Data and community: How Collective Impact initiatives in Australia use data to support action

A report prepared by the Australian Research Alliance for Children and Youth (ARACY)

2017
For further information about this report, please contact:
Zoya Gill
p. 02 6248 2413
e. zoya.gill@aracy.org.au

Suggested citation:

ARACY:
Mail: GPO Box 2807, Canberra, ACT 2601 Email: enquiries@aracy.org.au
Website: aracy.org.au
Phone: +61 2 6248 2400
@ARACYAustralia

ABN 68 100 902 921
Table of Contents

Glossary of terms........................................................................................................ vi

Executive summary ....................................................................................................... 8
What is community level data and why does it matter? .............................................. 8
Key interview findings ................................................................................................. 8
Gaps............................................................................................................................... 9

Introduction .................................................................................................................. 10
Desktop review ............................................................................................................ 11
Identifying organisations ......................................................................................... 11
Interviews .................................................................................................................... 12
Process of analysis .................................................................................................... 13

Community level data ................................................................................................. 14
What is the role of community level data................................................................. 16

Collective Impact ......................................................................................................... 18
International case studies ....................................................................................... 20

Qualitative research findings ..................................................................................... 25
Interviews .................................................................................................................... 25
Issues of definition ..................................................................................................... 25
  Community Level Data ........................................................................................... 25
Measurement ............................................................................................................... 28
  Measurement tools .................................................................................................. 28
  Measurement frameworks ....................................................................................... 30
Developing measurement frameworks: what’s working .......................................... 32
  Results Based Accountability ................................................................................. 32
  The Nest Action Agenda and Opportunity Child Shared Outcome Framework 33
  Community consultation ....................................................................................... 33
  Consultation with children, young people and families ......................................... 34
Frequency and sources of data collection ................................................................... 35
Short, intermediate and long term outcomes ............................................................. 42

Barriers to data collection and use ............................................................................ 44
Gaining access to government data .......................................................................... 44
Barriers to sharing data ............................................................................................. 45
Lack of continuity between data sets ......................................................................... 46
Non-existence and obsolescence of government data ............................................. 47
Enablers of data collection and use ................................................................. 49
Relationship-building ...................................................................................... 49
Data parties .................................................................................................. 50
Leverage community capacity ....................................................................... 50
Build data collection into programs ............................................................... 51
Data sharing systems .................................................................................... 52
Proxy indicators ............................................................................................ 53
Key interview findings .................................................................................. 54
Gaps and suggested solutions ........................................................................ 55
1) Understanding and definitions ................................................................... 55
2) Awareness and access to public data ......................................................... 55
3) Missing data ............................................................................................ 56
4) Evidence for the effectiveness of Collective Impact ................................. 56
Conclusion .................................................................................................... 57
References ....................................................................................................... 58
Appendix 1: Participating organisations .......................................................... 61
Communities for Children (TAS) .................................................................... 61
Connecting Community for Kids (WA) .............................................................. 61
Go Goldfields (VIC) ....................................................................................... 62
Grow Well Live Well, City of Palmerston (NT) ................................................ 63
The Hive, Mount Druitt (NSW) ....................................................................... 63
Logan Together (QLD) ................................................................................... 64
Together SA .................................................................................................. 64
Maranguka (NSW) ........................................................................................ 65
West Belconnen Local Services Network (The Network) (ACT) ...................... 66
Appendix 2: Interview question guide ............................................................. 67
Background .................................................................................................... 67
Data Collection ............................................................................................... 67
Data Use ......................................................................................................... 67
General ........................................................................................................... 68
Appendix 3: The Nest action agenda outcome domains ................................. 69
List of tables and figures

Table 1: Comparison of process establishment by Promise Neighborhoods Institute and Strive Together................................................................. 23
Table 2: Interviewee descriptions of community level data..................................................... 26
Table 3: Software and systems used by participating organisations...................................... 28
Table 4: Participating organisation measurement frameworks............................................. 30
Table 5: Frequency and sources of data collection............................................................... 37
### Glossary of terms

For the purposes of this report, unless specified otherwise, the following terms are understood as follows.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>administrative data</td>
<td>data that are routinely collected in the course of providing services to client groups or otherwise undertaking the core business of an agency, such as occasions of service</td>
</tr>
<tr>
<td>attribution</td>
<td>identifying the action that causes an outcome or indicator</td>
</tr>
<tr>
<td>baseline data</td>
<td>an agreed initial collection of data, or datapoint, which serves as a basis for comparison with any subsequently acquired data.</td>
</tr>
<tr>
<td>Collective Impact</td>
<td>A framework for joined-up approaches to effect changes at the community level, described by John Kania and Mark Kramer in 2011.</td>
</tr>
<tr>
<td>community</td>
<td>the population of a geographically contained area. Please note, for the purposes of this paper, community is a geographical concept rather than an ethnic, religious or socio-cultural concept.</td>
</tr>
<tr>
<td>community level data</td>
<td>data about the population of a geographically contained area; data related to local populations</td>
</tr>
<tr>
<td>data</td>
<td>a set of values of qualitative or quantitative variables</td>
</tr>
<tr>
<td>dataset</td>
<td>a collection of data</td>
</tr>
<tr>
<td>disaggregated data</td>
<td>data broken to subgroups or individuals</td>
</tr>
<tr>
<td>domain</td>
<td>a subset of a whole</td>
</tr>
<tr>
<td>impact</td>
<td>the longer term outcomes (effects or consequences) of an activity or service</td>
</tr>
<tr>
<td>indicator</td>
<td>a measurable marker that shows whether progress has been made towards achieving an outcome</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>individual data</td>
<td>data relating to a specific individual</td>
</tr>
<tr>
<td>outcome</td>
<td>an expected end result, consequence or effect</td>
</tr>
<tr>
<td>population data</td>
<td>data about a group</td>
</tr>
<tr>
<td>primary data</td>
<td>original research that is obtained through first-hand investigation; data collected directly from the subject</td>
</tr>
<tr>
<td>program logic</td>
<td>a tool used in planning and evaluation to clarify and communicate intended outcomes and assumptions</td>
</tr>
<tr>
<td>secondary data</td>
<td>research that is widely available and obtained from another party</td>
</tr>
<tr>
<td>statistics</td>
<td>collection, analysis, interpretation, presentation, and organisation of data</td>
</tr>
<tr>
<td>targets</td>
<td>desired level of change in an indicator or outcome; benchmark that is set as an aim</td>
</tr>
<tr>
<td>theory of change</td>
<td>a specific type of methodology for planning, participation, and evaluation; defines long-term goals and then maps backward to identify necessary preconditions</td>
</tr>
</tbody>
</table>
Executive summary

This report presents findings from a research project conducted by the Australian Research Alliance for Children and Youth (ARACY) on the topic of community level data in Australia, specifically in the context of Collective Impact (CI) initiatives. It combines a rapid literature review with qualitative data to describe the current state of data collection and use by CI initiatives from each state and territory.

Semi-structured interviews were conducted with representatives from nine CI initiatives. Interviewees were asked a number of questions relating to: organisational and interviewee background, data collection, data use, and general comments regarding gaps and solutions.

What is community level data and why does it matter?
For the purposes of this paper, community level data is taken to refer to population data for a defined geographical area. In the Australian context this may be a city, a suburb, a region, a town, or a local government area (LGA). It is not used to refer to socio-cultural, ethnic or religious communities.

The international literature on collaboration in community services emphasises the importance of effective approaches to data collection, access and use to enable meaningful evaluation. Without these processes, the effectiveness of approaches cannot be attributed and relies on subjective reporting. At the community level, data reveals information relating to the demographic, health, education and wellbeing status of the population and is necessary to ensure effective and efficient planning and delivery of services suitable to need.

Key interview findings
Key findings and considerations emerging from the qualitative interviews include the following.

- There is broad commitment to the use of data to inform practice by CI initiatives, with a number of organisations working to embed effective data collection and usage in their work.

- Some CI organisations have well developed processes for the collection, access and use of data, whereas others are in the establishment phase. There is potential to promote the effective implementation of processes via sharing of learning between organisations.
• Definition is a key point of difference with most interviewees approaching the concept of “community level data” with different levels and nature of understanding. This lack of clarity is also seen in key terms such as outcome, indicator, measure, and framework.

• Increased information sharing about data availability and access between government and non-government organisations at local, state and Commonwealth levels will facilitate more efficient use of data to support and measure action.

Gaps
Based on the findings of both the literature review and the qualitative interviews, a number of gaps have emerged in relation to community level data and CI initiatives.

There is a gap in understanding and definition regarding what community level data is and how it can be used to plan, deliver and measure CI initiatives. To address this, there is a need for establishment and promotion of materials to provide clarity on the definitions and applications of key terms and concepts.

Despite the large volume of publicly available data in Australia, many initiatives have experienced difficulty identifying and accessing the data required to measure and report on the issues facing their communities. Development of guidelines and processes that would aid access to publicly held datasets along with enhancement of existing platforms may help to address these issues.

An issue around missing data was also identified by interviewees. Possible solutions include increased collaboration across jurisdictions at all levels to harmonise data collection and indicator development, establishment of partnerships between CI initiatives and agencies such as the ABS to develop collection strategies targeted to need, and increased awareness and access to unpublished datasets.

The limited evidence underpinning CI initiatives is a gap which will take time and investment to address. Necessary steps towards building the evidence base for CI include the ongoing measurement and evaluation of current initiatives, sharing of findings from evaluations, and undertaking of experimental research to establish evidence of benefit.
Introduction

Localised approaches to identifying and responding to community needs, pressures and priorities are a key strategy to drive alignment of system elements around shared goals and outcomes (Fox et al., 2015). With recent shifts towards more place-based initiatives in social services, understanding and use of community level data is of increasing importance (Centre for Community Child Health, 2012, p. 4). In order to measure the effectiveness of community initiatives, and to engage in ongoing cycles of continuous improvement, we need to know the impacts on outcomes, and this information can only be revealed through community level data.

In recent years, an increasing number of initiatives across Australia have adopted the Collective Impact (CI) approach to drive collaborative activity. Many community-based organisations are looking for ways to maximise their effectiveness and consolidate efforts in addressing local issues and concerns. CI provides a systematic approach to guide multi-organisational responses to complex social issues, however, the model is largely untested and there is very little empirical evidence for its effectiveness.

This report on the collection and use of community level data by CI initiatives in Australia provides a snapshot of current practices, describes identified barriers and enablers to effective practice, and offers recommendations to better support data use for improved child, family and community outcomes. The report draws on evidence from international initiatives to provide a background to the concepts of community level data and CI, and to identify key areas, which informed our interview questions.

Representatives from nine Australian CI initiatives were interviewed for this report. Drawing on the findings from these interviews, this report discusses key points relating to definition, measurement frameworks and data collection. It also outlines the identified barriers and enablers to the effective use of community level data in CI initiatives. The report concludes with a series of key findings to inform policy and practice.

A subsequent report will consider the question of “what works?” in CI initiatives. This report will describe the lessons learned to date by these organisations on successful governance and collaboration. It will also offer
further insight into outcomes measurement and the question of whether this approach is leading to measurable impacts for communities.

**Methodology**

**Desktop review**
A brief desktop review was conducted to capture the current evidence for the importance of measurement and evaluation in collaborative practice. The evidence underpinning CI was also reviewed, including examples of how data is used to inform the work of well-established initiatives.

