

INEQUALITIES IN EARLY CHILDHOOD OUTCOMES: what lies beneath

The Australian Early Development Index (AEDI) allows us to shine a light on inequity in child health and development. Dr Sharon Goldfeld, Sue West and the Centre for Community Child Health AEDI research team look at children at risk and how community sector organisations can use the data to improve their lives.

Child health inequalities exist in all western countries including Australia¹⁻³ and constitute a significant and potentially preventable public health problem. Although the data are limited, in Australia we know the predictors of future health inequities – **differential health outcomes that are unjust, unnecessary and unacceptable, and potentially preventable**¹ – begin in utero. For example, there are differentially higher rates of maternal smoking and subsequent rates of low birth weights in Aboriginal mothers and those living in poorer and more remote areas.² The increasing evidence from developmental health research suggests that inequities emerging in early childhood are maintained into adulthood as higher rates of mortality and physical, social and cognitive morbidity across the social gradient.^{4,5}

Table 1. Variation in developmental vulnerability across subgroups of Australian children.

	Developmentally vulnerable on at least one AEDI domain (%)	Developmentally vulnerable on at least two AEDI domains (%)
All Australian children	23.55	11.84
Children from language background other than English	32.23	16.71
Children with additional health and developmental needs	57.73	37.38
Aboriginal and Torres Strait Islander	47.44	29.58
Socio-economic status (SES)		
Most disadvantaged SES communities	32.33	17.81
Most advantaged SES communities	16.30	7.18
Geography		
Very remote	47.13	30.54
Remote	29.49	15.98
Outer regional	26.84	14.07
Inner regional	23.64	12.11
Major cities	22.50	11.01

Note: SES was measured using SEIFA. Geography categorised using the Accessibility/Remoteness Index of Australia (ARIA). Source: Australian Early Development Index 2009

Indeed by the time Australian children start school, clear inequalities in their health and developmental outcomes are already evident; driven by the circumstances in which they live and the failure of health, welfare and educational systems to ameliorate these impacts.⁶ In the 2009 Australian Early Development Index (AEDI) census, almost 12 per cent of children starting school were found to be developmentally vulnerable on two or more domains; the rate was 17.5 per cent amongst children who lived in the poorest areas of Australia (see Table 1).

BUILDING THE DATA

The Australian Early Development Index (AEDI) is a cross-sectional population census of early childhood development in communities across Australia. It provides the first national data on developmental outcomes for a population of five year olds, globally and covers five domains of children's development:

- physical health and wellbeing
- social competence
- emotional maturity
- language and cognitive skills (school-based)
- communication skills and general knowledge.

In 2009 and 2012 the AEDI was completed by teachers for all children in their first year of fulltime schooling. Children who demonstrate much lower than average ability (less than the tenth percentile) in the competencies measured by a domain are said to be 'developmentally vulnerable' in that domain. In 2009, around 24 per cent of Australian children were developmentally vulnerable on at least one domain (Table 1), with 12 per cent vulnerable on at least two.

VULNERABLE GROUPS

There are subgroups of Australian children who are much more likely to experience developmental vulnerability. They include: children with additional health and developmental needs, children from language backgrounds other than English, Aboriginal and Torres Strait Islander children, children from the most disadvantaged Socio-economic status (SES) communities, and those living in remote areas of Australia. Alternately, children from the most advantaged SES communities, and children living in major cities of Australia were less likely to experience developmental vulnerability. We focus here on two of those groups, chosen because:

- they are important population subgroups that are under reported in the Australian context yet can be well studied in our data sets
- addressing their needs requires equitable system responses and therefore policy opportunity.

Children from language backgrounds other than English

In 2009, seven per cent of Australian children starting school were born outside of Australia in 187 different countries;⁶ 17 per cent of them spoke languages other than English at home. Most spoke English well but a substantial minority (14.5 per cent) did not.

Children from diverse language backgrounds were more likely to live in the most disadvantaged areas of Australia compared to children from English-speaking backgrounds. This difference was most apparent for children who were not yet proficient in English (41 per cent) when compared to children from English-speaking backgrounds who were proficient (18 per cent).

