RESTACKING THE ODDS

SUPPORTING DATA-BASED DECISION MAKING IN PLACE-BASED INITIATIVES

Key messages

- Many place-based initiatives focus on improving equitable outcomes across the early years. Yet understanding how to track progress is hard without consistent and timely information about what is happening and where.
- Access to evidence-based lead indicators across essential early years services can help to enhance decision making to reduce community disadvantage.
- Supporting the use of data for decision making requires a strong organisational data culture, and investment in infrastructure and training.

The early years (ages 0-8) are a critical period, laying the foundation for children's wellbeing and future development. The communities in which children live are key social determinants of their development, health and wellbeing. Inequities that emerge in early childhood often persist into adulthood, so timely action in the early years is essential to ensure children, families and communities can thrive.

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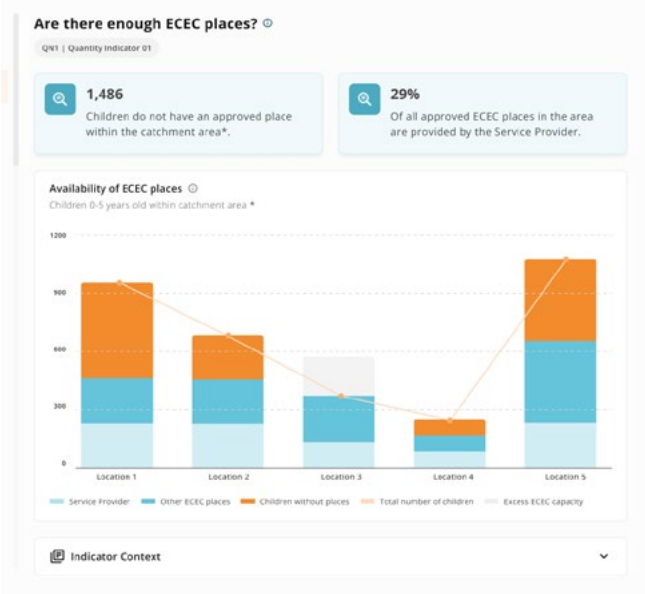
Place-based initiatives (PBIs) use collaborative approaches to deliver programs in specific geographic locations[1]. Because these initiatives are tailored to the unique needs and strengths of a community, they can effectively foster local engagement and ownership that contributes to improving early childhood outcomes.

When PBIs use evidence-based lead indicators to inform decisions they make with the communities they serve, they are better placed to optimise children's wellbeing. Currently however, limited understanding about what data to measure, poor data infrastructure and a lack of incentives make it difficult for PBIs to effectively use data for decision making and action. Investment that builds the capability of PBIs to interpret and use data routinely would allow them to better understand and address the needs of their communities in a timely way.

Why collect and use evidence-based lead indicator data?

Most PBI's current measurement frameworks rely heavily on outcome or 'lag' indicators (e.g. the proportion of children who are developmentally vulnerable as reported by the Australian Early Development Census).[2] While necessary for evaluating population level progress, lag indicators are insufficient for driving timely and effective changes on the ground.



The long delay – sometimes years – between action and outcome measurement makes it nearly impossible to determine if actions are effective in real time. By contrast, lead or process indicators (e.g. the proportion of early childhood education and care places available for children aged 2-5 years) provide early signals of progress toward an outcome.[3] This makes lead indicators a valuable tool for understanding the issues, determining priorities, setting actions, and supporting accountability and quality improvement efforts.

For example, with lead indicator data on service quality, quantity and participation, PBIs are better placed to ensure that families in their area can access and participate in high-quality programs that support children's health, development and wellbeing. Lead indicator data provides valuable insights that enable them to adjust their priorities and service delivery in real-time.

What did we find?

This study explored the barriers and enablers to collecting, reporting and using evidence-based lead indicators for decision-making in four Australian PBIs. Eight PBI leaders were interviewed. The barriers and enablers to data-based decision making that were identified were aligned with the three core components of the COM-B behaviour change framework: capability, opportunity and motivation.[4]

Capability

An individual's capability to undertake a particular behaviour is determined by their knowledge, skills and abilities.

Interviews uncovered a knowledge gap about how to consistently share, interpret and inform decision making in ways that are meaningful for services and community. Additionally, interviewees suggested a lack of trust in the fidelity of collected data can contribute to miscommunication and misinterpretation of service results. When data is not interpreted correctly, it affects the extent to which the findings - and their implications for services - can be communicated effectively.

> 'So data's knowledge, right, and knowledge is power.'
>
> Interviewee

All participants agreed that a strong data culture is supported when leaders can explain and reiterate the value of data to inform service delivery decisions and community child health outcomes (Figure 1).

Opportunity

The opportunity to engage in data-based shared decision making is dependent on external physical or social factors.