The insights gained from the literature were then used to build the interview question guides for primary qualitative research with Australian initiatives. By analysing data guidelines and key reports a series of questions was developed that addressed the outlined areas of focus of this report.

A full list of interview questions is included at Appendix 2.

**Identifying organisations**
Most of the CI initiatives in Australia are in the early stages of development. In identifying potential organisations to study, the aim was to include an initiative from every state and territory and gather information from those organisations that were most established in their region.

A national spread and the inclusion of established organisations were the key criteria when identifying initiatives for interview. Although growing, the CI community is still relatively small. This made it possible to determine potential organisations through a combination of desktop research and snowballing.

By gathering a national snapshot of the use of community level data, the intention was to ensure a comprehensive analysis. Between states and territories there are differing barriers and enablers. By interviewing stakeholders from across the country it was possible to compare their experiences and determine potential gaps and solutions.

Contacting and engaging with established organisations allowed for a more in-depth look into all stages of the collection, management and use of community level data. Those organisations at the later stages of the process would be able to provide information on how data is used and collected.
both in the establishment and the maintenance of a CI initiative, therefore providing a richer data snapshot.

The selection of key representatives for interview was determined by researching each organisation’s governance as well as contacting the initiatives directly. Interviewees needed to be in a position of responsibility that required knowledge of governance, strategy, organisational history, funding and data collection, use and management. For the most part these were directors, chairs and coordinators. In some cases, they were accompanied by data analysis experts and key facilitators.

Once an organisation and key stakeholder was identified, they were contacted via email and informed of the scope of the report. If they were willing to participate, a telephone interview was arranged. The decision to conduct the research by telephone was due to time and funding constraints that precluded travel to conduct interviews in person. Once the interview was arranged, the interviewees were sent a consent form and a list of questions that would inform the semi-structured interview.

The consent form outlined how they had been identified as a potential interviewee, including personal recommendations where relevant. It also provided the time of the interview and noted that information collected would only be accessed by personnel working on the report and stored at the ARACY office. It also requested permission to make an audio recording of the interview, use direct quotations and allow for the interviewee’s name to be used in any publications resulting from the research. The interview only proceeded if the consent form was signed and returned.

Eleven organisations were contacted to participate in the research, but the key stakeholders for two were unable to take part in the interviews due to time constraints. Nine initiatives were therefore studied for the purpose of this report. A brief description of each organisation is included at Appendix 1.

**Interviews**

The interviews were semi-structured, with the questions being sent to the interviewees in advance. When carrying out interviews, as well as recording the conversation, notes were also made to enable clarification and mitigate potential technical difficulties.
The interview questions were divided into five parts: an outline of the interviewee’s role, background on the organisation, data collection, data use and general questions and comments regarding gaps and solutions. The questions were intended to prompt interviewees to share information that would form a rich picture of the history, scope and activities of the organisations. They were also structured in such a way as to enable open-ended discussion. In this way the interviewees would not feel constrained by questions and would therefore be more likely to provide useful information beyond the preliminary scoping of the topic.

The semi-structured interview approach ensures that the discussion is relevant and that all points are covered in the time available, but allows for the voice of the interviewee to take precedence. This ensures that the questions asked are less likely to impact on the inferences and recommendations made by the researcher, encouraging a greater focus on the information provided by the interviewees.

**Process of analysis**

While carrying out the interviews, notes were made that formed the initial basis of the analysis. The interviews were then thematically transcribed in line with the interview questions. Key quotes were written down, while key concepts were summarised. By transcribing the interview into the questions it was easier to extract information when analysing the data.

The information from the thematically transcribed interviews was then analysed and broken up into key areas of focus: definitions of community level data, organisational history, measurement frameworks, measurement tools, what tools are working, and how short, intermediate and long term outcomes are measured. By collating the information in this way it was possible to identify similarities, gaps and potential solutions.
Community level data

In simple terms, community level data is population data for a defined geographic area. In the Australian context this may be a city, a suburb, a region, a town, or a local government area (LGA). Community level data can be collected by a range of organisations and individuals, including federal, state and local government, service providers, public and private facilities, businesses, educational institutions and researchers. Similarly, the method of data collection varies and includes administrative collection, clinical notes, surveys, telephone calls and in-person interviews.

As noted in the Introduction, there has been a shift in recent years towards place-based or localised approaches to provision of social services. In this context, the understanding and use of community level data is of increasing importance (Centre for Community Child Health, 2012, p. 4). In order to measure the effectiveness of community initiatives, and to engage in ongoing cycles of continuous improvement, community level data is needed.

In Australia there is a tension between the emerging need and market for data at the community level, and a lack of technical expertise and resourcing for its access and analysis (Productivity Commision, 2016). There is a vast and ever expanding volume of data collected in Australia, with digital capture and storage enabling rapid generation, however the mechanisms with which to mine it effectively are not keeping pace (Productivity Commision, 2016).

The potential for data to inform more effective and targeted service provision is well recognised, and a number of initiatives are underway both by government and non-government providers to support this (Productivity Commision, 2016, p. 7). This data may be drawn from health providers, social services, education, planning and a number of other sectors, as well as from purposeful collection, including the census and other national surveys such as Measures of Australia’s Progress (MAP) or the General Social Survey (GSS) (Australian Bureau of Statistics, 2014, 2015).

At the federal level, significant datasets are held by the Australian Bureau of Statistics (ABS), the Australian Institute of Health and Welfare (AIHW), and the Department of Social Services Data Exchange and there is public access to this data. State and local governments also have a range of resources freely available, including for example, SA NT Datalink, the South Australian
Monitoring and Surveillance System (SAMSS), and the Victorian Child and Adolescent Monitoring System (VCAMS).

The importance of sharing data is highlighted in the Productivity Commission’s Draft Report on the inquiry into data availability and use (Productivity Commission, 2016). The report outlines that, “[increased] access to data can facilitate the development of ground-breaking new products and services that fundamentally transform everyday life . . . better access to and use of data can also benefit businesses and government through improved operational processes and productivity” (Productivity Commission, 2016, p. 4).

The report goes on to suggest the potential value of this high volume of data may not be realised due to a number of factors including a risk aversive approach to data-sharing and linkage (Productivity Commission, 2016, p. 4). The Commission report notes, a major barrier to data sharing is due to the “separation of data holdings across three levels of government and across different agencies within each of these jurisdictions, and the distrust that inhibits sharing of this data for linkage purposes” (Productivity Commission, 2016, p. 7).

One of the recommendations of the Commission’s inquiry is the establishment of a process for nomination and delegation of certain public and private datasets as “National Interest Datasets (NIDs)” (Recommendation 9.4) (Productivity Commission, 2016). This could be of great benefit to increase accessibility to a number of important sources of data. However the extent to which such datasets could be disaggregated to the community level, and the ease of such a process, are yet to be seen.

Another Australian Government initiative, data.gov.au, is a dedicated website providing access to a range of public datasets from all levels of government. The Productivity Commission’s draft recommendations also call for all Australian Government agencies to create “comprehensive, easy to access data registers . . . and publish these registers on data.gov.au” (Draft Recommendation 3.1) (Productivity Commission, 2016). Further, the Commission recommends all states and territories should create “an equivalent model where one does not exist” that should be linked to data.gov.au (Productivity Commission, 2016).

In addition to data sharing, there are also a number of initiatives that provide some disaggregation and analysis of data and reporting against indicators,
such as Community Indicators Victoria (CIV, ceased 31 December 2016), Community Indicators Queensland (CIQ), and the City of Sydney Community Wellbeing Indicators. These reflect the trend towards place-based initiatives, wherein jurisdictions and localities are taking the initiative to set up frameworks to track services and wellbeing.

**What is the role of community level data**

Community level data serves a number of roles in service provision. Data about a community are needed to: establish and identify the current status of the community against a range of indicators; inform the aims of activities of service providers and other community agencies; set targets for measuring trends against outcomes, and; assess the effectiveness of interventions and approaches (Wood, 2016). This enables locally focused services to undertake meaningful benchmarking in comparison to state or territory and national datasets, as well as measurement of trends within the community itself (Cox, Frere, West, & Wiseman, 2010).

Community level data is central to community indicator development and monitoring, which is in turn a necessary element of effective measurement and evaluation. Cox et al. (2010), describe community wellbeing indicators as “statistical tools for translating broad community goals into clear, tangible and commonly understood outcomes and for assessing and communicating progress in achieving these goals” (p. 72). In order to know how a community is faring, indicators are necessary to record and report progress. This use of data can assist in shifting focus from inputs and outputs to trends and outcomes (Cox et al., 2010).

In the early stages of planning for community service delivery, data play an important role in identification of key issues and needs in the community (Hanleybrown, Kania & Kramer, 2012). The use of community level data in the early stages of collaborative initiatives can be very valuable to inform indicator development to ensure that what is being done is linked to what is being measured (Cox et al., 2010). Where relevant datasets are not available, this can be identified early in the process and steps taken to establish collection of the necessary information. When the target outcomes of an initiative are aligned with demonstrated community needs, there is likely to be more effective linkage with community members, as well as willingness to provide data they recognise as relevant to their lives (Cox et al., 2010).
As noted by Danielle M. Wood (2016) from the University of Notre Dame, the role of data in initiative development is key. Through two case study analyses of influential CI initiatives in Quincy, Illinois and Jacksonville, Florida, Wood suggests that these initiatives succeeded in large part due to their use of data to ensure the indicators they targeted were in key areas where intervention was most likely to have clear impacts to improve outcomes in their community (Wood, 2016).

A powerful example is given in the Florida case, where community level data revealed that Jacksonville had one of the highest rates of infant mortality in Florida, which in turn had one of the highest rates among US states, with the US rate higher than most industrialised countries (Wood, 2016). As Wood notes, “taking collective action . . . would not have happened without the numbers first . . . in Jacksonville, ‘virtually no one had ever heard of infant mortality as a problem’ (Jacksonville Interview)” (Wood, 2016, p. 205). It was only through attention to the trends revealed in community level data that this initiative was able to target their work towards an area where substantial progress was necessary, and where their efforts led to significant improvements in outcomes (Wood, 2016).

Once initiatives are underway, data continues to play a key role in assessing and measuring progress. Collection, tracking and reporting of progress data at the level of the community allows initiatives to see if their efforts are having impact on targeted outcomes (Flood, Minkler, Hennessey Lavery, Estrada, & Falbe, 2015). This will also build the evidence base for the effectiveness of the collaborative approach. The effects of community on wellbeing are difficult to measure empirically, as evidenced by research studies, such as the Kids in Communities Study (KiCS). This cross-disciplinary research collaboration is working to understand how different factors in communities—physical environment, social environment, socio-economic factors, access to services, and governance—influence the way that children develop (Centre for Community Child Health, nd). The researchers have noted the difficulty that exists in attempting to separate the effect of neighbourhood from the effects of family (Goldfeld et al., 2015). Similarly, in assessing outcomes in community based initiatives, the attribution of causality is complex and difficult. This underscores the value of explicitly linking the indicators
measured against target outcomes, and recognising the interconnection between various inputs and effects.

