et al. 2012.

(continued)

Table B.1(continued): Potential indicators

Constructs	Possible indicator	Instrument/source	Age range	Data availability (Australia)	Comments
Bullying	Proportion of youth who were bullied at school 'at least some of the time'	National Longitudinal Survey of Children and Youth (NLSCY)	10–11	No	Reported in *Progress of Canada's children and youth 2006* (Canadian Council of Social Development 2006).
Concern about Bullying	Proportion of young people concerned with bullying/emotional abuse	Mission Australia Youth Survey	15–19	Yes	Reported in *Youth Survey* 2013 (Mission Australia 2013).
			School engagement		
School enjoyment	Proportion of children who have a high score on the School-Liking and Avoidance Scale (SLAS)	LSAC	6–11	Longitudinal survey data	The SLAS has 4 sub-scales (15 items): school-liking; school avoidance; teacher-liking; peers scale (AIFS 2012).
School satisfaction and liking	Proportion of students who report positive feelings about school	LSAC	10–11	Longitudinal survey data	Modified version of Longitudinal Surveys of Australian Youth Attitudes to School Scale (AIFS 2012).
A fun place to learn	To be determined	ESSP (Elementary School Success Profile)	8–10	No	Questions asked of students: I think school is fun. I look forward to going to school. I like the things we study at school. I look forward to learning new things at school (School success profile 2009).
A fun place to be with other children	To be determined	ESSP	8–10	No	Questions asked of students: I have friends to talk to at school. I look forward to seeing other kids at my school. I have fun with other kids at my school. I have friends to play with at school. I have friends to eat lunch with at school (School success profile 2009).

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Table B.1(continued): Potential indicators

Constructs	Possible indicator	Instrument/source	Age range	Data availability (Australia)	Comments
Teachers who care	To be determined	ESSP	8–10	No	Questions asked of students: My teacher and I get along well. My teacher listens to what I have to say. When I try hard or do a good job, my teacher makes me feel good. When I raise my hand, my teacher calls on me. My teacher lets me know he or she cares about my schoolwork. When I don't understand something, my teacher helps me (School success profile 2009).
Motivation to mastery	The child responds to new experiences with curiosity and energy, resulting in the pleasure of mastering new learning and skills	Search Institute Developmental Assets	3–5	No	The Developmental Assets are not an instrument. The Search Institute surveys are not publicly available (Search Institute 2005).
Achievement motivation	Child is encouraged to remain curious and demonstrates an interest in doing well at school	Search Institute Developmental Assets	5–9	No	The Developmental Assets are not an instrument. The Search Institute surveys are not publicly available (Search Institute 2005).
Engagement in learning experiences	The child fully participates in a variety of activities that offer opportunities for learning	Search Institute Developmental Assets	3–5	No	The Developmental Assets are not an instrument. The Search Institute surveys are not publicly available (Search Institute 2005).
Learning engagement	Child is enthused about learning and enjoys going to school	Search Institute Developmental Assets	5–9	No	The Developmental Assets are not an instrument. The Search Institute surveys are not publicly available (Search Institute 2005).
Bonding to programs	The child forms meaningful connections with out-of-home care and educational programs	Search Institute Developmental Assets	3–5	No	The Developmental Assets are not an instrument. The Search Institute surveys are not publicly available (Search Institute 2005).
Bonding to school	Child is encouraged to have and feels a sense of belonging at school	Search Institute Developmental Assets	5–9	No	The Developmental Assets are not an instrument. The Search Institute surveys are not publicly available (Search Institute 2005).
Enjoying school	Percentage of young people 'liking school a lot'	HBSC	11,13,15	No	Young people were asked how they feel about school at present (Currie et al. 2012).
Enjoying school (Learning)	Percentage of students who like school (very much and quite a bit)	NLSCY	10–15	No	Reported in: *The progress of Canada's children and youth* (2006) (Canadian Council of Social Development 2006).

