Deloitte.

National Community Hubs Program SROI Evaluation Report FINAL

Community Hubs Australia

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Deloitte Access Economics

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Glossary

Acronym	Full name
ABS	Australian Bureau of Statistics
AEDC	Australian Early Development Census
AMEP	Adult Migrant English Program
ATAR	Australian Tertiary Admission Rank
CALD	Culturally and linguistically diverse
CHA	Community hubs Australia
GP	General Practitioner
LT	Long term
NCHP	National Community Hubs Program
NAPLAN	National Assessment Program – Literacy and Numeracy
MT	Medium term
QDTP	Quality differentiated teaching practices
SDAC	Survey of Disability, Ageing and Carers
SROI	Social return on investment
ST	Short term
TAFE	Technical and further education

Executive summary

Background

The National Community Hubs Program (NCHP) was established in 2013 to engage newly arrived communities at risk of limited access to education, health and social services, and opportunities for economic independence. At its foundation, the NCHP model is a place-based and person-centred method of connecting newly arrived families with their community, schools and existing health, education, and settlement services. Each community hub enables and facilitates access to services that build social connections and social capital within newly arrived communities.

Since establishment, the NCHP has expanded to over 90 locations across Australia. In 2019, nearly 10,000 migrant families accessed support and services through the NCHP.

Scope of the report

Community Hubs Australia (CHA) engaged Deloitte Access Economics to undertake a comprehensive social return on investment (SROI) evaluation of the NCHP in 2019. Specifically, the SROI evaluation focuses on the impact of the NCHP across four domains:

- **English language:** the impacts of the NCHP on English language attainment of participants in 2019.
- **Engagement:** the impacts of the NCHP on engagement with the broader society in 2019.
- **Early childhood development:** the impacts of the NCHP on early childhood development in 2019.
- **Vocational pathways:** the impacts of the NCHP on employment opportunities of migrant adults in 2019.

This report forms the completion of Phase B of this engagement. Phase A of the engagement involved the development of an evaluation framework, which guides this report.

Methodology

This evaluation followed the SROI framework developed as part of Phase A. A mixed-method approach was taken, combining primary and secondary data to inform the measurement of the SROI of the NCHP.

Secondary data sources included activity data from CHA, CHA English census data, and desktop research using academic journals and ABS amongst other resources.

Primary data was collected across the network, incorporating a participant and volunteer survey, a hub leader survey, a school principal survey as well as a support coordinator survey. Participant and volunteer surveys and consultations with 14 hub leaders were conducted for a sample of sites within the network.

Summary of findings

SROI of the NCHP

The NCHP had an SROI of 2.2 in 2019. This means that, for every $1 invested in the program, there were $2.2 in social benefits realised in Australia. This indicates that the NCHP is an efficient use of investment. This is a conservative estimate as it only incorporates benefits which could be reliably monetised in this analysis.

This evaluation estimates that the NCHP delivered benefits of $33.9 million to Australian society in 2019. As the NCHP was delivered on a budget of $15.2 million in 2019, it is estimated that the program had an SROI of 2.2. The NCHP budget encompasses direct government investment, investment from not-for-profit organisations, direct costs to schools and in-kind supports.

Overall, the analysis shows that the NCHP had the largest impact on the quality of life of participants, accounting for 59.7 per cent of its total social impact in 2019. Employment and volunteer benefits accounted for 25.7 per cent of the social benefits of the program in 2019, which are realised through increased productivity in the economy. Finally, early education benefits relating to early detection and access to supports for learning delays, as well as increased likelihood of gaining a future qualification account for approximately 14.7 per cent of the total social impact of the program in 2019.

Engagement

Community hubs are having a significant impact on the quality of life of newly arrived migrant families by supporting them to feel engaged in their broader communities.

When migrant families first arrive to Australia, they often face significant barriers to participating in their new communities. Many people do not speak English well, do not know how to access support services available to them, and have only their family members as support within the community. This can lead to families being socially isolated; **approximately 70.0 per cent of newly arrived migrants feel socially isolated when first engaging with the community hub.**[1]

Community hubs support migrant families to feel more engaged in their communities and less isolated. Hubs provide newly arrived migrant families with the opportunity to engage with other people in their community and build relationships. It is estimated that the value of quality of life benefits realised by hub participants due to improved social engagement equals **$20.3 million** in 2019.

