THE UNIVERSITY of ADELAIDE

Witness Statement
Royal Commission into Early Childhood Education and Care

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for the *BetterStart* Health and Development Research Group

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January 2023

BETTERSTART
Health and Development Research

Better
Evidence
Better
Outcomes
Linked
Data platform

make history.

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Who we are

The *BetterStart* Health and Development Research Group comprises inter-disciplinary researchers from epidemiology, public health, criminology, paediatrics, biostatistics, and psychology who are trying to better understand how to ensure infants and children have the best start in life that will enhance their health, development and human capability formation over the life course.

Acknowledgement

We would like to acknowledge the data in this statement represent serious experiences that can have a lifelong impact on children and families.

Using data in this way is only one way to tell important stories, however, we hope that this work contributes to ensuring South Australia is able to make more informed decisions about how best to support children and families.

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Who we are

Dr. Pilkington is an expert in child protection epidemiology, and for this testimony represents the BetterStart Health and Development research group led by Professor John Lynch in the School of Public Health, the University of Adelaide.

Our research is both empirical and interventional. Over the last decade, this has included epidemiological analysis of child protection, poverty, housing, youth justice, developmental vulnerability, child health inequalities, and childcare. Our goal is to understand how early life conditions impact life chances, and what we can do to improve early life conditions.

Much of the data presented in this witness statement is sourced from South Australia's social and health data asset – the **B**etter **E**vidence **B**etter **O**utcomes **L**inked **D**ata (BEBOLD) Platform.

- BEBOLD
  The BEBOLD platform includes de-identified data on over 500,000 children and young people born from 1991 onwards, and their parents and carers. State and Commonwealth data sources span the health, human services, welfare, education, justice, and social systems. Children not born in SA are included in the data platform if they enter the state and use SA services. BEBOLD represents the most contemporary, comprehensive collection of routinely collected whole-of-population data in Australia. Professor John Lynch is the Director and Dr Rhiannon Pilkington is the Co-Director of the BEBOLD platform. As part of Professor Lynch's BetterStart research group Dr Pilkington has delivered over 70 briefs and reports to the SA government over the past 7 years. We have used the BEBOLD platform in partnership with nearly every government agency in SA across health, human services, treasury, education, and justice to inform 1) defining policy relevant populations (e.g. size, characteristics); 2) understanding patterns of service use and service overlap across different agencies (e.g. transitions from child protection to youth justice); and 3) evaluating policy relevant outcomes of service provision.

  The decade-long build and millions of dollars of investment into the BEBOLD platform supports research to inform and evaluate approaches to intractable health and social problems such as poor child development, mental health, child maltreatment, and intergenerational disadvantage, while preserving confidentiality and privacy. There is a substantial amount of evidence that these challenges are highly prevalent in South Australia (SA).

- Australian Early Development Census
  We know SA is one of the only jurisdictions to show a steady increase in the proportion of children developmentally vulnerable on one or more domains at school entry. [1] In the latest Australian Early Development Census (AEDC), 23.8% or just under 1 in 4 children were found to be developmentally vulnerable on one or more domains at school entry, compared to 22% nationally. [2] If SA reached the national average it would mean approximately 336 fewer developmentally vulnerable 5 year olds in SA each year.

- Child Protection Contact
  By age 10, 1 in 4 children in SA will be notified to the Department for Child Protection with an

allegation of abuse or neglect [3], and 1 in 50 young people will have experienced contact with the Youth Justice system by the time they turn 18. [4] We know over a third of young people aged 11-20 in SA have experienced intergenerational welfare contact and this has flow on effects to the health system as children with intergenerational welfare contact had the highest hospitalisation rates. [5] The 2019 SA Population Health Survey shows that nearly 1 in 5 children aged 5 to 15 were estimated to have an emotional, behavioural or mental health problem. [6] There are currently 4,750 children and young people in out-of-home care, removed because it was considered they could not live safely with their family of origin, and this number increases year-on-year. [7]

- Socioeconomic Disadvantage
  For many, these experiences have roots in multiple forms of socioeconomic disadvantage. Over 25% of SA's children and young people live in the most disadvantaged areas according to the Census, which is only exceeded by Tasmania where 37% of people were living in the most disadvantaged areas. [8] Of all young people with mental health challenges, children identified as developmentally vulnerable, and those notified to child protection – approximately half live in suburbs that fall in the bottom two SEIFA quintiles. [2, 3, 6] Aboriginal and Torres Strait Islander children are overrepresented across all of these indicators due to the enduring impact of colonisation, legacies of systemic racism, oppression, and systems set up to remove and assimilate Aboriginal and Torres Strait Islander peoples. This contributes to intergenerational trauma, and multiple economic and social disadvantages experienced by current generations.