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Table B.1(continued): Potential indicators

Constructs	Possible indicator	Instrument/source	Age range	Data availability (Australia)	Comments
Feelings about school (Learning)	Percentage of students reporting positive feelings about school. By gender	NLSCY	10–15	No	Reported in: *The progress of Canada's children and youth* (2006). Feelings reported on are: I never feel like an outsider at school. I am doing very well at school. I like school very much/quite a bit. Teachers give me extra help all of the time. Teachers treat me fairly all of the time (Canadian Council of Social Development 2006).
Learning confidence	Mean score of students' perception of their learning ability	Victorian Attitudes to School Survey	10–17	Victoria	Reported in *The state of Victoria's children 2010* (Victorian Department of Education and Early Childhood Development 2010).
Student morale	Mean score of students' positive feelings at school	Victorian Attitudes to School Survey	10–17	Victoria	Reported in *The state of Victoria's children 2010* (Victorian Department of Education and Early Childhood Development 2010).
Students' connectedness to school	Mean score of students' perception of their connectedness to school	Victorian Attitudes to School Survey	10–17	Victoria	Reported in *The state of Victoria's children 2010* (Victorian Department of Education and Early Childhood Development 2010).. Questions asked on a 5-point Likert scale are: I feel good about being a student at this school; I like school this year; I am happy to be at this school; I feel I belong in this school; I look forward to going to school.
Teacher support and effectiveness	Mean score of students' perception of teacher support and effectiveness (stimulating learning, teacher effectiveness, teacher empathy)	Victorian Attitudes to School Survey	10–17	Victoria	Reported in *The state of Victoria's children 2010* (Victorian Department of Education and Early Childhood Development 2010).
Connectedness with peers	Mean score of students' perception of connectedness with peers	Victorian Attitudes to School Survey	10–17	Victoria	Reported in *The state of Victoria's children 2010* (Victorian Department of Education and Early Childhood Development 2010).
Parental satisfaction with schooling	Mean score of parents' satisfaction with their child's school	Victorian Attitudes to School Survey	10–17	Victoria	Victorian Child and Adolescent Monitoring System.
Interest in school	Proportion of students who think their subjects at school are interesting or boring	Victorian Adolescent Health and Wellbeing Survey	12–17	Victoria	Reported in *The state of Victoria's children 2010* (Victorian Department of Education and Early Childhood Development 2010)..
Enjoying school	Proportion of students who report enjoying school	Victorian Adolescent Health and Wellbeing Survey	12–17	Victoria	Reported in *The state of Victoria's children 2010* (Victorian Department of Education and Early Childhood Development 2010).

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Table B.1(continued): Potential indicators

Constructs	Possible indicator	Instrument/source	Age range	Data availability (Australia)	Comments
Children attend and enjoy school	Average score of how connected children feel with peers (out of 100)	Department of Education regular student opinion survey	10–17	Tasmania	Reported in *Kids come first 2009.* Tasmanian Department of Health and Human Services 2009).
Children attend and enjoy school	Percentage of children and young people in primary and secondary school with 30 or more days of unexplained absence (govt. schools only)	Administrative data	10–17	Tasmania	Reported in *Kids come first 2009.* Tasmanian Department of Health and Human Services 2009).
Attendance	Year 1–10 student attendance rate	National Student Attendance Data Collection	6–15	Yes but not nationally comparable	Source: Australian Curriculum, Assessment and Reporting Authority (ACARA). Included in the *Report on Government Services* (SCRGSP 2014).
Enrolment (participation)	Proportion of children aged 6–15 years enrolled in school (full-time and part-time enrolments)	ABS National Schools Statistics Collection	6–15	Yes	Source: ABS unpublished data and ABS *Schools, Australia.* Reported in the *Report on Government Services Report on government services* (SCRGSP 2014).
Absence	Average days of absence per student	Department of Education and Early Childhood Development (DEECD) Annual Collection	5–17	Victoria	Reported in *The state of Victoria's children 2010* (Victorian Department of Education and Early Childhood Development 2010).
Absence	Percentage of children (total for primary and secondary students) with 30 or more days of unexplained absence	Administrative data	5–17	Tasmania	Absence rates for all government schools. Reported in *Kids come first 2009.*Tasmanian Department of Health and Human Services 2009).
Absence	Absence rates for all government schools	Administrative data	10–17	Tasmania	Reported in *Kids come first 2009.* Absence rates for all government schools.
Absence	Percentage of primary school children who are absent from school for 20+ days in the school year	Administrative data	6–11	No	Reported in *State of the nation's children Ireland 2012 (*Department of Children and Youth Affairs 2012).
Absence	Percentage of post-primary school children who are absent from school for 20 days or more in the school year	Administrative data	12–17	No	Reported in *State of the nation's children Ireland 2012 (*Department of Children and Youth Affairs 2012).