**Collective Impact**

Collective Impact (CI) is a relatively new approach to collaboration that has become a popular model for initiatives in Australia and overseas. The CI approach was first published in 2011 by John Kania and Mark Kramer, who described it as broad cross-sector coordination to solve large-scale social problems (Kania & Kramer, 2011). The approach requires five key conditions; a common agenda, shared measurement, mutually reinforcing activities, continuous communication and backbone support (Kania & Kramer, 2011). Detailed arguments for why and how to leverage these conditions to effect social change are outlined in a series of articles published by Kania, Kramer and their colleague Faye Hanleybrown (Hanleybrown et al., 2012; Kania, Hanleybrown, & Juster, 2014; Kania & Kramer, 2011, 2013, 2015).

According to detractors the five conditions do not allow for a focus on community agency and involvement. In particular, Tom Wolff (Wolff, 2016) suggests that it is a top-down model that does not focus on policy and system change and, most importantly, is not evidence-based. In one of their more recent publications, however, Kania and Kramer (2015) addressed the issue of agency by emphasising that those people who are affected by the work being done by CI initiatives should be involved at every stage of the process.

This continuous and communicative development of what makes up CI is an important part of the process. Cabaj and Weaver (2016) have argued for a need to further evolve the five conditions to better incorporate an equity and community agency focus. Their ‘Collective Impact 3.0’ calls for a move from a management focus to a “movement building paradigm” that emphasises systemic change through the incorporation of a more diverse set of stakeholders (Cabaj & Weaver, 2016). Through this process in which the community is at the centre of, and has power over, change they call for CI to amend its five key conditions:

1. Shared aspiration instead of common agenda: a ‘big tent’ that allows for diverse stakeholders to “pursue the interdependent challenges underlying tough issues” from their differing perspectives.
2. Strategic learning that incorporates shared measurement: data is used to inform ongoing, rapid feedback loops that make up a ‘robust learning and evaluation process’ that allows for evolution of system and strategies.

3. High leverage activities instead of mutually reinforcing activities: community partners don’t just co-operate in the delivery of programs but also compete with differing approaches to the problem. This recognises that different perspectives on the same aspiration can result in greater penetration and community engagement.

4. From continuous communication to authentic community engagement: focusing on a bottom-up process of change-making and engagement that involves “those most affected by complex issues”. This is done by ensuring community members take part in each stage of the process and must be a thought-out and diplomatic process.

5. A container for change instead of backbone support: creating an environment that encourages trust, empathy, sharing, and systemic and cultural change (Cabaj & Weaver, 2016).

In practice, CI has evolved beyond its original, somewhat simple and top-down, framework. For many initiatives it now involves more community input and ownership with an emphasis on continued evolution and strategic learning. This community-focused, evolutionary approach is carried out by a number of organisations. Local residents are part of working groups, community meetings are used to inform data analysis, there is a desire to incorporate rapid feedback loops and interviewees have spoken about their desire to ‘create a movement’. Two organisations in particular outlined that they wanted their backbone organisations to create environments for systemic change, where they will be able to pull out in a number of years yet still ensure sustainability of impact.

The CI model has quickly become very popular, in part due to high level endorsement, such as by former President of the United States, Barack Obama, and in part due to the appeal of its comparably structured and strategic approach (Karp & Lundy-Wagner, 2016).

The evidence for the effectiveness of the CI approach, however, remains unproven. Independent analysis of the CI approach to date has been limited, although some researchers have recently published papers considering the
approach in more scholarly terms. Flood et al. (2015) undertook a case study in San Francisco in order to analyse the benefits and limitations of CI. They found some advantages to adoption of the CI model, especially as regards its emphasis on a common agenda and continuous communication. However, they emphasised that, although CI appears to have utility as a conceptual framework, it requires further testing in order to establish its benefits (Flood et al., 2015).

A recent edition of *Community Development* (Volume 47, Issue 2) was dedicated to considerations of CI, with articles selected to illustrate how the CI framework has been applied to community development (Walzer, Weaver, & McGuire, 2016). The evidence presented through this issue was limited to observation and case studies with no experimental or quasi-experimental research featured. This makes attribution of causal effects difficult, as we can only reliably report correlations between CI initiatives and community outcomes. Further experimental research is needed to empirically demonstrate the effectiveness of the CI approach, however, there is a larger volume of evidence to support the effectiveness of specific interventions and efforts conducted by CI initiatives.

**International case studies**

Two well-established initiatives in the United States that are following a CI framework and leveraging community level data at an established level are the Promise Neighborhoods Institute (PNI) and StriveTogether. Both began as local community programs before expanding to become national initiatives. The stages of their respective pathways for achieving change map similarly with each other and both have an emphasis on using data to track and inform results, as is shown in Table 1.

Promise Neighborhoods is a government driven national expansion of Harlem Children’s Zone (HCZ), an initiative started in 1997 to improve the educational, social and career outcomes of children in central Harlem. Whilst the individual community programs that make up HCZ have shown to be effective in addressing key indicators such as childhood asthma (Spielman et al., 2006) or standardised mathematics test scores (Dobbie & Fryer, 2011), a clear link has not yet been established between the overarching CI approach and improved overall outcomes. This is largely due to the complexity of the issues targeted by the initiative, and the time frames over which HCZ is aiming to enact change.
Danielle Hanson (2013) of the Heritage Foundation, outlines that success in improving school attendance and standardised test scores may demonstrate the benefit of the HCZ. However, she notes, in order to evaluate HCZ fully “analysts would need to measure the cumulative social impact of the organization on the Harlem community, not just the specific results of the Zone schools. While academic success is an important factor in rebuilding a community, it is just one piece in the overall puzzle, not the puzzle itself” (Hanson, 2013, p. 4). Unpicking this complexity has not yet occurred in relation to HCZ, PNI or StriveTogether. In relation to the issue of time frames PNI, in a report outlining key considerations for future program evaluations, highlighted that, “it may take years to see [physical and social environmental] changes because transformation depends on a number of factors, including: the scale at which the initiative operates, the effectiveness and focus of outreach, and the maturity of the organizations involved … It may be difficult to observe positive outcomes within the first few years of the initiative or during the duration of an evaluation performed too soon” (Jean-Louis, McAfee, & Miller, 2014, p. 4). Indeed, in their presentation of potential timeframes, PNI suggest that some indicators such as educational outcome or familial affect may not be assessable for up to fifteen years (Jean-Louis et al., 2014).

There are a number of similarities between the ways PNI and StriveTogether incorporate the use of data into their established processes. Significantly, data is used at particular points for particular purposes – to determine outcomes, to ensure accountability, to identify key areas of need and to drive ongoing feedback and change. PNI have an additional element to their process, which involves identifying and developing software systems to store, collate and analyse data (Promise Neighborhoods Institute, 2014). They do this by providing guidelines not only for data use, but also for choosing an adequate data system. PNI’s criteria for an effective system include security, accessibility, usability and relevance as well as functionality that supports accountability, program improvement, ad-hoc reporting, flexibility of use, data integration and mobile use (Promise Neighborhoods Institute, 2014).

PNI’s Five Developmental Stages in the Cradle-to-Career Pipeline (PolicyLink, 2014), along with their guidelines for choosing a data system were used by ARACY to inform the questions asked in interviews for this paper. These are presented in Table 1. Key actions that PNI suggested should be taken at each
stage were asked about in the interview. For example, whether needs assessments were conducted, how and how often performance data is collected, and whether disaggregated data is shared by partners. In this way, it was possible to assess the extent to which Australian CI organisations are aligning their collection, use and management of data with established processes. These findings could then be used to identify barriers faced by Australian initiatives, as well as isolate potential solutions to these barriers.
### Table 1: Comparison of process establishment by Promise Neighborhoods Institute and Strive Together

<table>
<thead>
<tr>
<th>Promise Neighborhoods Institute (PolicyLink, 2014)</th>
<th>Strive Together (KnowledgeWorks, 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Planning</strong></td>
<td><strong>Exploring</strong></td>
</tr>
<tr>
<td>• Needs assessment</td>
<td>• Selection of community level outcomes and core indicators</td>
</tr>
<tr>
<td>• Segmentation analysis</td>
<td></td>
</tr>
<tr>
<td>• Development or purchasing of a data system</td>
<td></td>
</tr>
<tr>
<td>• Data plan created that follows a results-driven approach</td>
<td></td>
</tr>
<tr>
<td><strong>Early Implementation</strong></td>
<td><strong>Emerging</strong></td>
</tr>
<tr>
<td>• Collection and collating of population and performance data</td>
<td>• Collection and disaggregation of baseline data for core indicators, divided into key sub-populations</td>
</tr>
<tr>
<td>• Use of performance data to create an improvement-focused feedback loop</td>
<td>• Baseline report card publicly released</td>
</tr>
<tr>
<td><strong>Full Implementation</strong></td>
<td><strong>Sustaining</strong></td>
</tr>
<tr>
<td>• At least 50% of children and families connected to services and experiencing improved results</td>
<td>• Release of annual public report card</td>
</tr>
<tr>
<td>• Collecting and sharing of longitudinal data</td>
<td>• Continual refinement of indicators</td>
</tr>
<tr>
<td>• Use individual case data to improve solutions</td>
<td>• Continuous feedback loop through ongoing collection and connection of data</td>
</tr>
<tr>
<td>• Use of disaggregated data by partners to create an improvement-focused feedback loop</td>
<td></td>
</tr>
<tr>
<td><strong>Reaching Scale</strong></td>
<td><strong>Systems Change</strong></td>
</tr>
<tr>
<td>• At least 65% of children and families connected to services and experiencing improved results</td>
<td>• Data accessible by partners</td>
</tr>
<tr>
<td>• Increase in ‘quality and completeness’ of longitudinal data</td>
<td>• Use variety of data to create an outcomes-focused feedback loop</td>
</tr>
<tr>
<td>• Continued and routine use of individual and disaggregated to improve solutions and measure performance</td>
<td>• Funding and policy is focused on ‘data-driven practices’</td>
</tr>
<tr>
<td>• Data used to justify funding and policy changes and maintain an improvement-focused feedback loop</td>
<td></td>
</tr>
</tbody>
</table>
### Sustaining Results
- Complete and high quality longitudinal data collected and used
- Regular updating of needs assessment and segmentation analysis
- Individual and disaggregated performance and population data used regularly by partners to maintain an improvement-focused feedback loop

### Proof Point
- 60% of indicators in the community level outcomes are maintained or improved
Qualitative research findings

Interviews
Nine interviews were conducted with representatives from the following organisations:

- Communities for Children (Tasmania)
- Connecting Community for Kids (Western Australia)
- Go Goldfields (Victoria)
- Grow Well Live Well, City of Palmerston (Northern Territory)
- The Hive, Mount Druitt (New South Wales)
- Logan Together (Queensland)
- Maranguka (New South Wales)
- Together SA (South Australia)
- West Belconnen Local Service Network (ACT)

The interviews lasted between 45 and 90 minutes, with the longer interviews usually being conducted with more than one stakeholder from the organisation at once. Whilst the intention was to work with well-established organisations, time constraints and the lack of well-established initiatives in Australia resulted in some of the organisations being at the beginning of the data collection and management process. This, however, provides an insight into the barriers at all stages of the data engagement process and has highlighted that many of the issues are relevant regardless of stage.