These markers of the challenging and complex health, economic and social conditions experienced by children, young people, and families in South Australia are the impetus for the research program using the BEBOLD platform that underpins much of this witness statement.

Our position

- **Issues of child protection and child development cannot be separated**
  Child protection has rightly been recognised as 'everyone's business' through multiple Federal and jurisdictional policy documents[9, 10] for decades. While people advocate for a "public health approach" and some progress has been made - the fundamentals of how the broad "child protection system" works remain largely the same. [11]

- **A "child wellbeing system" has a statutory and preventive role**
  A society needs its "child protection system" to serve both a statutory and prevention role. Perhaps we should use the term - a "child wellbeing system" that has explicit roles to ensure child safety, child development and wellbeing. Most of the preventive capacity and supportive services do not lie within a Department for Child Protection.

- **Early Childhood Education and Care (ECEC)**
  We welcome initiatives in Early Childhood Education and Care (ECEC). Such initiatives must be positioned within the explicit understanding that they are a crucial part of the broad "child wellbeing system". [11]

ECEC is a major link between the health system that dominates care and support up to age 2; and the formal education sector beginning at around age 5. ECEC must have an outreach mentality and capacity, and cultural competency, as well as the data needed to know if they are reaching priority populations who are most at risk of child protection contact and later developmental vulnerability.

- **Fund the coordinating glue**
  While there are certainly efforts to coordinate multi-agency responses, this is a very difficult task. Currently it is 'nobody's job' to provide such coordinating 'glue' so that families and children get the right kind of supports that are responsive to sometimes changing needs.

  Governments and their funded services usually operate in silos. The health system is rightly equipped to deal with health issues. The early years system is equipped to support early development and learning. So, it is not surprising these pivotal agencies face challenges in considering child protection 'their business'. However, together, human services, health, education and child protection along with backbone agencies such as housing, form what is the core of a child wellbeing system. Children and families do not live their lives in such silos.

- **Raising the bar on universal services**
  Provision of ECEC must take into account the need to actively engage families dealing with complex circumstances like child protection risk, and be prepared to reach out and engage them in culturally appropriate ways. If we are to achieve equitable delivery and universal coverage of ECEC services, we need to improve the capacity of ECEC services to provide support to families experiencing disadvantage.

- **There is no trade-off in universal and targeted services**
  Universal services will not equitably improve outcomes without partnerships with effective and resourced targeted services. Targeted services rely on universal services to identify and engage priority populations in non-stigmatising ways. Without long-term commitment to appropriately resourcing both universal and targeted services, we will not 'turn-the-curve' to improve child wellbeing.

- **Child protection as an early warning of developmental risk**
  Notifications that are not considered child protection matters are not false positives for poorer child development. They are not child protection matters but they are surely concerning for those interested in improving child development and its connections into later education and skill building.

  There are countless reports to child protection, sometimes duplication of risk assessments for different outcomes, but in the end there is a lack of service provision to families that actually changes their situations. We have shown that the majority of children in contact with child protection but not reaching the risk level for formal statutory intervention, end up being over-represented in hospitals, emergency departments, and in developmental vulnerability before school entry; and their parents are over-represented in mental health, drug and alcohol and other government and non-government services. So, in the end these children and families turn

up in a different silo at a later time.

- **Outcomes focus**
  A 'child wellbeing system" must be explicitly outcomes focused – did we improve the life chances of children and families through fostering development and building skills?

- **We must learn as we go**
  The child wellbeing system in SA must be able to learn from what is working and what is not. Evaluation is at the centre of creating a learning system to support child wellbeing. Too often evaluation is feared because it affects re-funding decisions. Even if evaluation is done it is invariably an underfunded afterthought that is unable to generate high quality evidence.

  If we are trying to create a child wellbeing system in SA, including the ECEC sector, it is imperative that we are able to know what is working. Otherwise, we'll be back in 10 years time with another commission to mull over what didn't work and to generate yet another raft of recommendations. Why don't we learn as we go and change what is not working.