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Table B.1(continued): Potential indicators

Constructs	Possible indicator	Instrument/source	Age range	Data availability (Australia)	Comments
Suspension	Proportion of young people who report being ever suspended from school in the last year, and frequency of suspension	Victorian Adolescent Health and Wellbeing Survey	12–17	Victoria	Reported in *The state of Victoria's children 2010* (Victorian Department of Education and Early Childhood Development 2010).
Caring climate in child-care and educational settings	Caregivers and teachers create environments that are nurturing, accepting, encouraging, and secure		3–5	No	Search Institute Developmental Assets (Search Institute 2005).
Caring climate in child-care and educational settings	Child experiences warm, welcoming relationships with teachers, caregivers, and peers at school		5–9	No	Search Institute Developmental Assets (Search Institute 2005).
Level of parental satisfaction with schooling	Percentage of parents generally satisfied with their child's education (government schools only)	Tasmanian Department of Education Survey of Parents	6–17	Tasmania	Reported in: *Kids come first 2009* Absence rates for all government schools.
		Parenting quality/capacity			
Parental warmth	Proportion of children living with a parent with lower parental warmth	LSAC	0–11	Longitudinal survey data	Uses the Child Rearing Questionnaire (CDQ) and is assessed on the basis of 6 items regarding the frequency with which parents displayed warm affectionate behaviours towards their child (AIFS 2012).
Parental praise	Proportion of parents who do something special with/praises child at least once a day	NLSCY	0–11	No	Canadian survey, reported in: *Progress of Canada's children and youth* 2006 (Canadian Council of Social Development 2006)
Close relationship	Proportion of parents who report feeling very close to their children	2003 National Survey of Children's Health (US)	6–17	No	Reported in: *Child Trends Fact Sheet 2008:27* (Bandy & Moore 2008).
Knowing child's friends	Proportion of parents who report meeting all or most of their children's friends	2003 National Survey of Children's Health (US)	6–17	No	Reported in: *Child Trends Fact Sheet 2008:27* (Bandy & Moore 2008).

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Table B.1(continued): Potential indicators

Constructs	Possible indicator	Instrument/source	Age range	Data availability (Australia)	Comments
Communication	Proportion of parents who report being able to talk about things that really matter very well with their children	2003 National Survey of Children's Health (US)	6–17	No	Reported in: *Child Trends Fact Sheet 2008:27* (Bandy & Moore 2008).
Communication with parents	Proportion of children who find it easy to talk to their mothers/fathers about 'things that really bother you'	HBSC	11, 13, 15	No	Reported in *Progress of Canada's children and youth 2006* (Canadian Council of Social Development 2006).
	Time spent by parents on caring for child	ABS Time Use Survey	0–14	Yes	Latest iteration of the survey is 2006; next scheduled for 2019. Dimensions included: Physical and emotional care; Teaching/ helping/reprimanding; Playing/reading/talking; Minding children. Survey *cannot* be used to obtain information on time spent by parents with individual children aged 0–8 (ABS 2008).
Parental consistency	Proportion of children living with a parent with lower parental consistency	LSAC	4–11	Longitudinal survey data	Based on the Canadian NLSCY (AIFS 2012).
Parental school engagement	Proportion of children whose parents talk to the child daily about his/her day at school//Talk to child about school activities/day at school	LSAC	4–11	Longitudinal survey data	Based upon Early Childhood Longitudinal Study, Kindergarten Cohort of 1998-99, ECLS-K (US Department of Education) and the US National Household Education Survey (NHES) (AIFS 2012).
Parental involvement with school child's education	Frequency of helping with homework	LSAC	6–11	Longitudinal survey data	Based upon Early Childhood Longitudinal Study, Kindergarten Cohort of 1998–99, ECLS-K (US Department of Education) and the US National Household Education Survey (NHES) (AIFS 2012).
Parental involvement with school child's education	Frequency of helping with homework	LSAC	6–11	Longitudinal survey data	Based on several sources (AIFS 2012).
Parental hostility	Proportion of children living with a parent with higher parental hostility	LSAC	0–9	Longitudinal survey data	Adapted items from the Early Childhood Longitudinal Study of Children, Birth Cohort (ECLS-B) and the NLSCY 1998–1999 (AIFS 2012).
Parental hostility	Proportion of children living with a parent with higher parental hostility	LSAC	4–11	Longitudinal survey data	Angry Parenting Scale and the NLSCY: Cycle 3 (Survey Instruments, 1998–1999, Parent Questionnaire) (AIFS 2012).
Parental hostility	Proportion of children living with a parent with higher parental hostility	LSAC	6–11	Longitudinal survey data	Based on Ineffective/Hostile Parenting scale (developed for the NLSCY) (AIFS 2012).