Issues of definition
Throughout the literature, as well as the primary research, there was limited consensus on the definition of key terms and concepts. ‘Community level data’ was not a term used by the key Collective Impact initiatives, despite their focus on using local data to improve community outcomes. Furthermore, throughout the interviews, it emerged that there is no clear agreement on key terms used in relation to the collection, use and management of data, with many terms such as indicators, outcomes, targets and measures being used interchangeably in interviews.

Community Level Data
Looking to perceptions of ‘community level data’, a number of perspectives were identified. Indeed, some interviewees outlined that there is a discrepancy amongst people working within individual initiatives themselves. Different ways of interpreting
the concept described by interviewees are presented in Table 2. Various examples of data that they saw as community level included, but are not limited to, percentage of the community with mental health issues, numbers of children referred to child protection every month in a community, or rates of pre-term birth within a particular geographical area.

Table 2: Interviewee descriptions of community level data

**Interviewee A:**

- “Data that is supplied by the local community” that “could take many forms”, including stories, community perceptions, or local business and service organisations’ data on clients.

- “The data supplied by the community that has been collated but hasn’t yet been refined by any process of analysis”.

**Interviewee B:**

- Population level data

- “If I’m talking about children and young people in [a particular area]...Any data that’s to do with children in that region”.

**Interviewee C:**

- “It’s specific, not generic. It’s targeted, has a focus”

- It’s quantitative

- It identifies if and what changes there are after an initiative

- It is targeted and not population level. Population level is baseline data that “gives you a feel”; it results in assumptions and doesn’t “show the blockages”. Community level data “drills right down” and has the potential to be identified or turned into a longitudinal study.

**Interviewee D:**

- Everything is shared with the community and used to inform the work.

**Interviewee E:**

- It is either data that is held by bureaucracy or collected directly from community members, is less than twelve months old and is focused on outcomes instead of outputs or throughputs.
“Data that corresponds to the geographic scope of the initiative”.

**Interviewee G:**

- “Data that describes the situation of a community” or “data that the community provides...[it] should perhaps be data that is meaningful to a community and useful in stimulating positive change within a community”
- “It can provide a community level baseline and be used to measure change at the community level which cannot be achieved using population-level data”
- “[It is] finer grained and can determine effectiveness of sub elements of initiatives and allow better targeting of resources”
- “It is also easier to identify connections between factors using community level data”
- There is an issue of nuance with relation to community level data, as ‘community’ “may be geographical/social/virtual/ideological/ethnic/diaspora or a combination of one or more of these”.

There are a number of crossovers evident in these definitions and elaborations. These include the understanding that community level data measure change and are provided by the community, are accessible by and inform work done in the community, allow for a better understanding of community mechanisms, and refer to the region in which the initiative is working.

However, there are some significant points of difference. In particular, the confusion between whether or not it is used to provide a baseline (interviewee C and interviewee G), its relationship with population level data (interviewee B, interviewee C and interviewee G) and whether it can be both quantitative and qualitative (interviewee A and interviewee C). There are also definitions and elaborations that do not have a crossover or point of difference with any other statements. These include the idea that community level data is data that has not yet been analysed, that it has the potential to be identified or turned into a longitudinal study, it is less than twelve months old, it is outcomes focused and it may not necessarily refer to a location-based community.

It is notable that there is a lack of consistent understanding around whether community level data is different from population level data, what form it can take and whether or not it is used to develop baselines. This has the potential to lead to significantly different ways in which data is collected, managed and used. This difference will then act as a barrier to collaboration and communication between
initiatives, resulting in government-provided data being used and interpreted in different ways across organisations. As a result, there is less ability to consistently assess initiatives.

Measurement

Measurement tools

The PNI guidelines outline that a CI initiative should purchase or develop a data management system (Promise Neighborhoods Institute, 2014). This system must be secure, accessible, usable, relevant, support accountability, influence program improvement, allow for ad-hoc reporting, be flexible and support data integration and mobile use. Making use of web-based technologies allows for universal reporting systems and increased efficiency (Kania & Kramer, 2011).

In Australia, the Collective Impact initiatives studied use a range of software to collate, analyse and present data, as shown in Table 3. The extent to which the initiatives integrated different software and systems depended on whether there was a data analyst on staff. This, along with the ability to afford multiple data systems was not possible for many initiatives due to a lack of capital. The extent to which the data is manually manipulated depends on the type of data, the purpose of its use, how it is to be presented and the initiative itself. Much of the manual manipulation is done ad hoc if it is required for presentation in, for example, monthly reports, community presentations, or group meetings.

Table 3: Software and systems used by participating organisations

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Software and systems used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communities for Children (TAS)</td>
<td>• Microsoft Excel&lt;br&gt;• Department of Social Services Data Exchange&lt;br&gt;• SCORE (part of DSS Data Exchange)&lt;br&gt;• Clear Impact Scorecard</td>
</tr>
<tr>
<td>Connecting Community for Kids (WA)</td>
<td>• Monthly reports (in the form of commentary) stored on Child Australia Mainframe</td>
</tr>
<tr>
<td>Go Goldfields (VIC)</td>
<td>• Microsoft Power BI&lt;br&gt;• Potential to use Collaborator (being developed by Murdoch Children’s Research Institute&lt;br&gt;• Dropbox to be used for storage</td>
</tr>
<tr>
<td>Grow Well Live Well (NT)</td>
<td>• NVivo for qualitative data analysis</td>
</tr>
<tr>
<td>The Hive (NSW)</td>
<td>• N/A</td>
</tr>
</tbody>
</table>
The most common basic software is Microsoft Excel, which is used by many of the organisations to store and handle raw data. Those interviewed cited the ease with which it can be used. For those with data analysts on staff, the usability of Microsoft Excel was increased to include the ability to index data and develop a data dictionary and the potential to pull data and input it into other software. Furthermore, for initiatives that do not receive enough funding to develop a custom database, Excel provides a low-cost alternative.

In relation to data collection, Maranguka is carrying out community-based surveys using LimeSurvey. This is an online survey tool that allows for analysis with SPSS. For much of the other data, both in Maranguka and other initiatives, information is imported or manually transcribed into Excel once it is collected from either primary or secondary sources.

In the case of Communities of Children, one potential source of this data is the Department of Social Services Data Exchange. They are not yet using this portal for the purposes of creating community data profiles however, as community partners are not able to share their data with one another. This lack of functionality for initiatives that involve multiple organisations has been identified as a significant barrier by this particular initiative. It was suggested by the interviewee, however, that this was simply a glitch that was being addressed and they hope to use it soon for this purpose.

Many initiatives cannot afford dedicated data analysis software. Out of the nine interviewed, two use SPSS, one uses Microsoft Power BI and one uses NVivo for analysis of qualitative data. However, there are a number who are using, or plan on using, software for the development of a data dashboard.

The software being used to create these dashboards are SCORE (part of the DSS Data Exchange), the Clear Impact Scorecard and the Nest Scorecard. One organisation, Go
Goldfields, is currently using Microsoft Power BI but will potentially move to a custom platform being developed by the Murdoch Children’s Research Institute specifically for government initiatives. Five of the initiatives are currently not using software packages to create data dashboards, but two are in the consultation stage of choosing one.

**Measurement frameworks**

A key element of forming a Collective Impact Initiative is the development of a shared measurement framework (Kania & Kramer, 2011). This works to ensure and maintain the common agendas, enables accountability and supports mutual learning and feedback (Kania & Kramer, 2011). Cabaj and Weaver (2016) suggest these systems should focus on a few select and manageable measures, provide real-time feedback on outcomes, have clear and robust processes, and have the ability to evolve alongside program strategies.

Each Initiative studied is at a different stage of development and use of their measurement framework. The processes by which they developed, or are developing, their frameworks are also different.

**Table 4: Participating organisation measurement frameworks**

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Stage of framework development</th>
<th>Framework development process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communities for Children (TAS)</strong></td>
<td>Established framework, building partnerships and data collection system.</td>
<td>Research and consultation – identifying key domains outlined by residents. Then aligned with <em>The Nest</em> action agenda (Australian Research Alliance for Children and Youth, 2014). Results Based Accountability (RBA).</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Grow Well Live Well (NT)</td>
<td>Baseline report using framework published August 2016 (Grow Well Live Well, 2016). Action plan in development.</td>
<td><em>The Nest</em> action agenda (ARACY, 2014), overlaid with the Ecological Model (Bronfenbrenner, 1979). Indicators developed through collection combination of community data collection and feedback and input from interested community members. These are placed under Nest domains.</td>
</tr>
<tr>
<td>The Hive (NSW)</td>
<td>Indicators being developed by Centre for Social Impact. Will then be narrowed down by Hive leadership group.</td>
<td>Opportunity Child Shared Outcomes Framework (Opportunity Child, 2016), the Hive five year strategy and available data sets. Working with a three-level impact map based on systems, postcodes and suburbs.</td>
</tr>
<tr>
<td>Logan Together (QLD)</td>
<td>Established initial framework and have begun program implementation.</td>
<td>Community consultation and research. RBA and Program Logic.</td>
</tr>
<tr>
<td>Maranguka (NSW)</td>
<td>Using framework to track and report progress. Been in this stage for 4-5 months.</td>
<td>Community-identified targets and strategy informed by life-course snapshot developed using government data. Indicators set by Just Reinvest NSW using a feedback process with the community.</td>
</tr>
<tr>
<td>Framework being further adapted by Social Ventures Australia.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Together SA (SA)</th>
<th>Established framework.</th>
<th>RBA</th>
</tr>
</thead>
</table>

|---|---|---|

### Developing measurement frameworks: what’s working

The most commonly used foundations to develop a measurement framework were RBA, The Nest action agenda and the Opportunity Child Shared Outcomes Framework, which can be accessed by member organisations. These were often used together, and in conjunction with community consultation and reference to government data sets.

*Results Based Accountability*

Results Based Accountability is a data-driven decision making process that emphasises building performance measurement frameworks around desired outcomes. Interviewees identified RBA as effective because it makes it easier to ensure initiatives and decisions have an evidence base. One interviewee suggested that a shared system for understanding evidence and impact, “help[s] us understand
better what we are doing and it helps workers suffer from less burnout because they actually get why they’re doing what they’re doing”.

Results Based Accountability is outcomes-focused and helps communities identify and take the actions necessary to achieve those outcomes. This is one of the key drivers behind Maranguka’s measurement framework. Furthermore, other organisations also indicate an outcomes-focus. Go Goldfields, for example, ran conversations with community members in 2015 when developing indicators asking them, “if we got this right, what would you be seeing in the community...and how would we get there”. The answers provided and the indicators developed from these conversations were outcomes-focused. These include, for example, parents reporting a positive change in talking, rhyming, reading and playing with children or a reported increase in the number of opportunities for formal and informal social connection to develop amongst community members (Central Victorian Primary Care Partnership, 2015).

_The Nest Action Agenda and Opportunity Child Shared Outcome Framework_

Four of the nine initiatives are referring, or referred to _The Nest_ action agenda (Australian Research Alliance for Children and Youth, 2014) in the development of their measurement frameworks while two use the Opportunity Child Shared Outcomes Framework (Opportunity Child, 2016). Both have distinct similarities, as the Opportunity Child framework addresses the six outcome domains of _The Nest_ (Opportunity Child, 2016). Six of the organisations therefore have, or are developing, their measurement systems with similar points of reference. This similarity in performance and outcomes measurement may provide a potential enabler in the sharing of information and the continuation of strategic learning on the part of the initiatives, and Collective Impact in Australia as a whole. The outcome domains of _The Nest_ are illustrated in Appendix 3.