- **Poverty and housing**
  We live in a country where more children live in poverty than adults. Reducing poverty and ensuring safe and secure housing are fundamental to achieve child wellbeing.

Key facts

Since 2016, we have worked closely with the Early Intervention Research Directorate in the Department for Human Services, the SA Department for Child Protection and adjacent agencies in health and education to increase our understanding of the scope and scale of child protection system contact, and child maltreatment. Below are some key findings from this research.

At all ages child protection system contact is very common and increasing over time. In 2021, there were over 91,000 reports to child protection equating to over 42,000 children. This means just under 12% or more than 1 in 10 of all children aged 17 and under were reported to the Department for Child Protection in one year.

Notifications
1 in 4 children born from 1991 to 1992 were notified to the South Australian Department for Child Protection at least once by the time they turned 18 years of age. This has increased year-on-year with nearly 40% of children born in 2001-2002 (who turned 18 in 2018/19) reported at least once to child protection. For children born more recently, we are seeing 1 in 3 reported by the time they turn 10 years of age.

Substantiated child maltreatment
1 in 20 children born in South Australia will be subject to a substantiated allegation of child maltreatment. This means at least 1 child in an average classroom will have experienced child maltreatment.

Socioeconomic disadvantage
Around 60 to 70% of substantiations for child maltreatment come from SAs most disadvantaged areas as defined by the SEIFA IRSAD measure.

Aboriginal and Torres Strait Islander children are over-represented
Aboriginal and Torres Strait Islander children and families are over five times more likely to be reported to child protection and over 10 times more likely to be removed into out-of-home-care. [12] We are committed to Indigenous Data Sovereignty and are currently working with expert Aboriginal and Torres Strait Islander academics and the South Australian Commissioner for Aboriginal Children and Young People to appropriately explore the epidemiology of child protection for Aboriginal and Torres Strait Islander children, families and communities.

Child protection contact and child development at age 5
The AEDC provides invaluable insight into child development across the domains of physical health and wellbeing, social competence, emotional maturity, language and cognitive skills, and communication skills and general knowledge, in a child's first year of formal schooling.[2] The AEDC data can be used as a form of population-level developmental surveillance to inform early support and prevention. Using the AEDC data linked into the BEBOLD platform, we have quantified the prevalence of developmental vulnerability on one or more domain for children with different forms of early life child protection contact.

- 21% of children with no child protection contact by school entry were developmentally vulnerable on one or more domain
- 37% of children who <u>only ever had a single notification</u> that was not considered a child protection matter before school were developmentally vulnerable by age 5
- 43% of children with 3+ notifications, none of which were considered child protection matters, were developmentally vulnerable by age 5
- 50 to 54% of children investigated, substantiated or removed into out-of-home care were developmentally vulnerable by age 5
- Of the most advantaged children (determined by SEIFA), 15.4% of those with no child protection contact vs 32% of those with child protection contact were developmentally vulnerable on one or more domains
- Of the most disadvantaged children: 24.9% of those with no child protection contact vs 48% of those with child protection contact were developmentally vulnerable on one or more domains

This work shows that notifications that are not considered child protection matters are not false positives for poorer child development. Children who have only ever been notified but never had any more serious child protection contact before they enter school, are nearly twice as likely to be developmentally vulnerable in their first year of school. This is also tied up in socioeconomic disadvantage, but we see that child protection contact tells us something about developmental vulnerability above and beyond socioeconomic circumstances. These notifications are not matters for the statutory system, but they are alerting us to developmental risk early in life and the potential flow on costs that result in entering school developmentally vulnerable.

Prevention is the only viable solution

The demand arising from reported concerns for the wellbeing of SA children is overwhelming. There is no one Department that is equipped to respond to this level of demand. The statutory role of the Department for Child Protection means their primary responsibility is to keep children safe. There is limited capacity within the agency to address the causes of maltreatment.

This is reflected in child protection expenditure. In 2019/2020 of $640million, $500 million or 78% of the entire budget was expended on out-of-home care services[13]. This is in contrast to other Australian jurisdictions where on average, 59% of the total child protection budget was expended on out-of-home care services[13]. South Australia is also notable for spending only 10% of the total child protection services expenditure on intensive and family support services compared to the highest proportionate spend of 27% in Victoria, and an average of 18% of total expenditure in other Australian jurisdictions[13]. Without successful preventive efforts we will continue to see the flow on effects of child protection risk on later life child outcomes, including child development.