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Table B.1(continued): Potential indicators

Constructs	Possible indicator	Instrument/source	Age range	Data availability (Australia)	Comments
Parental self-efficacy	Proportion of children living with a parent with lower parenting self-efficacy	LSAC–Global rating for self-efficacy	0–11	Longitudinal survey data	Based on the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B). Rating scale – 1 (Not very good at being a parent) through 5 (A very good parent) (AIFS 2012).
Parental self-efficacy	Proportion of children living with a parent with lower parenting self-efficacy	LSAC-Parental Efficacy Scale (Infants)	0–1	Longitudinal survey data	Based on the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) (AIFS 2012).
Parental self-efficacy	Proportion of children living with a parent with lower parenting self-efficacy	LSAC–Parental Efficacy Scale (Children)	2–11	Longitudinal survey data	Based on the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B) (AIFS 2012).
Parental mental health	Proportion of parents with mental health problems, and who have co-resident children aged 0–8	Mental health Component Summary (MCS) scores	0–8	Yes	HILDA survey. Reported for parents of children 0-14 in: *A picture of Australia's children 2012* (AIHW 2012a).
Parental support	Proportion of parents/carers (of children aged 1–15) who felt need for assistance	NSW Child Health Survey 2009–10	Parents/ carers of children 1–15	NSW	Include parental support questions: Have you ever felt the need for any type of support services to assist in caring for your child or dealing with problems you may have experienced with your child?; Have you ever used any support services? (NSW Ministry of Health 2009).

(a) Only LSAC waves 1 to 4 were reviewed in view of their relevance to the age group 0-8.

Appendix C: Data sources

Following is a brief description of the data sources that will be used for reporting against the indicators for which specifications have been included in Chapter 3.

AIHW data sources

Child Protection National Minimum Data Set

The AIHW collects annual statistics on child protection in Australia for children and adolescents aged 0–17 years. Data are provided by the state and territory community services departments and are used to produce *Child protection Australia* and are also provided to the Productivity Commission for the *Report on government services*.

For the 2012–13 reporting period, the Child Protection National Minimum Data Set was established, replacing the existing collection of aggregated data, and for the first time allows for analysis at the child level (unit record).

The national collection provides comprehensive statistical information on state and territory child protection and support services, and some of the characteristics of the children within these systems. States and territories provide annual data for seven national child protection sub-collections:

- Notifications, investigations and substantiations
- Care and protection orders
- Out-of-home care
- Foster carers
- Relative/kinship carers
- Intensive family support services
- National out-of-home care standards.

Data availability: Aggregate annual from 1991 to 2012; Unit record data from 2013.

Further information:
<www.aihw.gov.au/childyouth/childwelfare/childprotection/index.cfm>.

National Mortality Database

The AIHW National Mortality Database includes information on the factors that caused death, and other information about the deceased person such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD). The tenth revision (ICD–10) has been available for use since 1997.

Further information: <www.aihw.gov.au/mortality/index.cfm>.

National Perinatal Data Collection

The AIHW National Perinatal Data Collection (NPDC) is a national population-based cross-sectional data collection of pregnancy and childbirth. The data are based on births reported to the perinatal data collection in each state and territory in Australia. Midwives and other staff, using information obtained from mothers and from hospital or other records, complete notification forms for each birth. Selected information is then compiled annually into this national data set by the AIHW National Perinatal Epidemiology and Statistics Unit. Information is included in the NPDC on both live births and stillbirths of at least 400 grams birthweight or at least 20 weeks gestation.

Data availability: Annual from 1991 onwards.

Further information: < www.aihw.gov.au/mothers-and-babies/>.