_Community consultation_

When developing their measurement frameworks, many of the initiatives drew heavily on the views and suggestions of community members. Indeed, all the organisations include community members in their working groups. Communities for Children, for example, developed their key domains in collaboration with the community. They first created a snapshot of the community from national and state-based data sources, which was turned into the _The State of Launceston’s Children 2014_ (Launceston Child Friendly City & Anglicare Tasmania, 2014). After this snapshot they identified some key areas that they then spoke about with parents and children through a community consultation in late 2014 through to mid 2015. Through these
consultations and stories, alongside further detailed unpacking with key community members, they developed their framework. Towards the end of this process, they discovered their framework aligned closely with *The Nest* and therefore began using it as a foundation.

A further example of drawing on community capacity to build a measurement framework was the work done by Maranguka. This initiative has a grassroots origin and structure, meaning the direction of the organisation and the use and collection of data is driven by the community. The Bourke Tribal Council identified the key domains on which the initiative should focus. These then formed the basis of the measurement framework, with the sub-domains and indicators developed by Just Reinvest NSW. These were then taken back to the community and further developed through cycles of feedback and revision, led by the community. In this way, the measurement framework was a product of collaboration between the Collective Impact backbone organisation and the community, led by the community itself.

*Consultation with children, young people and families*

Furthermore, some of the organisations have worked to include the views of young people and children when developing their measurement frameworks. Maranguka, for example, carried out focus groups with young people in high schools, utilising the most significant change approach, along with art, to help them draw out their life course. These two sets – the outcome of the most significant change interviews and the drawings – were thematically analysed and used alongside government and non-government data as well as thematically analysed community conversations to inform a large community meeting in which goals and strategies were set. These goals and strategies then informed the measurement framework.

Out of these youth focus groups, Maranguka helped establish a Youth Council. This is a group of young people from diverse backgrounds put forward by the community and their families. They are being supported to build their capacity to look at data and use it to inform their priority setting. These priorities will then be used to inform program areas of focus and develop a context for data collected from secondary sources.

Looking at the inclusion of the views of younger children, some organisations have used tools to engage young children. Connecting Community for Kids, for example, are focusing the majority of their primary data collection on children and families. They target venues and activities at least once a fortnight that are frequented by families and children, and run surveys in schools here they have permission. These
interactive surveys, aimed at children up to four years old, involve buckets, each of which have a picture on them. The child is given a bean bag and asked to identify, for example, where they most feel safe or what makes them healthy. They then place the bean bag (or bags) in the bucket with the picture they perceive as the answer. For example they may identify home as the place they feel safest, and exercise as the thing that keeps them healthy. These answers are used to look for anomalies that might indicate an area to investigate more closely, for example communities where the only safe place identified by children is school.

Other techniques used by organisations include the Speak Up Challenge run by Communities for Children, in which primary schools in Launceston Tamar Valley competed to have the largest proportion of their students submit an outline of what they liked most about their area and what would improve it. This challenge, run in 2015 highlighted potential areas of focus to include in the measurement framework.

In the development of their framework and roadmap, Logan Together used a ‘stick wall’ process. This involved putting up a big piece of fabric with adhesive stuck to it, onto which children and families stuck pieces of paper in whatever shape they wished and including any images or text they wanted. Flexible, open ended discussions then took place around the wall, while the wall itself provided a visual outline of what young people in the community wanted the initiative to focus on.

Outcomes measurement

All the organisations studied make use, or intend to make use, of a range of data sources to set targets and measure outcomes. The intention is to use national data to develop targets and set baselines, while community level data is used to measure outcomes. The majority of data is collected from secondary data sources. Throughout the interviews it became clear that there were significant gaps in data as a result of a variety of barriers and that primary data collection on the part of initiatives would go some way towards addressing those gaps. Whilst most interviewees expressed an interest in gathering primary level data for that reason, a number outlined that it was not possible to do so to the required level with the available human and economic resources.

Frequency and sources of data collection

The interviewees were asked about the sources of their data and how often they measured their outcomes. Table 5 is not comprehensive, as the range of data sources used by many of the initiatives is so broad that the interviewees were not able to list
them all. Indeed, one interviewee stated that their sources are, “any publically available data we can get our hands on”. Table 5 does, however, provide a guide as to the types of sources that are used by each initiative.
### Table 5: Frequency and sources of data collection

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Frequency of outcome measurement</th>
<th>Data collected</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communities for Children (TAS)</strong></td>
<td>• <em>State of Launceston’s Children Report</em> – every four years&lt;br&gt;• Clear Impact Scorecard – monthly</td>
<td><strong>Primary data</strong>&lt;br&gt;• Community surveys&lt;br&gt;&lt;br&gt;<strong>Secondary data</strong>&lt;br&gt;<strong>Government data sources:</strong>&lt;br&gt;<strong>Federal:</strong>&lt;br&gt;• Australian Bureau of Statistics Regional Profiles&lt;br&gt;• Socio-Economic Indexes for Areas (SEIFA)&lt;br&gt;• Australian Early Development Census (AEDC, formerly AEDI)&lt;br&gt;• <em>Mapping of children and youth indicator reporting frameworks</em> (AIHW, 2014)&lt;br&gt;&lt;br&gt;<strong>State:</strong>&lt;br&gt;• Kids Come First 2012&lt;br&gt;• Tasmania Police</td>
</tr>
<tr>
<td><strong>Connecting Community for Kids (WA)</strong></td>
<td>• Monthly report to the Joint Leadership Team&lt;br&gt;• 6 monthly report for longer projects without a monthly shift&lt;br&gt;• 6 monthly report to Woodside&lt;br&gt;• Some frequencies are even longer because of government department data collection cycles e.g school attendance</td>
<td><strong>Primary data</strong>&lt;br&gt;• Surveys: children’s surveys, topic-based surveys&lt;br&gt;• Community conversation packs&lt;br&gt;• Will soon collect data from pilot 100 days initiative targeting 3 year old health checks&lt;br&gt;&lt;br&gt;<strong>Secondary data</strong>&lt;br&gt;<strong>Government data sources:</strong>&lt;br&gt;<strong>Federal:</strong>&lt;br&gt;• Department of Health&lt;br&gt;• AEDC&lt;br&gt;&lt;br&gt;<strong>State:</strong>&lt;br&gt;• Disability Services Commission&lt;br&gt;• Department for Child Protection</td>
</tr>
</tbody>
</table>
Local:
- City of Cockburn
- City of Kwinana

Non-government data sources:
- Ngala
- Smith Family

<table>
<thead>
<tr>
<th>Go Goldfields (VIC)</th>
<th>Primary data</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Total collation of data in 2009 and annually from 2013.</td>
<td>- Surveys</td>
</tr>
<tr>
<td>- 90 day cycle collection of key indicators</td>
<td>- Focus groups</td>
</tr>
</tbody>
</table>

Secondary data
Government data sources:

Federal:
- AEDC

State:
- Victorian Child and Adolescent Monitoring System (VCAMS) (Victoria Department of Education and Training, 2016)
- Individual agencies and government departments that do not provide data to VCAMS
- VicHealth Indicators Survey
- Victoria Police

Non-government data sources:
- Resilience Survey
<table>
<thead>
<tr>
<th>Initiative</th>
<th>Status</th>
<th>Primary data</th>
<th>Secondary data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grow Well Live Well (NT)</td>
<td>Not stable or established as they are waiting on funding</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Primary data</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Focus groups</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Secondary data</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Publically available data, as the initiative is waiting to receive ethics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>approval e.g NAPLAN, ABS. Put together by a consultant. This will not be</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ongoing due to funding constraints.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• All collected data is tested against community consultation</td>
<td></td>
</tr>
<tr>
<td>The Hive (NSW)</td>
<td>Not yet established fully. Pre-school data collected every 3 years.</td>
<td><strong>Primary data</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Not yet established</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Secondary data</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Government data sources:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Federal:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• AEDC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Will use data from:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>State:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Department of Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Department of Premier and Cabinet Behavioural Insights Unit</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Family Services</td>
<td></td>
</tr>
<tr>
<td>Logan Together (QLD)</td>
<td>Hope to be annual, but it depends on data sets</td>
<td><strong>Primary data</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Asking questions at community events using conversation toolkits and</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Secondary data</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Government data sources:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Federal:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• AEDC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NAPLAN</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• AIHW</td>
<td></td>
</tr>
<tr>
<td>Maranguka (NSW)</td>
<td>Depends on government and organisation collection cycles. Most is collected every 6-12 months.</td>
<td>Primary data</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Youth surveys and focus groups • Most significant change studies • Community conversations • Data conversations • Service mapping (forming a foundation for network mapping) • Safety Survey - first start on primary quantitative data collection</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Secondary data**

**Government data sources:**

Federal:
- AEDC
- MySchool
- NAPLAN
- ABS

State:
- Government departments e.g NSW Department of Justice

Non-government data sources:
- *Dropping Off the Edge* (Jesuit Social Services and Catholic Social Services, 2015)

<table>
<thead>
<tr>
<th>Together SA (SA)</th>
<th>Intended weekly, but likely once per term. Not yet established.</th>
<th>Primary data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Not yet started</td>
<td></td>
</tr>
</tbody>
</table>

**Secondary data**

**Government data sources:**

Federal:
- AEDC
- SA NT Data Link (University of South Australia)

State:
- South Australian Monitoring and Surveillance System (SAMSS) (Government of South Australia, 2017)
- School attendance
- SA NT Data Link (University of South Australia)

Local:
- School attendance

**Non-government data sources:**
- SA NT Data Link (University of South Australia, 2017)
- School attendance

### West Belconnen Local Services Network (ACT)

<table>
<thead>
<tr>
<th><strong>Primary data</strong></th>
<th><strong>Secondary data</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Not yet started – setting baselines with existing data sets initially</td>
<td>Working with government sources, as non-government sources do not have a common data system:</td>
</tr>
<tr>
<td>Qualitative researcher used digital storytelling to collect information from families and service providers</td>
<td></td>
</tr>
</tbody>
</table>

**Federal:**
- AEDC

**Territory:**
- ACT Health
- Department of Justice and Community Safety
Short, intermediate and long term outcomes

As can be seen from Table 5, organisations use a variety of sources to measure outcomes. These include primary and secondary sources, although there is a greater reliance on secondary data. This is for a number of reasons, the main being issues of resourcing.

When measuring outcomes, the organisations had subtly different ways of referring to, and carrying out, the process. This was, in many ways, dependent on the ways in which the measurement framework was initially developed. For example, those organisations that utilised an RBA approach appeared less likely to establish long term targets, instead focusing on performance outcomes and ‘turning the curve’ (Clear Impact, 2016). This means success was measured by whether or not the outcomes data started trending in the right direction, as opposed to meeting specific and exact targets. To quote one interviewee: “nothing can kill a movement quicker than failing to reach the first target…and half the time [target setting] is guesswork at best”. Indeed, even those organisations who have established targets recognise that they are unlikely to reach them. One interviewee, when talking about the issue around targets, suggested that aspirational targets can be a good way to motivate movements, but that fixing targets to funding can be potentially problematic. Whilst target setting, according to this interviewee, can be helpful it is only possible after an extended consultation and research process, which can take up to 18 months.