If the goal is to develop an effective, integrated, supportive child wellbeing system then child protection notifications could be considered part of an early warning system. A child wellbeing system must invest in crisis care as well as the capacity for prevention and support through universal and more intensive services according to need.

Earliest feasible prevention opportunity: child protection contact by age 1

In South Australia 1 in 10 infants are known to child protection before they can walk and talk. In other words, of around 20,000 births in SA each year, 2000 of those children were notified to the child protection agency by age 1.

- Around 80% of these children were re-notified at least once before age 5, and 40% were re-notified five or more times.
- Most of these children are born into disadvantaged circumstances- around 40% are born to a single parent with no recorded partner at birth, over half are born into a jobless family, and nearly 60% live in the most disadvantaged areas.
- There are additional indicators that these children come from families with complex service needs that require supports from multiple service agencies. We used the family file from BEBOLD linked to inpatient hospitalisation, emergency department, homeless 2 home, and child protection data to investigate drivers of child protection contact. We found that compared to children with no child protection contact, of those who were reported as Unborn Child Concerns or as infants aged under 1
    - 26% had at least one parent with a substance use indicator from emergency, inpatient hospital or child protection data vs 1% with no child protection contact.
    - 43% had at least one parent with an indicator of poor mental health from emergency, inpatient hospital or child protection data vs 4% with no child protection contact.

- 24% had at least one parent with an indicator of domestic or family violence from emergency, inpatient hospital, homelessness or child protection data vs <1% with no child protection contact
- 61% had at least one parent with a record of their own child protection contact vs 14% with no child protection contact.
- 46% of these infants will go on to be developmentally vulnerable on the AEDC in their first year of school and an additional 11% will be identified as 'special needs' (children with special needs are not included in calculations of domain scores or summary indicators in the AEDC because of the already identified substantial developmental needs of this group).

These figures reinforce the need to support ECEC to be able to engage with families experiencing complex forms of health, social and socioeconomic disadvantage. We already know who these families are – child protection concerns and socioeconomic circumstances are often known perinatally. We have an opportunity to use this information to supportively engage with families from the start. We need to provide integrated and supportive health and child care for these families.

From an ECEC perspective, how can we ensure these infants receive the best of ECEC as they age? As we move into providing 3 year-old preschool, how do we ensure this system is setup to support families from disadvantaged backgrounds to have their children consistently attend high-quality preschool?

While there are certainly efforts to coordinate multi-agency responses, this is a very difficult task. Currently it is nobody's 'job' to provide such coordinating 'glue' so that families and children get the right kind of support responsive to their changing needs at any particular time. If we buy-in to the vision of building an integrated child wellbeing system then there will need to be one person in charge. There will need to be clear performance benchmarks and appropriate monitoring to feedback into a quality improvement cycle.

There is an opportunity to harness the vision to build a child wellbeing system that integrates health, human, social services and education and to prioritise providing support at the earliest possible opportunity that ultimately improves life chances for children for *all* children.

A public health approach to supporting child development, child wellbeing and child safety

Calls for a public health approach to prevent child maltreatment rest on the provision of primary, secondary and tertiary services[14] under a model of progressive universalism where more intensive services are provided to those with greater need[15, 16].

- A key assumption is that at-risk children and families are able to be engaged in universal service provision as a non-stigmatising gateway to effective intensive and targeted supports aimed at improving a range of family and child outcomes.
- But the 'bar' needs to be raised on the capacity of universal services to provide support to higher risk families. This means ensuring that the workforces for *both* universal and targeted services are

equipped to engage and build trust with at-risk families dealing with a range of complex circumstances that can lead to poor child development.
- This cannot be done through targeted services only. It relies on equitable, non-stigmatising universal services to ensure our youngest children are experiencing high-quality early care and learning.

Embedding the capacity for early support into a child wellbeing system means the responsibility for addressing circumstances that lead to child protection and developmental risk must be shared across all agencies that can contribute to prevention efforts. In South Australia, this implies agencies with the responsibility to deliver support in drug and alcohol, mental health, housing, homelessness, domestic and family violence, along with intensive family support services. All these agencies and services have an important role to play in preventing maltreatment.

System capacity also depends on being able to reach enough of the at-risk population that successful interventions can contribute to stemming the tide of child maltreatment. If an effective service is only ever delivered to 5% of the population that needs it, some individuals may experience improved outcomes, but we will never 'turn the curve' on reducing child protection and developmental risk at the population level.