2010 Australian National Infant Feeding Survey (ANIFS)

The 2010 ANIFS collected national baseline data collected national baseline data on a range of infant feeding practices, including prevalence data on the initiation, duration and intensity of breastfeeding, from a cohort of infants aged 0–2 at the time of the survey (AIHW 2011a). Prior to this survey, there was limited national data to effectively monitor infant feeding practices.

The ANIFS is funded by the Commonwealth Department of Health and managed by the Australian Institute of Health and Welfare.

The objectives of the ANIFS are to collect and report on:

- national baseline data on the prevalence and duration of breastfeeding
- national baseline data on other foods and drinks consumed by infants and toddlers
- national baseline data on perinatal depression
- national barriers to initiating and continuing breastfeeding by exploring the associations with demographic information and other characteristics of the infant and parent/carer.

The ANIFS was conducted between November 2010 and January 2011.

ABS data sources

Census of Population and Housing

The Census aims to provide an accurate measure of the number of people in Australia on Census night, their key demographic, social and economic characteristics, and the dwellings in which they live. The Census reports on a range of topics including population, cultural diversity, community, living arrangements, education, work, need for assistance, economic resources and housing.

Data availability: 1911 onwards; 5-yearly from 1976

Further information:
<www.abs.gov.au/websitedbs/D3310114.nsf/Home/census?opendocument?utm_id=GT>.

Childhood Education and Care Survey

The Childhood Education and Care Survey (CEaCS) was conducted for the first time in June 2008. Prior to the CEaCS, the ABS conducted the Child Care Survey (CCS) triennially between 1969 and 2005. The main aims of the CCS was to provide information on the use and cost of child care in a survey (related to care usage in a survey reference week), and some aspects of families' requirements for formal care or preschool.

In addition to this information, the CEaCS collected information for the first time on early childhood education and learning (the types of learning activities that children aged 0–8 years engage in, the environments in which these activities take place, and patterns of attendance at preschool and school).

The scope of the 2008 and 2011 CEaCS was Australian resident children aged 0–12 years and their families living in private dwellings in non-remote Australia. In each selected household, detailed information about child care arrangements and early childhood education was collected for a maximum of two children aged 0–12 years. Information was obtained via interview from an adult who permanently resided in the selected household and was either the child's parent, step-parent or guardian.

Data availability: Child Care Survey: triennial from 1969 to 2005; Childhood Education and Care Survey: triennial from 2008; 2014 data expected in 2015.

Further information:
<www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/1136.0Main+Features5032009>.

National Early Childhood Education and Care Collection

The Early Childhood Education and Care (ECEC) National Collection was established to provide comparable jurisdictional statistics on early childhood education and to support the National Partnership Agreement on Universal Access to Early Childhood Education 2013 (which replaces the National Partnership Agreement on Early Childhood Education 2009).

Data collected through the National ECEC Collection are published annually by the ABS, with the fourth iteration being Preschool Education, Australia, 2013 (cat. no 4240.0).

The collection is underpinned by standards specified within the Early Childhood Education and Care National Minimum Data Set. Further information is available on the Australian Institute of Health and Welfare's METeOR (Metadata Online Registry) website:
<http://meteor.aihw.gov.au/content/index.phtml/itemId/466519>.

The collection includes information on services that provide an early childhood education program, the teachers who deliver them, and the children who participate in them.

Data availability: Annual from 2010. Data for 2010 and 2011 were described by the ABS as 'experimental estimates' because of data quality issues. From 2012 the data are no longer considered to be 'experimental'.

Further information:
Data collection
<www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/4240.0.55.001Main%20Features22012?opendocument&tabname=Summary&prodno=4240.0.55.001&issue=2012&num=&view=>

Data standards
<http://meteor.aihw.gov.au/content/index.phtml/itemId/466519>.

National Aboriginal and Torres Strait Islander Social Survey

The 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) was conducted between August 2008 and April 2009. Information was collected from approximately 13,300 Indigenous Australians living in both remote and non-remote areas, including discrete communities.

The 2008 NATSISS provides information on a range of demographic, social, environmental and economic indicators, including: personal and household characteristics; geography; language and cultural activities; family social network and support; health and disability; education; employment; financial stress; income; transport; personal safety; and housing.

Data on children were collected for the 2008 NATSISS from a parent or guardian.

The 2002 NATSISS was conducted between August 2002 and April 2003. Information was collected by personal interview from about 10,000 Aboriginal and Torres Strait Islander people aged 15 years and over throughout Australia, including those living in remote areas.