English proficiency at school entry is important: bilingual children who were not proficient in English were more likely to be developmentally vulnerable on the AEDI domains when compared to English proficient bilingual children (Figure 1).⁹

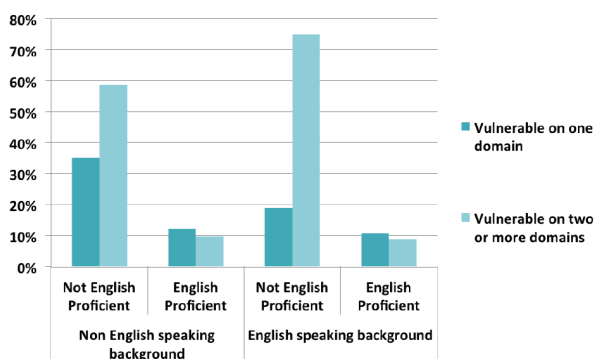


Figure 1. Proportion of children vulnerable on AEDI domains by language background and English proficiency. (AEDI 2009)

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Preschool attendance is associated with English proficiency: children who had attended preschool in the year before school entry were more likely to be proficient in English (74 per cent) than children who had not (61 per cent).¹⁰

Children with additional health and developmental needs

Data from the AEDI suggests that around one fifth of five-year old children experience additional health and developmental needs, including four per cent with well-established and formally diagnosed conditions, and 18 per cent with emerging developmental problems.¹¹

This includes children with a wide variety of conditions impacting primarily on their physical health (for example, diabetes, epilepsy) and psychosocial wellbeing (such as Attention Deficit Hyperactivity Disorder and autism spectrum disorders). Such children are represented across the population, but rates tend more to be higher in boys, Aboriginal children and older children and those from lower socioeconomic status communities.¹¹

These children, also referred to as children with special health care needs, are at risk for poorer long term health and educational outcomes, including during primary school.¹² However, a number of factors have been shown to improve school outcomes,¹³ including:

- issues related to the child, for example ability to regulate themselves
- attitudes to schooling
- factors related to their environments including the ability of the school to provide multidisciplinary care
- the parent's ability to advocate for their child's needs.

Our research also shows that approximately one in four children with special health care needs are developmentally vulnerable across the AEDI domains, compared to approximately one in 20 children without special health care needs (Figure 2).

There are therefore substantial opportunities to change schooling and early childhood systems to better detect and accommodate the needs of these children as early as possible.

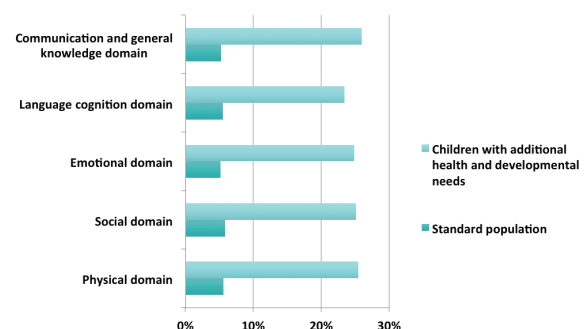


Figure 2. The percentage of children with and without additional health and developmental needs and vulnerable on each of the AEDI domains (AEDI 2009)

HOW CAN COMMUNITY SERVICES RESPOND?

In communities where AEDI results are poor we know that doing nothing is not an option, but how do community sector organisations turn AEDI data into action? There are three important considerations in that process:

- The AEDI is a population measure and provides data about a cohort of children at a particular point in time rather than an assessment of individual children or data by which we can measure the performance of any one organisation. Thus the AEDI data shines a light on how a group of children are faring. Population measures help organisations to focus on improving child outcomes rather than the usual focus on, for example, operational imperatives for improvement. They also serve to galvanise multiple organisations around the same outcome or set of outcomes.
- Uniquely, data are available at a community and local community level. For organisations this means that they can gain insight about what may or may not be working well for children in a particular community and shape their activities accordingly.
- Data are available for two points in time – 2009 and 2012 – which allows us to detect shifts, however most population measures shift very slowly so it is best for services to think about the *contribution*¹⁵ they can make to shift the results, without expecting immediate improvement. Critically, it will be the actions of many agencies, together, that will make the greatest impact.

USING THE AEDI TO REDEVELOP COMMUNITY SERVICES

Typically, the process of service redevelopment includes forming a local network of organisations that can make a difference to children's outcomes to work through the following questions:

- What are the outcomes we want to see in our community?
- What does the data tell us about these outcomes? This is where AEDI data are analysed alongside other important data.
- Are these the results we want?
- What's the story behind these data – how do we explain these results?
- What is our shared vision for better outcomes?
- What can we do together to realise this vision? What does the evidence say will make a difference?
- How can we work together to make sure we are all progressing the same plan?
- How will we know we've made a difference?

Vital to this process is to involve the relevant families and children. This act, in itself, aims to redress inequities and is likely to put the child and their family 'front of mind' in the planning process.

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