Improving outcomes: how will we know what works?

What we know

We know stakeholders in health and social welfare feel like things are getting worse. The challenges across housing, homelessness, child protection, mental health, domestic violence, and drug and alcohol issues can seem insurmountable and demoralising. Workforce turnover is increasing.

While these challenges may often be considered 'other', the reality is these are common, and these challenges all impact child wellbeing and development. We have little evidence that we are achieving success in one of the core challenges in Australia and internationally - breaking intergenerational cycles of disadvantage in all its forms.

What we know less about

- Are our interventions, policies, and programs effective?
- What is the right mix of effective interventions to match population needs?
- Can we implement our programs effectively, and can we do it at scale?
- Do we have enough reach into the population to 'turn the curve'?
- Will the social conditions that drive poor outcomes overwhelm whatever we do?
- Do we have the right data infrastructure – BOTH operationally and for research – to know if we are answering the questions above.

Building a child wellbeing system that can learn and adapt relies on data and research

There are many challenges in building a child wellbeing system. As researchers, we limit our comments here to those around the role of data infrastructure and research as central to improving the child wellbeing systems capacity to learn, adapt and improve.

We must increase capacity to learn and change and that is a legitimate role for research. For example, in the last decade the inquiries and reviews into child protection have delivered 811 reform recommendations (some contradictory). The "review-recommendation" model with a lack of long-term funding and multi-partisan political commitment to reform needs to fundamentally change, otherwise in 10 years time another group will be pondering the next raft of reform recommendations.

The first step in building the evidence base is to understand - are our policies, interventions and programs effective? If we are building a child wellbeing system, it is essential we are able to monitor and test the effectiveness of investments across both the universal and targeted systems. This will require up-front investment to build an intelligent data infrastructure to help us know what works to improve a range of development, health and wellbeing outcomes in the early years.[11] This can then be built on to understand what is required to improve the longer-term life chances for all children in SA.

Currently there are substantial challenges in collecting high-quality data across child and family services due to a lack of investment in what constitutes fit-for-purpose data, IT solutions, as well as ongoing workforce training and support. Our experience working with government and non-government services means that we are familiar with some of the key challenges posed by the current data systems in understanding what works. These challenges are not unique to SA but are pervasive across child and family services systems across Australia and internationally.

These challenges include:

Challenge #1: Lack of Investment in Operational and Research Data Infrastructure

Ideally operational and service provision data infrastructure are integrated with capacity to also use those data for more 'deep dive' research beyond the normal requirements and timelines for operational decisions. This sort of information infrastructure is what is envisioned in Electronic Medical Records (EMRs) that underpin both improved quality of care and that feed into building evidence through research.

It is not unusual for programs in the child wellbeing sector to operate with minimal to no funding to support data infrastructure. For example, our research investigating the supply of services that can support the prevention of child maltreatment surveyed 23 organisations delivering 88 programs across the adult mental health, substance misuse, domestic and family violence and associated sectors. It was not uncommon for client information to be recorded in excel spreadsheets (final report being prepared for delivery to EIRD, DHS in quarter 1, 2023), with smaller organisations more likely to operate without formal client management systems. The recent development of the Child and Family Support System in the SA Department for Human Services has been undertaken with extremely limited resources for data infrastructure to even understand who receives our services. For example, there is limited capacity to understand who uses assets like Children's Centre's, for how long and for what purposes.

Without appropriate data infrastructure it is almost impossible to rigorously investigate the effectiveness of investments in the early years. This seriously hampers our ability to learn what works for who, and to scale accordingly.

Government must commit to appropriately funding fit-for-purpose data solutions as a long-term investment in our capacity to improve outcomes in the early years that persist, and lead to improved life chances for all children in SA.

Challenge #2: Client management systems are not designed to support evaluation and monitoring
When data collection systems do exist, they are understandably built based on the needs of day-to-day client management, and/or to support reporting on contractual KPI's. However, this often means there is little capacity to provide population-level views of client flows through services. Extensive use of open-text fields make data difficult to use in evaluation and research, and there are often challenges in recruiting workers with the right skills to support extraction of data beyond standard reporting.

Our previous research has shown that even in the case of sophisticated client management systems there is often a focus on 'process' indicators that measure activity and performance with minimal collection of child and family focussed development, wellbeing and health outcomes[11].