Data availability: 2002 and 2008; 2014 survey data expected to be available in 2015.

Further information:
<www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4714.0Main+Features12002?OpenDocument>.

Australian Health Survey

The ABS Australian Health Survey 2011–13 (AHS) is made up of 3 components: the National Health Survey (NHS); the National Nutrition and Physical Activity Survey (NNPAS); and the National Health Measures Survey (NHMS). Some data are collected in both the NHS and the NNPAS components. The combined data from these 2 surveys is often referred to as the 'AHS Core' and includes data collected from around 25,000 private dwellings across Australia which amounts to around 32,000 people. The survey was designed to collect a range of information from Australians about health related issues, including health status, risk factors, socioeconomic circumstances, health-related actions and use of medical services.

In 2011–13, the AHS collected new information on nutrition and physical activity. It also included the first national biomedical information collection.

The 2011–12 NHS was conducted throughout Australia from March 2011 to March 2012. Urban and rural areas in all states and territories were included, while *Very remote* areas of Australia and discrete Aboriginal and Torres Strait Islander communities (and the remainder of the collection districts in which these communities were located) were excluded. Non-private dwellings such as hotels, motels, hospitals, nursing homes and short-stay caravan parks were excluded from the survey. This may affect estimates of the number of people with some long-term health conditions (for example, conditions which may require periods of hospitalisation).

Within each selected dwelling, 1 adult (aged 18 and over) and, where possible, 1 child (aged 2 and over) were randomly selected for inclusion in the survey. Sub-sampling within households enabled more information to be collected from each respondent than would have been possible had all usual residents of selected dwellings been included in the survey.

Data availability: 1977–78, 1983, 1989–90, 1995, 2001, 2004–05, 2007–08, 2011–12

Further information:
<www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.001Chapter1202011-12>.

Survey of Income and Housing

The ABS Survey of Income and Housing (SIH) (previously known as the Survey of Income and Housing Costs) is a household survey that collects information from residents aged 15 years and over on sources of income and amount received, and also housing, household and personal information. In 2011–12, the sample for the SIH was around 14,600 households.

As income received by individuals is often shared between members of a household, equivalised household income can be used in analysis of the SIH. This survey allows analysis of the amount of income received and the source of that income, and how factors such as these vary depending on age, state and territory, remoteness of the household, or household size. It is also possible to examine housing circumstances such as the rate of home ownership among various groups.

Data availability: Most years from 1994–95 to 2003–04 (no survey was run in 1998–99 or 2001–02), 2005–06, 2007–08, 2009–10, 2011–12.

Further information:
<www.abs.gov.au/AUSSTATS/abs@.nsf/DOSSbyTopic/F0CDB39ECC092711CA256BD00026C3D5?OpenDocument>.

Other data sources

Australian Early Development Census (AEDC)

The Australian Early Development Census (AEDC) is a census of children that measures how they are developing as they enter school and was previously known as the Australian Early Development Index (AEDI). It was completed nationwide for the first time in 2009 Information was collected on over 260,000 Australian children (97.5 per cent of the estimated 5-year-old population) in their first year of full-time school between 1 May and 31 July. A second collection was conducted in 2012 and the Australian Government has made a commitment to collect data on an ongoing basis every 3 years. The next AEDC is scheduled for 2015.

The AEDC is a population measure of children's health and development undertaken in the first year of formal schooling, based on the scores from a teacher-completed checklist. It aims to provide communities with a basis for reviewing the services, supports and environments that influence children in their first 5 years of life. The AEDC measures development in 5 domains: physical health and wellbeing, social competence, emotional maturity, language and cognitive skills (school-based), communication skills and general knowledge. The Council of Australian Governments (COAG) has endorsed the AEDC as a national progress measure of early childhood development in Australia.

Data availability: Triennially from 2009.

Further information: <www.aedc.gov.au/>.

National Assessment Program—Literacy and Numeracy

The National Assessment Program—Literacy and Numeracy (NAPLAN) tests are conducted in May each year for all students across Australia in Years 3, 5, 7 and 9. All students in the same Year level are assessed on the same test items in the assessment domains of Reading, Writing, Language Conventions (Spelling, Grammar and Punctuation) and Numeracy.

