

# RESTACKING THE ODDS

21 December 2022

Hon Julia Gillard AC  
Royal Commissioner into Early Childhood Education and Care  
GPO Box 11025  
Adelaide SA 5001

## **RE: Formal invitation to appear at a public hearing held by the Royal Commission into Early Childhood Education and Care**

Dear Ms Gillard

Thank you for your invitation to provide a written submission to the Royal Commission to address the following:

- Summary of Restacking the Odds evidence-based review of indicators to assess quality, quantity and participation
- Barriers, facilitators and strategies to improve participation.

**Restacking the Odds is focused on tackling intergenerational disadvantage.** The program aims to drive equitable outcomes by ensuring that children and families can and do access a combination of high-quality, evidence-informed services where and when they need them. The initiative is a collaboration between the Centre for Community Child Health (Murdoch Children's Research Institute (MCRI)), Social Ventures Australia (SVA) and Bain & Company.

I have provided an overview of the Restacking the Odds initiative below, with detail on the selection of evidence-based indicators to assess quality, quantity and participation in early childhood education and research findings on barriers and facilitators to improve participation. I have also attached a selection of relevant publications and summaries of our research.

Drawing on the findings from Restacking the Odds and complementary projects undertaken by the Centre for Community Child Health, I encourage you to consider the following points in your inquiry:

- The **need for multiple, effective, evidence-based strategies across the early years**, implemented concurrently and continuously (we call this stacking). Positioning early childhood education and care reforms within the broader ecosystem of early years services is critical for equitable and improved outcomes for South Australian children.
- Restacking the Odds proposes **provision of high-quality early childhood education and care for 15 hours or more per week to all children for 2 years before starting formal schooling**. It also identifies that **children from priority population groups will benefit from attending ECEC from a**

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- **younger age:** 3 years before the start of formal schooling. Priority groups include children living in areas of socio-economic disadvantage, children from a non-English speaking background, Aboriginal and Torres Strait Islander children and children with disability. A universal approach allows for full population coverage and is therefore more likely to deliver equitable outcomes.
- Our research supports the **continued application of the National Quality Standard (NQS)** in early childhood education and care as an important tool to support monitoring and reporting of service quality.
- Achieving the benefits from early childhood education and care – and indeed from complementary early years services – means ensuring that services are available by families where and when they need them, are high quality and are used at the appropriate dosage. I encourage the Commission to **embed a focus on quantity, participation and quality** in the delivery of early years services in South Australia. This should include collection and use of lead indicator data to assess performance and progress on a regular basis and accompanying strategies to build capability and increase capacity to use that data to measure and monitor quantity, quality and participation.
- Addressing existing **barriers to participation in ECEC** is particularly important for effective implementation of universal 3 year old preschool – noting a current disparity between enrolment and attendance. Our research on barriers and facilitators to early childhood education participation suggests that this may include reducing direct (e.g. fees) and indirect (e.g. travel) service costs; promotion of the benefits of ECEC linked to high-quality play-based learning in formal settings; and investment, time and resourcing for professional development including training staff in relationships-based and family-centred practice.
- I also encourage the Commission to consider the role of **integrated services and place-based approaches** in the implementation of early learning reforms. There is potential for South Australia to play a leading role in combining and integrating early childhood education services with other evidence-based early years strategies. Considering integration across education, health and social care is important for child development outcomes and for providing a more child-centric system. This could provide a model to inform national developments, such as the Early Years Strategy and the future of national place-based approaches.

## Restacking the Odds: purpose and overview

The Australian Early Development Census (AEDC) shows us that each year, one in five children start school developmentally vulnerable. Children living in the most socio-economically disadvantaged communities are twice as likely to be vulnerable on one or more AEDC domains and three times more likely to be vulnerable on two or more domains compared to children living in communities with high levels of socio-economic advantage. These inequities have not shifted in over a decade.

**There is no single solution to the complex challenges faced by many children, families and communities.** The rapid development in a child's earliest years (0-8) provides the foundation for lifelong health, development and wellbeing. Establishing the conditions that children need to thrive during this critical time provides immediate and lasting benefits for individuals, families and communities. Improving children's health, development and wellbeing requires combining or 'stacking' multiple effective evidence-based strategies across the early years (0-8 years) and implementing them concurrently and continuously (See Attachment 1). Our approach was informed by the evidence-based research of economist James J. Heckman who has suggested that greater investments in early childhood development bring greater returns through better health outcomes and increased productivity. He also identified that applying multiple, complementary services across the early years will amplify the effect on a single strategy/service.