Hubs also provide community members with opportunities to volunteer, exposing migrants to opportunities to contribute to their communities, improve their skills and further engage with their communities. In monetary value, these contributions were estimated to be worth **$307,390 in volunteered work** within hubs and at the local schools in 2019.

Further, hubs support people to access and engage with health and support services to meet their families' needs. Approximately **53.4 per cent of hub participants are more satisfied with their access to health and support services after participating in a community hub.** This can lead to improved health outcomes in the long term; however, these were unable to be measured in this report.

[1] Participant and volunteer survey results across a range of questions.

English

Hub participants feel more confident to engage in society due to improved English competency obtained at community hubs.

The monetary value of benefits associated with the English language domain were not estimated in isolation in this evaluation. This is because English language contributes to the other benefits measured, such as social participation and employment. Therefore, the estimated value of other benefits is, in part, attributable to the English language domain.

English language competency is the highest need of migrant families when they first join a community hub.[2] **Approximately 69.5 per cent of adults that engage in a community hub for the first time report that they speak and read the English language 'not well' or 'not at all'**.[3]

Community hubs play an important role in improving English competency of newly arrived migrants. **Overall, 84.7 per cent of adults that participate in the community hub have improved their spoken English language**. Further, participants with improved English language competency go on to have improved outcomes and greater engagement in society.[4] Specifically, hub participants with a higher level of English language competency were:

- 2.8 times more likely to have studied higher education or to be currently engaged in study
- 2.0 times more likely to frequently engage socially with others
- 1.8 times more likely to report a higher level of quality of life
- 1.7 times more likely to be satisfied with their access to health and support services
- 1.7 times more likely to be employed.

Early childhood development

Community hubs support child development and improve school readiness of young children from migrant families.

Child development is a key focus of community hubs throughout Australia. Community hubs assist a child's development through playgroups and other services, supporting the physical, cognitive, and social development of participating children. Approximately 56.4 per cent of hub families engaged in child development activities within community hubs in 2019, with approximately 7,952 children participating in hubs throughout the year. For approximately 90.0 per cent of families that accessed early years services at hubs, the hub playgroups are the first early years programs they engage with in Australia. Community hubs play an important role in supporting the development of children from migrant families prior to entering school.

Through the provision of early years programs, it is estimated that **children will experience life-time benefits valued at $4.6 million related to improved school readiness** due to participation in community hubs in 2019.

Hubs also provide access to health and support services that can improve the likelihood that developmental delays are diagnosed in a timely manner. Early identification can lead to these delays being addressed early, resulting in fewer children needing additional support in school. It is

[2] Hub leader interviews and participant and volunteer survey results for survey questions: What was the first reason you came to the hub?; What other activities have you participated in while attending the community hub?
[3] Participant and volunteer survey results for survey questions: Please provide a response to your level of English language proficiency in reading; Please provide a response to your level of English language proficiency in speaking.
[4] Hub leader interviews and participant and volunteer survey results across a range of questions.