Data-based decision making is reliant on effective data sharing platforms and processes. The absence of such systems and processes was identified as a key barrier in the interviews. All participants acknowledged the need for a data platform or mechanism to enable data sharing and the extraction of data collected by local services. The interviewees also identified concerns around inconsistent data collection processes and its impact (e.g. increasing the chances of missing data, undermining confidence in data quality and hindering negotiations around data sharing).

Because data reporting has been traditionally used for service accountability, interviewees highlighted that the existing data culture protected one's organisation from 'reputational risk'. Interviewees indicated that PBIs fear they will be viewed negatively if poor indicator results emerge. As the focus of data usage turns to continuous improvement, the effect of this on data culture, such as limited data sharing between services, is a social opportunity barrier. Participants suggested building strong relationships and partnerships would be important to enable a collective approach to data sharing, governance and common shared goals to collectively define actions.

'Not having the funding to be able to invest in the software and the processes to collect the minimum data set …'

Interviewee

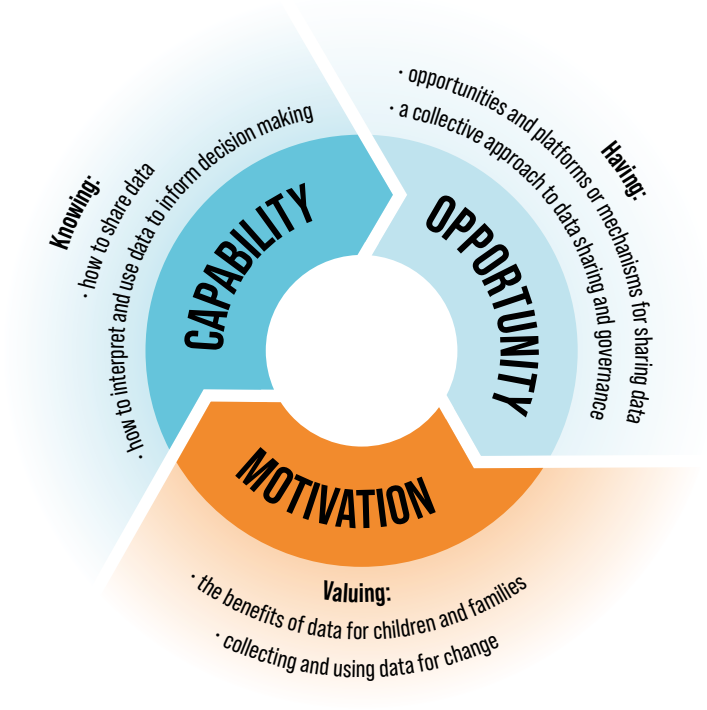


Figure 1: Enablers of data-based decision making

Motivation

Internal processes that motivate behavior can be automatic (without 'thinking') or reflective (after some deliberation). As such, data-based shared decision making can be influenced by an individual's social/professional role and identity, their beliefs about the consequences of data use, and their goals.

In this research, it was clear that leaders in PBIs understood the importance of placing a high value on data-based decision making to motivate data usage at an organisational level. Interviewees identified that demonstrating the value of data and subsequent benefits to families and workers who collect the data, was a key enabler.

What does this mean?

Implications for policy and practice

When PBIs support the community to use the right data effectively, they are better placed to engage with stakeholders, make informed decisions, use their existing resources more efficiently, and monitor progress. This fuels better collaboration, more targeted interventions and in turn, better outcomes for children and families.

Barriers that hinder the capability, opportunity and motivation of PBIs to use data for decision making could be reduced by:

- having consistent evidence-based lead indicators
- investing in data systems, processes and training to support data use, including the establishment of communities of practice
- sufficient and sustainable funding to facilitate data sharing
- embedding lead indicator use into funding deliverables through policy changes
- communicating the benefit of using evidence-based lead indicator data to increase motivation for supporting activities.

Embedding the use of lead indicators into routine practice will require multifaceted interventions that build workforce capability, increase opportunities to collaboratively engage in data-based decision-making, and increase stakeholder motivation.

For further information

Villanueva, K., Beatson, R., Hilton, O.,... & Goldfeld, S. (2024) Barriers and Enablers to Data-Based Decision Making in Australian Place-Based Community Initiatives: A Qualitative Study Informed by the COM-B Model and Theoretical Domains Framework. *Child Indicators Research*. 1-27
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2 Australian Early Development Census: **https://www.aedc.gov.au**

3 Centre for Community Child Health at Murdoch Children's Research Institute, Social Ventures Australia and Bain & Company (2023). The Restacking the Odds Indicator Guide: Quality, quantity and participation indicators across early years services and why they're important (Second edition). Melbourne, Australia. **https://doi.org/10.25374/MCRI.21484551**

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RESTACKING THE ODDS

RSTO is a collaboration between the Centre for Community Child Health at the Murdoch Children's Research Institute, Bain & Company, and Social Ventures Australia.

For information about the study or RSTO

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The Centre for Community Child Health is a department of The Royal Children's Hospital and a research group of the Murdoch Children's Research Institute.

We acknowledge the Traditional Owners of the land on which we work and pay our respect to Elders past, present and emerging.