Restacking the Odds focuses on five evidence-based platforms and programs to boost children's health development and wellbeing: antenatal care; sustained nurse home visiting; early childhood education and care; parenting programs; and the early years of school (defined as reception through to Year 3). These five strategies are notably longitudinal (across early childhood), ecological (targeting child and parent), evidence-based, already available in almost all communities (i.e. better use of existing service infrastructure), and able

to be targeted to those with the greatest needs.

Our analysis of data from the Longitudinal Study of Australian Children has found that ‘stacking’ these five fundamental strategies, (i.e., ensuring they are all applied for a given individual) has a cumulative, positive effect on child development outcomes, measured through reading scores at ages 8-9 (see Attachment 2).

## Evidence-based review of indicators to assess quality, quantity and participation

Restacking the Odds’ unique approach uses data and evidence-based indicators to focus on *how* to work differently to improve outcomes for children, families and communities. It develops the skills and knowledge of practitioners, community leaders and government for collecting, understanding and using lead indicators to answer key questions including:

- **Quantity:** Are the strategies available locally in sufficient quantity, relative to the size of the target population?
- **Quality:** Are the strategies delivered effectively relative to evidence-based performance standards?
- **Participation:** Do the targeted children and families participate, and at the right dosage levels?

Lead indicators are essential. They allow service providers and other stakeholders to regularly assess performance and progress, and course-correct when required. While outcome data is the ultimate arbiter of success, lead indicators about what families and children are actually experiencing allow service providers to make adjustments and accumulate learning regularly, rather than waiting years to see outcomes.

The project’s first phase completed research to develop and apply evidence-based lead indicators for the effective delivery of each of the five fundamental strategies. These indicators define how the strategies should be delivered across the dimensions of quality, quantity and participation. The full set of indicators is provided at Attachment 3.

**For Early Childhood Education and Care (ECEC)**, measurable, best practice indicators of quality, quantity and participation were developed through a targeted rapid review of the existing research base for ECEC. This included evidence for all forms of early childhood education and care – including preschool and long day care settings.

Extensive research indicates that the education and care of young children (from birth to eight years of age) has an immense influence on long-term outcomes related to their cognition, resilience, health and wellbeing. It suggests that children from the lowest socioeconomic quintile would benefit from good quality early education opportunities prior to starting school. These benefits relate to formal ECEC models, particularly high-quality centre-based care and preschool or kindergarten programs in the one to two years immediately preceding school. AEDC data suggest that children who attend preschool are less likely to be developmentally vulnerable, even when considering level of relative disadvantage. However, the data also suggest that preschool attendance does not currently close the equity gap in developmental vulnerability.

The targeted rapid review focused on answering four questions:

1. Within an existing national quality system for ECEC, which quality areas and/or standards have the most significant effect on child developmental outcomes (i.e., cognition, language, academic, and social and emotional development)?
2. What does the evidence indicate is the most effective universal starting age, dosage (i.e. number of hours per week) and attendance duration (i.e. number of months or years) as it relates to improving child developmental outcomes?
3. Given the evidence determined from Question 2, in what quantity should a given community be delivering ECEC?
4. Do the answers to these questions differ for targeted provision to disadvantaged populations?

The evidence based indicators established in the research phase are as follows:

### **Quality:**

To determine the indicators of quality, Australia's existing quality rating system was utilised: the National Quality Standard (NQS) implemented by the Australian Children's Education and Care Quality Authority (ACECQA). An initial mapping exercise was undertaken to determine how closely Australia's Quality Areas matched the key principles identified from the European Commission Quality Framework and on domains from standardised, objective measures of ECEC quality: the Classroom Assessment Scoring System PreK (CLASS PreK) and Early Childhood Environment Rating Scale – Revised (ECERS-R).