When developing targets and outcomes is it necessary to build a measurement framework, set a baseline, and then use data to evaluate the progress of the initiative against that framework and baseline. Data is used to develop the initial framework, as it is necessary to identify areas that need to be addressed; areas where community level indicators and outcomes are, for example, below national or state averages. When using data to set baselines and measure progress, however, there are problems with regard to granularity. One interviewee highlighted that the difficulty or inability to break down data to a meaningful community level often prevents organisations measuring incremental steps or short term progress. Currently, most organisations are in the stage of using data to develop a measurement framework, instead of using it to evaluate progress.

Within Collective Impact initiatives, it is important to establish feedback loops in order to ensure programs are having the desired impact. To this end, a number of the organisations aimed to collect data at a high frequency. Together SA, for example, aimed to gather data weekly, although they were not successful because secondary data was not available at the desired frequency, and they do not have the
resources to carry out primary data collection. Communities for Children are establishing a monthly data collection process using Scorecard. This will be carried out by their community service providers and will measure attendance as well as a reflection on the services by the providers. Go Goldfields has a 90 day collection cycle for key indicators. The data collected varies depending what is being assessed. In some cases they are able to collect replicable data that shows changes in the short term, but often they are not able to access government sources. To resolve this, they come up with their own ways of collecting data through, for example, practice reflection or the Most Significant Change technique. This is an evaluation technique developed for use by non-government organisations that draws on structured group conversation and reflection to determine, as a group, the most significant change in the area of focus (Davies & Dart, 2005). The interviewee highlighted that they focus on outcomes, such as the percentage of parents who report services respond to what they are saying, as opposed to output such as school attendance or number of clients served by a program.
Barriers to data collection and use

Those interviewed identified a number of barriers in relation to the collection and use of data, with many similarities between initiatives. These include:

- Gaining access to government data
- Barriers to sharing data e.g. lack of a central database
- Lack of continuity between data sets e.g. lack of nationally agreed data or available data does not overlay with region
- Non-existence and obsolescence of government data

Gaining access to government data

Almost everyone surveyed identified difficulties when attempting to gather data from government sources, particularly in the early stages of the initiatives. The role of a backbone organisation is to leverage existing organisations to work around a common agenda. This is done through facilitation and the development and use of a measurement framework, which is done by collecting and collating available data. As Kania and Kramer (2011) highlight, a “backbone organization [sic] requires a dedicated staff separate from the participating organizations who can plan, manage, and support the initiative through ongoing facilitation, technology and communications support, data collection and reporting, and handling the myriad logistical and administrative details needed for the initiative to function smoothly”.

Each organisation involved in the initiative has access to their own data; the advantage of a Collective Impact initiative is the access to complementary data from other partners, as well as the whole of community perspective provided by the backbone organisation’s collation role. To this end, making use of existing government data is a vital part of the process, particularly in order to adequately establish baselines and track indicators and outcomes. To quote an interviewee, “when we’re talking about collective impact you’re really needing all sorts of data to see if you are trending correctly”. One organisation chair outlined:

“Collection is adding to challenges for us... [our organisation] deliberately includes both government and non-government agencies, we are able to call on government data that helps inform the indicators that we are talking about. That’s Step one...but again, agencies have to be prepared to share their aggregated data for us to be able to look at what is happening for children.”
When asked about the barriers faced in relation to the use and collection of data, several interviewees cited access as a key difficulty. They also noted that, in cases where agencies are reticent or unable to share data, initiatives can stall or collapse. Different groups have had a variety of experiences in sourcing data via their state or territory government bodies. Some reported very helpful relationships where data sharing was working well, others expressed frustration in their attempts to establish these exchanges within their jurisdiction.

There are a number of publically available data sources that are used, for example MySchool and the Australian Bureau of Statistics. Many of the interviewees were not aware of the Australian Government central catalogue of public data (www.data.gov.au), but those who were stated that they did not find it useful. One interviewee outlined that all the data they needed was available from the AEDC, whilst two others outlined that it doesn’t provide the granular, locally focussed data that they needed; it was suggested that it is “good for trends but not indicators”. One of those two interviewees expressed the belief that, “with time it has the potential to be a useful tool”.

Whilst some of the data requested was inaccessible because of privacy concerns, a number of interviewees cited a lack of trust on the part of government agencies as a key reason why data was not shared. Indeed, it was suggested that once access was gained and departments were able to see that the initiatives were using the data in a positive manner, further requests for data were far easier.

A further issue outlined with regards to accessing data was the lack of clarity around what data is available or accessible. One interviewee cited a need for communication and for departments to be frank about what they do and don’t have. This can then ensure data requests are more targeted and efficient:

“No-one wants to go on a fishing trip...[once someone from a government department became involved in the initiative] what she knew was available and what she knew would help [informed] our process. If there was that sort of support available in the actual drafting of the request I think it would cut down a lot of potential wasted time and expense.”

**Barriers to sharing data**

Intertwined with the issue of accessing data held, collected and owned by the local, state or federal government are the challenges around sharing data. There were two aspects identified. The first is the lack of an effective database through which initiatives can share information.
A second barrier to sharing is the perception of non-governmental organisations working in conjunction with the government:

“Most of the data we want is not coming out of federal agencies anyway [some key organisations] probably hold a lot of data that we would like to access but they can’t give it to us as they are constrained by their federal contract. If [governments] could generally work on allowing data to be shared in their contracts, not restricting sharing of data, that would be a really good thing.”

There is an understandable fear around sharing data in a way that contravenes the Privacy Act 1988 (Cth) but interviewees perceived some of that to be risk aversion as opposed to genuine legal issues:

“You have to look at the internal processes across the different departments. And maybe it’s the legal sections within those departments. Or maybe it’s a cultural reluctance to share data...There is not an issue around identifiability of data because you’ve done what needs to be done to address any of those issues and yet data is still not provided.”

There is clearly a need for leadership around communication and clarity with regards to the sharing of data with and between organisations.

To quote an interviewee: “I think that if we don’t get the basics right, there is no point. The basics for me are getting some sense of what we agree on nationally, some sense of joining things up within [government], and connecting states. Without some kind of common platform or understanding, the detailed wish list is unnecessary”.

Lack of continuity between data sets
Those interviewed emphasised that it was integral to have comparable data, which means trying to get data from one source for each indicator: “if you start using different sources you quickly start running into problems...it’s difficult to combine or reconcile from multiple service providers”.

There is not an established data collection and measurement standard across departments. This has the potential to make the same data look different or vice versa: “This is the biggest problem – [the departments] don’t align in any shape or form”. Other interviewees, such as those from West Belconnen Local Services Network, have also highlighted that, despite its failings, government data is still the
most accurate data to be collecting as, “there isn’t a common data system across the non-government system”, leading to them only using national data sets.

This comparability issue extends to issues of geography as well. Often data will not align or drill down to the statistical areas that the initiatives work within. This results in a need to make extrapolations or assumptions, which can greatly impact outcomes measurement.

This lack of continuity and comparability is therefore a significant gap in the move to leverage data as efficiently as possible and warrants further attention.

Non-existence and obsolescence of government data
It was identified by a number of those interviewed that much of the outcomes data required did not exist. A number of reasons were posited for this. These included that the data itself was either too complex a data set to gather or did not have standardised measurement systems. One example of outcomes data not collected was breastfeeding rates in a small regional town. Whilst it may provide valuable data to measure the outcome of a maternal and child health initiative, it is not a data set usually collected by national or state governments in a standardised manner. As a result, one interviewee identified that it would not be possible to use locally collected data such as that to compare rates and measure improvement in an accurate way.

A second reason suggested for the lack of data was the fact that much of the data gathered by government agencies is output, instead of outcomes, focused. This means, for example, that the number of people attending a program is measured, not whether the program had the desired impact. For many, but not all, of those interviewed, much of the output data was not valuable.

Thirdly, it was identified that in many cases the data did exist, but it was not collected frequently enough to be of significant use. Most of the initiatives studied, for example, used the Australian Early Development Census (formerly the Australian Early Development Index) when establishing their baseline. This Census, however, is only carried out every three years, meaning the young people to whom the initiatives are directed are not those who provided the baseline data. Furthermore, the AEDC is funded through to the 2018 data collection, but there is not yet any certainty with regards to further funding. This means there is a possibility that from 2018 it will no longer be of use as a data source.

Added to the frequency of data collection are data processing times. One interviewee emphasised that while community level data needed to be less that 12 months old,
much of the data provided by the government was older than that. This was perceived to be as a result of the time it took to gain approval from agencies, alongside the timeframes of internal data manipulation and validation procedures. Once data becomes available to an initiative, therefore, much of it is too old to be used for outcomes and performance measurement. This is because Collective Impact initiatives need to make use of current data in order to inform and enable rapid feedback loops.
Enablers of data collection and use

Although a number of barriers in relation to the collection and use of data were described by interviewees, they also shared their insights on some key enablers to support their work. These include:

- Relationship building
- Leveraging community capacity
- Building data into programs
- Use of data sharing system
- Use of proxy indicators

Relationship-building

One of the barriers to gathering data identified by interviewees was reticence on the part of organisations to share information. This was particularly the case in the early stages of development for some of the initiatives. For most of the organisations, however, once they had established access to data and made use of it, government organisations were more willing to continue sharing. This could be as a result of the agency building trust in the Collective Impact initiative that the data provided is used in a positive manner. To quote one interviewee, “[we’re] likely to get more data now because they’re aware [we] aren’t trying to vilify them but help them and identify where services need more help”.

Building trust, partly through a greater understanding of Collective Impact initiatives, is therefore an important element of data sharing. This includes trust of government and non-government services by the community in order to facilitate more data sharing and engagement in data conversations by community members.

A process for building trust and relationships is embedded in the Collective Impact model. The initiatives studied include government, non-government and community members in their collaborative working groups. By having government and non-government representatives ‘at the table’, communication and sharing of data may be more easily facilitated.

Connecting Community for Kids, for example, includes leaders from a majority of relevant government departments, all of whom have committed to sharing data with the organisation. It is perhaps significant that this organisation was established by the State government, therefore pre-establishing relationships, networks and trust.
Data parties
A further way in which relationships can be developed and leveraged is in the form of a ‘data party’. This is a technique that was particularly useful for Grow Well Live Well when establishing what data was available and what was important to focus on in the early stages of the project. In a ‘data party’ each representative from an organisation, community or agency comes with an outline of what data they are already collecting. This then gives the initiative an idea of what they have access to, where the assumptions are, what is able to be shared and what is private. It provides, “a better picture of what people think is important to collect”. Importantly, it has the potential to enhance the direction of the project, as well as being an effective “strategy to get people more involved in the story ... It builds some enthusiasm and appreciation for the power of data and how it can help us see things more clearly”.

Relationship and network-building can also lead to increased levels of data collection on the part of government agencies. Maranguka are currently working with the Australian Bureau of Statistics to carry out population forecasting that will provide a more accurate picture of the numbers of young people in Bourke. This will then better inform outcomes measurement, as it can be analysed against an accurate baseline. Collaboration between initiatives and government agencies that leverage community knowledge and government resources may be one way to build a more complete data profile of communities.

Leverage community capacity
Collective Impact is predicated upon leveraging community capacity at all levels to enable system change. This includes drawing on community members to collect data, working collaboratively with agencies and service providers to identify data points and drawing on the community to manage issues of attribution.