There may be an opportunity to develop a minimum set of items to be collected by every adult and child service relevant to improving outcomes in the early years. Comparable to how departments routinely reach national agreements regarding minimum data collections to underpin national reporting through the Australian Institute of Health and Welfare, SA could invest in developing a system-wide minimum data set. This would mean every state-funded service would agree to collect a specific set of data for their clients which could greatly increase capacity to understand what works and for who. This is similar to the goal of the Commonwealth Department of Social Services Data Exchange (see [17]).

The minimum data set would need to include:
1) Process indicators related to activity (e.g. dates and details of client flows);
2) Indicators of warm handover e.g. when a client exits a service are they referred with a 'warm' handover between agencies, therapeutic contact where we know whether a client attended and engaged with a service and when, and dose so we can learn what dose of intervention is required for different types of clients to improve outcomes; and
3) Measures of child and family outcomes, i.e. client reported (where possible), worker reported, and objectively measured system outcomes. It is only when these three aspects of data are collected and brought together that we will improve our capability to understand the impact of supportive investments in the early years.

Challenge #3: Minimal investment in workforce data literacy
In our experience there are varying levels of investment in workforce data literacy and skills training. Workforce capacity to record client and service data is often limited as services have little administrative support and struggle to keep up with demand. There can also be cultural challenges where there is minimal understanding or acceptance of the importance of data collection, and sometimes fear of how such data might be used. All of these issues can compromise data quality to the point where despite the hard work of some, the data as collected may not be useable for evaluation.

We need to make data powerful by using it to drive learning and adaptation in the child wellbeing system. We can help the workforce understand how the data is used and why it matters from a system perspective – we have done many such workshops with frontline staff in what we call 'returning data to source'. We need to move away from a model where gathering relevant data is feared because it feeds into a "de-fund failure model" - to an information system model that helps us learn how to do better and supports continuous quality improvement. The word "evaluation" needs to be valued, not feared.

Conclusion

There is an opportunity to build an integrated child wellbeing system that spans child, family and adult focussed services across education, human, health and social services. That system has statutory and preventive responsibilities and spans government and non-government agencies, community based stakeholders, and must involve meaningful Aboriginal and Torres Strait Islander leadership.

The equitable delivery of the early years services implies investment must be made to ensure families and children from the most disadvantaged backgrounds attend and benefit from major policies such as 3 year old preschool and universal 3 year old screening.

We cannot just 'hope' all families take advantage of these major investments, and we cannot just 'hope' that these investments work to improve outcomes. We must actively embed additional capacity to engage with families in disadvantaged circumstances, and we must plan and implement a rigorous research program to test the effectiveness of investments being made in the early years. This would need to include a population quantitative component to test reach, dose and child and family outcomes, alongside implementation science and qualitative methods to understand the 'why' services did or not have an impact and to support the inclusion of worker, child and family perspectives (where possible and ethical).

The highest quality evidence of positive impact has traditionally come from Randomised Controlled Trials (RCTs), and the demand for such evidence is increasing. Our extensive research into examining the quality of randomised and non-randomised studies underpinning a range of health and social welfare programs, shows the depth of the evidence is often shallow, i.e. there are not many studies, and the quality of those studies is often poor. The 'solutions' will not be rolling out a new 'program' or even a set of new 'programs'. The reality is the evidence base for effectiveness of many 'program's is scientifically weak. [18]

A 2022 review from a renowned US economist Greg Duncan and colleagues[19] concluded that the current evidence base for the effectiveness of early childhood education "fails to answer fundamental questions about what works for whom and why".

In the absence of RCTs, it is clear we still need local, high-quality evidence of effectiveness to feed into a learning system. We have built BEBOLD as a whole-of-population data platform for exactly this purpose. Because we have the whole population, we can create a comparison group that looks just

like the participants in a program, but they don't receive the program. The process involves linking program data into the big data platform under ethics and agreed governance processes. The key advantage of this approach is that it supports the creation of a quasi-experimental comparison group, unlike a simple pre-post design. Given the right kind of data, these methods using observational data have been shown to generate the same answers as those seen in high-quality RCTs (see Hernan & Robins, 2016[20]).

SA has the opportunity to invest in a statewide minimum dataset on service provision joined-up with a whole-population platform such as BEBOLD. This would place SA as a national leader in investigating the reach, dose and impact of early years investments to improve child wellbeing.

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