This initial scoping work provided confidence that important areas were not being missed when using the seven Quality Areas from the ACECQA National Quality Framework to direct the targeted literature search. A combination of literature reviews (peer-reviewed and web-based reports) and interviews with experts were then performed, to determine which ACECQA Quality Areas had the most robust evidence related to child outcomes. We found that the available evidence supports three of ACECQA's seven Quality Areas well (i.e., QA1 - Educational program and practice; QA4 – Staffing arrangements; and QA5 – Relationships with children). We identified that while 38% of Australia's ECEC centres receive an 'Exceeds' rating from ACECQA, only 25% of centres exceed the NQS standard for performance on all three of these Quality Areas.

*Quality indicator: The proportion of ECEC services rated 'exceeding' the standard in quality areas 1, 4 and 5 and at least 'meeting' the standard in all other quality areas according to the ACECQA assessment*

### **Participation:**

To determine participation indicators we focused on national and international longitudinal studies and utilised systematic reviews and meta-analyses, where available. The evidence was examined to determine any differential effect related to universal or targeted program participation in children from 0 to 5 years (e.g. targeted according to housing vulnerability or poverty, cultural and linguistic diversity, or low IQ).

There were three main factors identified that related to participation: i) starting age, ii) program duration, and iii) program intensity. The literature supports the importance of ECEC for all children for two years before starting school. For children from priority population groups (children residing in an area with a Socio-Economic Index for Areas Index of Relative Socio-economic Disadvantage quintile of 1, non-English speaking background, Aboriginal and Torres Strait Islander children, children with disability), the evidence suggests an earlier starting age and longer duration of ECEC is beneficial, as is a higher dose program. These benefits are only conferred for high quality programs.

The proposed participation indicators differ for universal vs targeted provision:

*Universal participation indicator: Proportion of all children attending ECEC for 15 hours or more per week, for the two years before starting formal school*

*Targeted participation indicator: Proportion of children experiencing disadvantage who attend ECEC for 15 hours or more per week, for at least the three years before starting formal school*

**Quantity:** When assessing quantity, the key considerations are whether there is sufficient ECEC infrastructure and a qualified ECEC workforce to support the relevant populations to attend for at least fifteen hours per week. Quantity indicators were developed using the best indicators of participation level (for universal and targeted provision), and community-level population data.

*Quantity indicator: The number of ECEC places for 15 hours per week available to 2-5 year olds.*

The full technical report of the review is attached (Attachment 4), together with the communication summary (Attachment 5).

The utility of the indicator data was tested by working across seven low-SEIFA communities to understand how the fundamental services were being delivered and accessed and the practical value of indicator data. Currently in Australia, these indicators are inconsistently collected and rarely used to inform early years services.

Our research and community level work has shown that evidence-based lead indicators can be defined and populated for each strategy and that the common framework of lead indicators can be applied across services and provide actionable insights. The data required to populate the indicators can typically be assembled, however it is often difficult to access.

The data reveals important gaps in early childhood services with the patterns in these gaps varying across communities and strategies. Service providers, policymakers and community representatives recognise the data gap and welcome our attempts to address it. One community representative commented: *'... we had very poor AEDC results. So, I was looking for data where we could show improvement. I was able to go through the Restacking the Odds data and find where we could make some easy wins'*. An ECEC service provider noted value in examining participation data – including to compare participation rates at different centres and against benchmarks and to consider opportunities to improve participation of specific population groups.

## Barriers, facilitators and strategies to improve participation

For early childhood education and care, the collection of lead indicator data highlighted that significant numbers of Australian children enrolled in early childhood education and care are not attending for at least 15 hours a week. For example, data of over 10,000 children at 688 centres across Australia, sourced via a collaboration with Xplor (one of Australia's leading ECEC software platforms) showed an average of just 56 per cent of children enrolled in ECEC received the recommended dose of at least 15 hours or more care per week for 90+% of weeks over a nine month period (1 March to 30 November 2019) – see Attachment 6.

The substantive variation in the proportion of children accessing early childhood education in the year before school has been found in previous research. Studies have shown that enrolment is lower among children from families with: a single-parent; non-English speaking background; lower levels of education; both parents unemployed; Aboriginal or Torres Strait Islander (ATSI) descent; residency in rural or remote areas or socioeconomically disadvantaged communities. Similar trends have been observed in studies of attendance rates. That is, even when children from disadvantaged groups enrol in preschool programs, they typically attend for fewer hours than their non-disadvantaged counterparts.