A number of the interviewees identified leveraging community capacity as a key practical tool in the gathering of primary data. One interviewee, for example, emphasised that “It makes a real difference who is asking the questions”. In the initial stages of a community consultation, teams were sent out to locations “with clipboards and questions and sausage sizzles”. Whilst they were able to get some basic data, some potential respondents were reticent to engage due to lack of trust. The initiative therefore engaged members of the community to collect the data. This was particularly effective when gathering data from the Aboriginal community:

“We employed some Aboriginal community members to take the clipboards and go into the homes of people they knew...to have a cup
of tea with someone, sit down with them and ask them about what they like about the community and what could make it better. What things they’d seen disappearing that they knew had been effective in the past. Trying to recapture a whole lot of community wisdom and knowledge that we don’t know, that’s been lost sometimes...We got much richer responses from people who were being asked these questions by other members of the community”.

This leveraging of community capacity was utilised by most of the organisations, in both formal and informal ways. A particularly useful tool that was identified was the Harwood Community Conversations Toolkit, which was used to support community members in carrying out data-gathering conversations with friends, neighbours and family members.

This privileging of community capacity and community voice was highlighted as particularly popular amongst residents.

“They [community members] love the fact that we’re not a service provider, we’re not an established organisation and we’re not government owned. We’re standalone and we’re really only there to be a conductor of their wishes...We’re non-threatening...Our role is to say ‘we’re actually here to allow you to do what you need to do”’

“The actual process of going as a group and working together on this and the process of going to all those little groups, listening, recording, and bringing it back, builds faith and credibility with the community”.

Most interviewees highlighted, however, that leveraging community capacity in this way took time, and sometimes cost money due to training or payment of those running the community conversations. As a result, leveraging of community capacity in this way was done when carrying out needs assessment in the initial phase of the initiative. Many of the interviewees expressed a desire to use it as an evaluative tool, but conceded that they did not have the resources to do so.

**Build data collection into programs**

A significant barrier to the collection of primary data is a lack of time and resources. However, initiatives are addressing that issue by building data collection into program delivery. Three key examples are the Maranguka birth expo, the Connecting Community for Kids 100 days initiative and the Communities for Children Scorecards.
An issue identified in Bourke was the lack of data on the number of children being born in the town. This is due to the fact that there is no facility for women to give birth within the area. Without accurate data on the number of births, it is not possible to suitably measure the success of programs aimed at improving the outcomes for newborns and their parents. This problem is being addressed by hosting a birth expo in Bourke. By encouraging expectant parents to attend, the initiative hopes to gather more accurate and detailed information on the demographics of women giving birth in Bourke.

Data collection will be part of the Connecting Community for Kids 100 days initiative. This program aims to combine the vaccination program for two year olds with the three year old health check. Currently, ninety percent of non-Indigenous and eighty percent of Indigenous children receive their vaccination, but only eighteen percent overall receive their three year health check. As a result, identification of the need to be referred to specialists is happening later than it should. The aim of the program is to combine the health check and the vaccination, with the hope that children will be better prepared for school. The intention is to gather data on the cohort of children at the point of service delivery and continue to do so as they move through the school and health system. By engaging with already-established data sources, as well as combining it with service delivery, primary data is able to be collected and used.

Connecting Communities for Children are using Scorecards in collaboration with their service delivery partners. These partners, who deliver programs in the community, have been trained in the use of Clear Impact Scorecards. They will then use these Scorecards to monitor the attendance and success of their programs. Whereas previously they had been asked to send through ‘good news stories’, this more structured process of tracking program success, in a way that is incorporated into the delivery itself, is intended to improve data collection and performance measurement.

Data sharing systems
A key barrier to data access and use identified by most of the interviewees was the difficulty of sharing data between organisations. A number of successful data sharing platforms, however, were identified. These were SA NT DataLink, the South Australian Monitoring and Surveillance System (SAMSS) and the Victorian Child and Adolescent Monitoring System (VCAMS).

SA NT DataLink is a data linkage project that is part of the Population Health Research Network (University of South Australia, 2017). Its aim is to better facilitate collaboration and data sharing between organisations and agencies by providing de-
identified population level data, connecting the two datasets together in order to build a richer picture of the population.

SAMSS and VCAMS are both state-funded and managed data portals that can be accessed by organisations that have gone through a vetting process. They provide a wide range of data collected across government departments in their respective states. Go Goldfields, for example, use VCAMS as their first point of data collection as it is possible to search by Local Government Authority. Once they have gathered data from this source, they then identity gaps that are filled through further contact with agencies or primary data collection.

**Proxy indicators**

All interviewees spoke of the issues around the non-existence of particular data sets. Where it is not possible to collect primary data directly related to a key indicator, proxy indicators are often used. These come with their unique challenges, however. The leaders interviewed on behalf of Grow Well Live Well, for example, outlined that they try to keep proxy indicators to a minimum, as they increase the likelihood of confounding factors. The example cited was that of using the number of young people who are volunteering as a proxy for community connection. The research found that the proportion of young people in Palmerston volunteering was significantly lower than the national average, indicating a possible lack of community connection and cohesion. However, it was noted in the interview that “we’re talking mainly about young families where both parents work and they have young children. Their capacity to go out and volunteer is therefore lower than where there is a spectrum of age groups or a large body of volunteers”. Proxy indicators, therefore, can be helpful if there is no other way to gather data on an indicator, but it must be remembered that they can result in issues of inaccuracy or misattribution.
Key interview findings

- There is broad commitment to the use of data to inform practice by CI initiatives, with a number of organisations working to embed effective data access, collection and usage in their work.

- Some CI organisations have well developed processes for the collection, access and use of data, whereas others are in the establishment phase. There is potential to promote the effective implementation of processes via sharing of learning between organisations.

- Definition is a key point of difference with most interviewees approaching the concept of ‘community level data’ with a unique understanding. This lack of clarity is also seen in key terms such as outcome, indicator, measure, and framework.

- Increased information sharing on data availability and access between government and non-government organisations at local, state and Commonwealth levels would facilitate more efficient use of data to support and measure action.
Gaps and suggested solutions

Based on the findings of both the literature review and the qualitative interviews, a number of gaps have emerged in relation to community level data and CI initiatives.

1) Understanding and definitions

Although data is a key feature of CI approaches to collaboration, what this means and what it looks like in practice is less clearly prescribed. Internationally, some researchers have started to publish their insights into the processes and practices that will support effective access, sharing and use of data. However, the people currently delivering CI initiatives do not yet have consistent approaches.

There is also limited understanding of some of the key terms associated with data and outcomes measurement. This contributes to potential duplication of effort, and misunderstandings between different organisations.

Suggested solutions:

- Establish and promote materials providing definitions and explanations of key terms and concepts

To aid in developing these materials, there are existing resources that may be adapted or promoted. For example the Centre for Social Impact’s *The Compass: your guide to social impact measurement* (Muir & Bennet, 2014) and networks like the Social Impact Measurement Network of Australia (SIMNA).

2) Awareness and access to public data

There is a large volume of publically available data in Australia, held by government and non-government owners at every level from federal to local. However, many initiatives have experienced difficulty identifying and accessing the data required to measure and report on the issues facing their communities. There is a disconnect between what is there and what is being utilised.

Suggested solutions:

- Establish and promote guidelines for timely access to publicly held datasets including simple, easily navigated forms to apply for specific information.

- Consider the need to refine and redesign data.gov.au to enable intuitive searching and provide information about what is available from where, for whom and through which process.
• Develop and deliver training and professional support materials to increase the capacity of users to make proper use of the DSS DEX.

3) Missing data
Whether due to gaps in collection or barriers to access, many CI initiatives have raised concerns that they do not have all of the data required to monitor their indicators.

Suggested solutions:

• Improve collaboration between Commonwealth, state and local governments to ensure alignment in data collection against national data frameworks, such as AIHW’s National Children and Youth Headline Indicators.

• Improve collaborative efforts between CI initiatives and agencies such as ABS to develop data collection strategies targeted to need

• Raise awareness and access to unpublished datasets, as per the Productivity Commission’s recommendations.

• Funding agreements to include provision for initiatives to establish data collection activities and resources to support collection.

4) Evidence for the effectiveness of Collective Impact
CI is a relatively new concept. In the six years since the theory was published, there has been limited opportunity for researchers to undertake comprehensive evaluation. Some of other the issues in establishing the evidence base for this approach include, the long time frame required to establish the preconditions for success within communities, the complexity of the activities undertaken and the multi-organisational actors providing services within initiatives. Attribution of effectiveness is another challenge as the initiatives are by their nature complex, interdisciplinary, long-term and embedded within the broader service system.

The effectiveness of CI is largely one of process – CI provides a framework to support a range of efforts towards particular outcomes, it is not a specific intervention in and of itself.

Suggested solutions:

• Embed measurement and evaluation in all service contracts with community level organisations to ensure there is ongoing monitoring of outcomes
• Promote the emerging evidence from the evaluations currently underway across Australian CI initiatives

• Undertake experimental or quasi-experimental research to investigate the benefits of CI initiatives.

**Conclusion**

Effective approaches to data collection, access and use are central to meaningful evaluation of any service or activity. Without these processes, causes of trends and impacts cannot be accurately attributed and instead initiatives must rely on subjective reporting. In order for funders to confidently support initiatives that are using CI as their organising framework, it is important to establish if and how the model is supporting positive trends towards stated outcomes for community wellbeing. To support their claims of effectiveness, CI initiatives need to incorporate robust data access, collection and analysis into their work.

Building from an overview of the international literature, this report brought together the views of a number of interviewees representing CI initiatives at various stages in their establishment. These views combine to provide insight into the approaches CI initiatives in Australia are bringing to their collection and use of data in the planning and delivery of services and in the monitoring of impact. Although interviewees identified a number of significant barriers, particularly in terms of access to datasets, they were also positive about the approaches that support the use of data for planning and evaluating their efforts.

There are of course, some limitations with this research report. The qualitative research design, based on semi-structured interviews, means that findings are necessarily thematic and iterative rather than direct responses to the list of interview questions. For more direct reporting against specific questions, a structured written survey would be required. This could be circulated to all CI initiatives in Australia and could also potentially garner the views of stakeholders in target communities. A mixed method approach such as this would add greater depth to our understanding of Collective Impact in Australia.
References


Australian Research Alliance for Children and Youth. (2014). The Nest action agenda: Improving the wellbeing of Australia’s children and youth while growing our GDP by over 7%. Canberra: ARACY.


Promise Neighborhoods Institute. (2014). Choosing a Data System for your Promise Neighborhood: Suggested Criteria and Functions.


Appendix 1: Participating organisations

Communities for Children (TAS)

Communities for Children is a government-funded program, delivered by Anglicare Tasmania, that has been a facilitating partner for child-focused programs and agencies for twelve years. Its scope is to support the wellbeing of children from the ages of 0-12 years in Launceston and Tamar Valley.