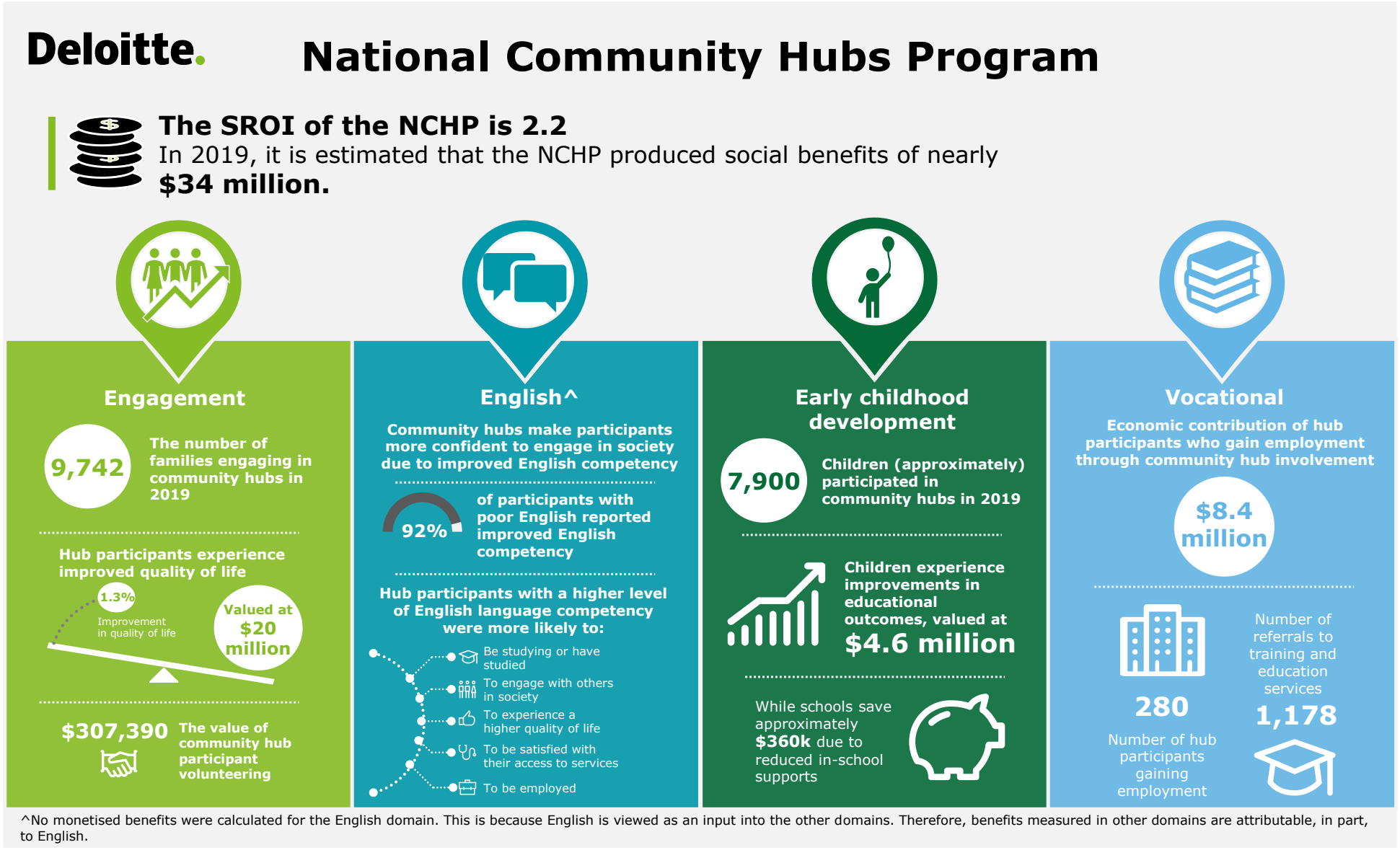
estimated that improved access to early education and support services for children with developmental delays **will save schools approximately $360,889 due to reduced need for schools to provide intensive educational supports for children throughout primary school.**

Vocational supports

Community hubs supported 280 people from migrant backgrounds to find paid employment in 2019.

Community hubs are estimated to have contributed to the employment of 280 hub participants in 2019. This employment is valued at $8.4 million, which includes $7.9 million in increased wages and $499,699 in efficiency gains due to a reduced demand for welfare support from the Federal government.

Community hubs play a broad role in supporting migrants to gain employment. Hubs support participants in learning basic but essential skills such as English language, resume writing and interview conduct. Further, hubs support people to develop skills, through the provision of courses in floristry and barista training among others, as well as referrals to training and education programs. Hubs also link people with opportunities in the workforce through connections with the local school and other services in their communities.



^No monetised benefits were calculated for the English domain. This is because English is viewed as an input into the other domains. Therefore, benefits measured in other domains are attributable, in part, to English.