The barriers and facilitators of participation in ECEC experienced by and most important to Australian families has been subject to only limited exploration, however. Further research was conducted to investigate these barriers and facilitators in three Australian communities. Attachment 7 provides the published research findings.

The study shows considerable convergence across parent and provider views on the importance of various ECEC participation barriers and facilitators, and highlights specific divergences. Findings indicate the need to:

- a) reduce both direct and indirect service costs for families;

- b) increase flexibility in program formatting so participation can be coordinated with the demands of work and other family responsibilities;
- c) more effectively promote the benefits of play-based learning in formal ECEC settings; and
- d) change attitudes about maternal roles and child readiness to participate in ECEC.

## Developing prototypes and opportunities to scale our approach

### Barriers and enablers to collecting and using indicator data

The Restacking the Odds initiative is now in a prototyping phase, in partnership with communities and service providers across Australia. This aims to better understand the key barriers and enablers to collecting, analysing and using evidence-based data amongst service providers and communities and to co-design feasible prototype solutions to embed the routine use of the Restacking lead indicators in key settings.

The most common barriers and enablers to collecting, reporting, and using the Restacking framework have been a focus of our recent research. This has used a behavioural change model, COM-B framework, to understand the elements requiring change, how they interrelate and identify the most common and important barriers and enablers. The aim is to develop evidence-informed prototype solutions to support behaviour change, in partnership with communities and service providers.

Preliminary analyses have revealed several emerging themes. The following table illustrates themes emerging across strategies and communities. Further analyses will include a more granular view of the major barriers and enablers, particularly as we work closely with services and communities to develop prototypes and interventions.

|                    | Barriers  | Enablers  |
|--------------------|---|---|
| <b>Capability</b>  | <ul style="list-style-type: none"> <li>• Low data literacy/knowledge</li> <li>• Lack of specific data skills</li> <li>• Dedicated time for data-related tasks</li> </ul>  | <ul style="list-style-type: none"> <li>• Education</li> <li>• Training</li> <li>• Enablement</li> </ul>   |
| <b>Opportunity</b> | <ul style="list-style-type: none"> <li>• Service/system structure</li> <li>• Service/system processes</li> <li>• Technology software platforms</li> <li>• Insufficient resources</li> <li>• Workplace and community data culture</li> <li>• Workforce shortages and staff turnover</li> </ul> | <ul style="list-style-type: none"> <li>• Tailored IT systems</li> <li>• Guidelines/processes</li> <li>• Relationships &amp; restructuring</li> <li>• Environmental restructuring</li> <li>• Develop data culture</li> <li>• Generate buy-in/vision/common goals</li> <li>• Develop trust</li> </ul> |
| <b>Motivation</b>  | <ul style="list-style-type: none"> <li>• External reporting requirements</li> <li>• Service/system processes</li> <li>• Perceived cost-benefit of staff resources for data-related tasks vs. other priorities (e.g. engagement with families and children)</li> </ul>                         | <ul style="list-style-type: none"> <li>• Legislation/ regulation/ incentivisation</li> <li>• Education/ persuasion/ incentivisation</li> </ul>  |

## Exploring potential to scale this approach

Alongside our research and prototype development we are exploring the appetite and barriers to implementing this approach across Australia. This includes understanding the value to the community of making investments in this type of initiative. We are engaging a wide range of partners, across governments and the sector, to explore what would be needed at a political and policy level to implement this approach widely.

As part of this we have been exploring community attitudes to investment in early childhood development and identified broad based support for doing more to help children, parents and families by offering universal early childhood education from both 3 and 4 years of age. SVA recently surveyed a representative sample of the Australian people to ask their views on early childhood education and programs that can help children thrive. Survey participants were presented with pairs of opposing statements and asked to choose the one they agreed with more. Headline findings are summarised in the table below.