In 2012/2013 it carried out in-house training on Results Based Accountability and in mid-2014 released *The State of Launceston’s Children 2014* (Launceston Child Friendly City Working Group & Anglicare Tasmania, 2014). This report, using existing data sources from 2011-2012 formed a snapshot of the wellbeing and health of children in the area. It was then used as the foundation for the development of a Collective Impact initiative called *Community it*, with Communities for Children acting as the backbone organisation. Their flagship initiative is *Every Child Succeeds*, which aims to leverage community capacity to address the needs of the 7000 at-risk children in the region. In 2016 Anglicare Tasmania hosted the Every Child Succeeds conference, a free event which aimed to increase knowledge and provide networking opportunities around Collective Impact.

For this report the Co-ordinator of the Communities for Children Program was interviewed.

Connecting Community for Kids (WA)

Funded in 2015 by the Woodside Development Fund, the backbone team of Connecting Community for Kids was formed in May 2016. Auspiced through Child Australia, it was founded by The Partnership Forum, a quarterly meeting of leaders from State Government agencies, the not-for-profit community sector and consumer advocates. Its focus is on developing and maintaining a sustainable not-for-profit sector.

The Connecting Community for Kids working group is made up of leaders from the government and non-government sector. The regional focus of Connecting Communities for Kids is the cities of Cockburn and Kwininana, which are part of metropolitan Perth. Their aim is that all children in those areas will be at the Perth average with regard to Early Development by 2020. The organisation is funded until
December 2020, which means their key role is to build capacity in order to ensure a sustainable system change that will continue after defunding.

The initiative is currently developing a Roadmap for Change, with Telethon Kids Institute providing support in the development of indicators. They will start their first pilot program, which will align the immunization of two year olds with a health check, in March 2017.

The Partnership Director of Connecting Communities for Kids was interviewed for this report.

Go Goldfields (VIC)
http://gogoldfields.org/

In 2010, after the publication of Gold Prospects (Perry, 2008), a detailed analysis of the economic, educational and social challenges in Central Goldfields Shire, a group of service leaders developed a three-year plan to address the wellbeing of children, youth and families. In 2012 it was determined that there was a need for a greater focus on system change through leveraging community capacity and 2014 the go Goldfields Alliance adopted Collective Impact as their framework for enabling this change.

In 2015 Go Goldfields ran a series of ‘Hatch’ conversations; collaborative community consultations that aimed to identify key areas of focus. These were then used as the foundation for the Collective Impact measurement framework. Their key outcomes are to create an environment where family violence is unacceptable, all children are happy, healthy, safe and able to achieve their full potential, youth are able to achieve their full potential and everybody can learn and achieve.

With the Central Goldfields Shire providing the backbone support, Go Goldfields is also funded through a number of external funders including Regional Development Victoria, the ten20 Foundation, Opportunity Child and the Sabemo Trust (“About Go Goldfields”, 2016).

For this report ARACY interviewed the General Manager of Go Goldfields and the Early Years Facilitator, whose main role is to align the work of the organisation with The Nest action agenda (ARACY 2014).
Grow Well Live Well, City of Palmerston (NT)

Formed in 2014, Grow Well Live Well is a collective of community organisations that wanted to change their practices in order to improve how children and young people grow up in Palmerston. By drawing on collective impact principles, this initiative aims to address complex social problems, particularly those related to child and adolescent development.

Grow Well Live Well conducted an extensive community, service provider, and stakeholder consultation period, as well as other publicly available data, to produce the Palmerston State of the Children report. The initiative is currently creating an action plan to advocate for resources and systems change that supports improving outcomes for children and young people in Palmerston.

For this report, both the General Manager of Child Australia, Northern Territory and the Regional Programs Manager for The Smith Family, Northern Territory were interviewed.

The Hive, Mount Druitt (NSW)
https://thehivemtdruitt.com/

The Hive is a collective impact initiative founded on the principle that children in Mount Druitt deserve the same opportunities in health, education, and life as children in any other part of Australia. Families, community groups, service providers, government agencies, and businesses are all involved. This initiative is motivated by data that indicates that:

- only 1 in 5 people in Mount Druitt complete high school, while less than 2 per cent achieve a tertiary qualification;
- nearly one-fifth of 15 – 24 year olds are disengaged from employment and education;
- adults are twice as likely to be unemployed (12 per cent) compared with Sydney (4.9 per cent) and NSW overall (5.2 per cent); and
- Individuals are four times as likely to be at risk of domestic assault.
The Hive uses a process of co-design, advocates for not duplicating existing services, and has diversified funding sources that allow it to take a long-term view, rather than base their work around funding cycles.

The NSW State Manager of The Hive was interviewed for this report. This role is responsible for overseeing the different pieces of work, with a focus on strategy and systems level work.

Logan Together (QLD)

Logan Together is a community impact initiative of the local government area of Logan City, which is located to the south of the City of Brisbane. The initiative describes itself as “a long term, whole of community campaign to create the best life opportunities for every child in Logan”. It has 33 locally-based partners, which include education, health, and social service providers.

The initiative, which was set up in 2014, aims to collaboratively establish joint priorities and a culture of continuous quality improvement. So far, Logan Together has developed a framework to connect people in developing a ‘Roadmap’, which seeks to mobilise community resources to ensure that every child gets the support, love, and care they need to do the best they can.

The Director of Logan Together was interviewed for this report. Prior to commencing at Logan Together, the Director spent a decade at the Australian Red Cross, leading the organisation’s human services and community development program in Queensland. The Director is also a member of the Logan City of Choice Leadership Team, and served as an adviser to the Every Child Deserves Every Chance campaign.

Together SA
https://www.togethersa.org.au/

Together SA is a social change initiative that brings together expertise from across South Australia in order to address complex social problems and encourage communities to work towards a better future. The initiative was started by a group of founding partners, under the leadership of Community Centres SA.
By drawing on collective impact principles, Together SA encourages South Australians to make changes on the issues of concern to them and to understand the substantial cultural and systems change this requires.

For this report, a Data and Research Project Officer from Together SA was interviewed. The Project Officer had a background in research, engagement and evaluation, across several sectors.

Maranguka (NSW)

Translated as ‘caring for others’, the Maranguka Justice Project is a collaboration between Just Reinvest NSW and the Bourke Aboriginal Community Working Party. Before 2012 the Working Party had built a vision for change, engaging Aboriginal families in the community in decision making. In 2012 they approached Just Reinvest NSW, suggesting that Bourke could be site to trial the concept of justice reinvestment. Just Reinvest is an organisation that aims to address the overrepresentation of Aboriginal young people in the criminal justice system by directing funding away from the justice system and into preventative programs. The money saved is then reinvested into the community.

The collaboration is led by the community, who set targets and strategies. These are then facilitated by Just Reinvest and Collaboration for Impact, a community of practice developed in partnership by the Centre for Social Impact and Social Leadership Australia. Social Ventures Australia has recently been contracted to support the redevelopment of their measurement framework.

In 2015, after an 18 month process of data collection, a snapshot requested by the Working Party was developed which outlined the life course of Aboriginal young people in Bourke. This was made up of government data, as well as primary data collected through data conversations in the community. As a result of this snapshot the Bourke Tribal Council established the Growing Our Kids Up Safe, Smart and Strong strategy. This strategy has three working groups, established and managed by the community: Early Childhood, 8-18 and the Role of Men. The initiative is currently in the early stages of the ‘Sustain action and impact’ phase. They have agreed upon a common agenda, working groups are in place and data is being used to make decisions regarding alignment of resources.
Three key team members were interviewed for this report; the Chair of Just Reinvest NSW who also acts as the Project Director of Maranguka, a key facilitator from Collaboration for Impact who provides coaching and support, and a volunteer data manager who works pro-bono through The Australia and New Zealand School of Government.

**West Belconnen Local Services Network (The Network) (ACT)**

The Network is a collective impact initiative that aims to build services and supports around the needs of the local community in West Belconnen. This initiative focuses on ensuring that people and families have a positive experience when accessing services that are simply, respectful, and easy to use; continuing to build the capacity of people and families to connect with their local community to receive the right support when they need it; and working together with local services, businesses, and people to share resources and to reduce service duplication.

Two representatives of The Network were interviewed for this report: the first was the Executive Officer at UnitingCare Kippax, and the second was the General Manager – Strategic Engagement and Policy Development at the Australian Research Alliance for Children and Youth (ARACY). UnitingCare’s Executive Officer previously worked in the areas of Indigenous policy and health promotion, while ARACY’s General Manager has a background in population health and child health.
Appendix 2: Interview question guide

Background
- What is the scope and role of your organisation?
- When was the initiative created? What is the current phase/stage of the initiative?
- How would you describe collective impact?

Data Collection
- How would you describe community level data?
- Was a needs assessment conducted?
- Was there segmentation analysis conducted with needs assessment data? (examining data within specific demographic – gender, post code, school, income etc)
- How were indicators decided/developed?
- How was type of data to be collected decided?
- Is individual-level as well as community-level data collected? If so, is it identified?
- What method(s) for data collection?
- When did data collection begin? Do you have an established baseline for all/some/any indicators?
- What is the frequency of data collection?
- Use existing data sources? (e.g. AEDC, LSAC, LSIC, School)
- New primary data collected to measure community level outcomes? (e.g. neighbourhood surveys, focus groups, school based surveys,
- If primary data has been collected, what are some practical ways (or tools used) in local communities to collect the data for their local indicators?
- What software is used to collect/analyse/store data?
- How do you deal with issues of attribution?
- How do you control for confounding factors?
- Do you actively seek the views of children and families?
- What is the methodology for including the views of children when collating the data?

Data Use
- How is data stored? System capacity? Security?
- Who has access to data?
- How user-friendly is system? I.e. Level of education/training needed to pull or view data
- Is data available in real time?
- How often is data analysed?
- How is the data reported/presented? (charts/tabular data/summary reports)
- Does system easily allow integration with systems such as excel/SPSS?
- Who is the data shared with? (stakeholders/community) How often?
- Are penetration rates calculated? (extent that the activities are reaching the target population)
- When is change expected at a community level after an intervention has been delivered i.e. when would it be reasonable to measure impact?
• Do you set targets for specific indicators? (e.g. for 2017 the chronic absenteeism rate will be between 15-20%) How are these targets set?
• How are data quality checks made? (E.g. prevention of invalid data such as males being pregnant)
• Who are the decision makers for how data is used/what changes made based on data?

General
• Lessons learned re data collection and use? What has worked? What has not?
• What review system is in place for indicators? data system? Entire collective impact model?
• How could the data be used more effectively/differently?
• Where are the gaps in collection or use of data?
• What would you like to see happen?
Appendix 3: *The Nest action agenda* outcome domains

**Loved & safe**
- Positive, supportive family environment
- Positive parenting
- Positive peer relationships
- Community safety
- OOHC rates
- Detention rates

**Healthy**
- Birth weight
- Immunisation
- Nutrition, activity and weight
- Dental health
- Mental health
- Injury deaths
- Teenage pregnancies
- Substance use

**Participating**
- Youth feel able to have a say
- Voting enrolment
- Use of technology and social media
- Participation in organised activities
- Membership of social, community or civic groups

**Learning**
- Participation in ECE
- Early childhood develop-mental vulnerability
- Parent engagement in learning
- English, maths and science performance
- School retention
- Youth participation in education

**Material Basics**
- Material wellbeing
- Income inequality
- Parental employment
- Youth in training/education/employment
- Internet access
- Educational possessions
- Housing amenity and stability

**Culture and identity**
- Family and community
- Cultural &/or religious practices
- Social inclusion
- Linguistic diversity