Each year, over 1 million students nationally sit the NAPLAN tests. National Protocols for Test Administration ensure consistency in the administration of the tests by all test administration authorities and schools across Australia.

National minimum standards have been developed for each assessment domain (reading, writing, spelling, language conventions (grammar and punctuation) and numeracy) for students in Years 3, 5, 7 and 9. Students who achieve the minimum standards have demonstrated at least the basic understanding required for their Year level.

The first NAPLAN tests were conducted in 2008. Consistent assessment of students across Australia is possible because students in each state and territory sit the same tests. There is a common and continuous reporting scale used for all students in Years 3, 5, 7 and 9, which provides considerably more information about student achievement than was previously available.

The test administration authority in each state and territory manages the marking of the tests. Tests for Reading, Language Conventions (Spelling, Grammar and Punctuation) and Numeracy are marked using optical mark recognition software to score multiple-choice items. Writing tasks are professionally marked using well-established procedures for maintaining marker consistency.

Data availability: Annual from 2008.

Further information:
< www.nap.edu.au/results-and-reports/national-reports.html>.

National Report on Schooling in Australia—Attendance at primary school

States and territories, and school sectors reported aggregated student attendance data for the first time in 2007 for: all relevant schools (that is, not on a sample basis); special schools (except distance education schools, juvenile justice schools, intensive language centres, hospital schools and senior secondary colleges); students enrolled as full-time, or full-time equivalent; and students in Years 1 to 10.

The data are reported: by school sector (government, Catholic and independent), by state and territory; separately for each of the agreed Year levels; for Indigenous and non-Indigenous students; and for males and females.

In the government sector, most jurisdictions measured student attendance over the entire first semester in the school calendar year, while some jurisdictions measured attendance over the term that included the month of May. The Catholic and independent school sectors collected data over a 20-day period in the month of May.

This student attendance data collection is in a transitional phase until all sectors have the capacity to be able to report using the agreed standard. Each jurisdiction and sector provide their own explanatory notes about the method used to collect and report on student attendance data.

Variations by school sector, state and territory, and Year level may therefore be partly explained by differences in data collection methodologies.

Until 2008, national reporting on schooling was firstly the responsibility of the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), followed by the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA). From 2009 it became the responsibility of the ACARA.

From 2014 onwards, nationally comparable student attendance data will be collected, as set out in the National Standards for Student Attendance Data Reporting. All jurisdictions and sectors have agreed to provide student attendance data that comply with these standards. The non-government sectors (independent and Catholic schools) are to comply with these standards from 2013 onwards; government schools in all jurisdictions except NSW, from 2014; and NSW government schools from 2015.

Data availability: Annual from 2007.

Further information: <www.acara.edu.au/reporting/reporting.html>.

National Quality Standard and Rating System

In 2009, the COAG endorsed the National Quality Framework for Early Childhood Education and Care (National Quality Framework). The National Quality Framework commenced on 1 January 2012 for long day care, family day care, outside school hours care and preschools. Key requirements of the National Quality Framework, such as ratios and qualifications, are being phased in over time.

The National Quality Framework includes the National Quality Standard (NQS), which sets a national benchmark for the quality of early childhood education and care services. The NQS is accompanied by a national quality rating and assessment process that reflects a nationally consistent approach to the assessment and reporting of the quality of education and care services.

Early childhood services are assessed against the following 7 areas of the NQS:

- educational program and practice
- children's health and safety
- physical environment
- staffing arrangements, including staff-to-child ratios and qualifications
- relationships with children
- collaborative partnerships with families and communities
- leadership and service management.

Each service is assessed on their performance across the 7 quality areas and given one overall rating. There are 5 levels against which services across Australia will be assessed:

- Significant improvement required
- Working towards National Quality Standard
- Meeting National Quality Standard
- Exceeding National Quality Standard
- Excellent.

As at 31 March 2014, 5,085 services had a current quality rating against the NQS, constituting 35% of all approved education and care services. All services will display their approval and rating information. Ratings will also be available on the internet.

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This report presents the results of Phase 2 of the National Outcome Measures for Early Childhood Development project. It identifies potential indicators for 5 indicator topic areas (child behavioural problems, peer relationships, racism, school engagement and parenting quality/capacity) and potential data sources for a further 2 (social and emotional wellbeing, and family social networks).