| A - Statements with high levels of support   | B - Opposing statements  |
|--|--|
| <p>7 out of 10 people chose these statements over the opposing statements in column B:</p> <ul style="list-style-type: none"> <li>• Every child should be able to receive quality early childhood education from 3 years old at their local school [68%]</li> <li>• Even though childcare is an essential service Government funding has failed to keep pace, leaving families with huge costs and many unable to find childcare at all. To give every child the best start in life we should move from an ad hoc childcare system to proper early learning for 3 and 4 year olds [68%]</li> <li>• The longer women are out of the workforce the more likely it is they lose the skills, networks and relationships they need to succeed. To help women return to work and to give every child the best start in life government must make childcare affordable / free for every family. [67]</li> </ul> | <ul style="list-style-type: none"> <li>• Government should not be spending more on childcare, it would cost too much and lead to increased taxes</li> <li>• It should be the responsibility of parents to cover the costs of childcare not taxpayers</li> <li>• It should be the responsibility of parents to cover the costs of childcare not government</li> <li>• Government should not be spending more on childcare, there are more important priorities</li> <li>• The best care a child can receive in the first years of their life is from their mum and dad. Parents should be encouraged to stay home and care for their children</li> <li>• People should be free to choose whether or not they go back to work, not incentivised one way or the other with childcare subsidies</li> <li>• A parent should not miss out on government support because they choose to stay home with their child</li> </ul> |
| <p>7 in 10 supported this statement over the statement in column B:</p> <ul style="list-style-type: none"> <li>• Good early education helps put a child on the path to success in school and beyond. All children should be able to go to preschool even if their parents aren't working so they can begin their learning [70%]</li> </ul>   | <ul style="list-style-type: none"> <li>• The Government should not be paying for children to go to preschool if their parents are not working or studying and can look after them themselves</li> </ul>  |
| <p>7 in 10 supported this over opposing statements:</p> <ul style="list-style-type: none"> <li>• To make sure every child is happy and healthy and off to a great start in life every child should receive regular check ups from a nurse in the first years of their life. [72%]</li> </ul> <p>And 6 in 10 supported this statement:</p> <ul style="list-style-type: none"> <li>• Every child needs parents who have the support they need to be great parents. Government should offer classes where parents learn practical parenting skills, like dealing with difficult behaviour or how to best support a child's learning [63%]</li> </ul>  | <p>Opposing statements included:</p> <ul style="list-style-type: none"> <li>• Government should not waste more money on new programs and leave parents alone unless they ask for help</li> <li>• It's not government's role to tell parents how they should be raising their children</li> </ul>   |

I am grateful for the Commission's interest in our work and welcome the opportunity for continued engagement beyond the initial hearing in January.

Kind Regards,

Prof. Sharon Goldfeld  
Director, Centre for Community Child Health

**Attachments:**

Attachment 1: C Molloy, T Moore, M O'Connor, K Villanueva, S West, & S Goldfeld, *A Novel 3-Part Approach to Tackle the Problem of Health Inequities in Early Childhood*, 2019. *Academic Pediatrics*, 21(2), 236–243. <https://doi.org/10.1016/j.acap.2020.12.005>

Attachment 2: C Molloy, M O'Connor, S Guo, C Lin, C Harrop, N Perini, & S Goldfeld, *Potential of 'stacking' early childhood interventions to reduce inequities in learning outcomes*, 2019. *J Epidemiol Community Health*, 73(12), 1078-1086. doi:10.1136/jech-2019-212282

Attachment 3: Centre for Community Child Health at Murdoch Children's Research Institute, Social Ventures Australia and Bain & Company, *The Restacking the Odds Indicator Guide: Quality, quantity and participation indicators across early years services and why they're important*.

Attachment 4: C Molloy, P Quinn, C Harrop, N Perini, S Goldfeld, *Early childhood education and care: An evidence based review of indicators to assess quality, quantity and participation: Technical report*, 2020.

Attachment 5: C Molloy, P Quinn, C Harrop, N Perini, S Goldfeld, *Early childhood education and care: An evidence based review of indicators to assess quality, quantity and participation: Communication Brief*, 2019.

Attachment 6: C Molloy, S Goldfeld, C Harrop, N Perini, *Early childhood education: A study of the barriers, facilitators, & strategies to improve participation*, 2022.

Attachment 7: R Beatson, C Molloy, Z Fehlberg, N Perini, C Harrop, & S Goldfeld. *Early Childhood Education Participation: A Mixed-Methods Study of Parent and Provider Perceived Barriers and Facilitators*, 2022. *Journal of child and family studies*, pp 1–18.