1 Background and Scope

1.1 About the National Community Hubs Program

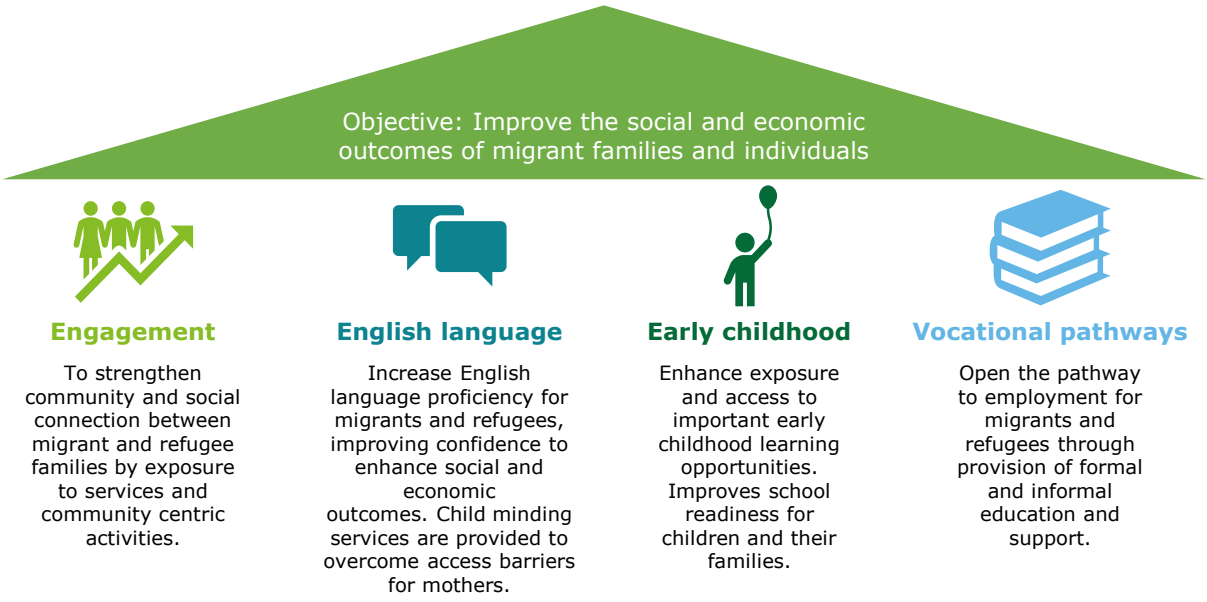
The National Community Hubs Program (NCHP) was established in 2013 to engage newly arrived communities at risk of limited access to education, health and social services and opportunities for economic independence. The program was built on learnings and evidence from the 'Supporting Parents - Developing Children: A focus on Literacy, Language, and Learning' program, delivered by the Hume City Council in 2011 to support the needs of culturally and linguistically diverse (CALD) communities.[5]

1.1.1 Strategic goals

The NCHP vision and initiatives are outlined in Figure 1.1, below. The NCHP has four strategic goals:

1. **Engage** newly arrived communities at risk of social isolation.
2. **Enhance English** language proficiency (spoken and written) among newly arrived communities.
3. **Facilitate social cohesion and structured learning** in children's early years, supporting school readiness.
4. **Provide opportunities** to access gainful employment, including skills-based vocational training.

Figure 1.1 NCHP strategic goals



Source: Adapted by Deloitte Access Economics in collaboration with CHA

[5] Hopkins, L. and Barnett, T. (2013). Evaluation of the Supporting Parents – Developing Children Project: Interim Report 2: Year two of three.

1.1.2 The community hubs place-based model

At its foundation, the NCHP model is a place-based and person-centric method of connecting newly arrived families with their community, schools and existing health, education, and settlement services. Each community hub enables and facilitates access to services that build social connections and social capital within newly arrived communities.[6]

Community hubs are physically co-located with primary schools (government, Catholic and independent). The Murdoch Children's Research Institute found this is an effective strategy to integrate the needs and support of newly arrived communities into established community settings, enhancing the continuum of support across services and settings.[7] Providing a safe and welcoming environment at the hub creates a trusted gateway for hub participants to access the services and support they require.

The flexibility, responsiveness and integrated nature of the community hubs model represents a relatively unique and efficient approach to meeting emerging community needs, taking a strengths-based approach. Core funding supports the employment of a hub leader who collaborates with the school and local health, education, and settlement service providers to identify local needs and services aligned to them. Where there is no clear access to relevant services, hub leaders can request additional funding to commission specific services aligned to NCHP strategic goals.

1.2 About this report

Community Hubs Australia (CHA) engaged Deloitte Access Economics to evaluate the NCHP with a social return on investment (SROI) framework. The purpose of this analysis is to demonstrate the impact of the program in monetary terms where possible, with quantitative and qualitative evidence providing additional context.

In Phase A of this analysis, a program logic model and a social impact framework were developed. This had the express purpose of building tangible measures and indicators for program outcomes. The program logic model can be found in Chapter 2 and the framework can be found in Appendix A of this report.

This report presents Phase B of the analysis. Here, survey data is collected alongside activities and referrals data from CHA alongside relevant literature to measure the impacts of the NCHP and present the SROI of the program.

Box 1.1: What is a SROI evaluation

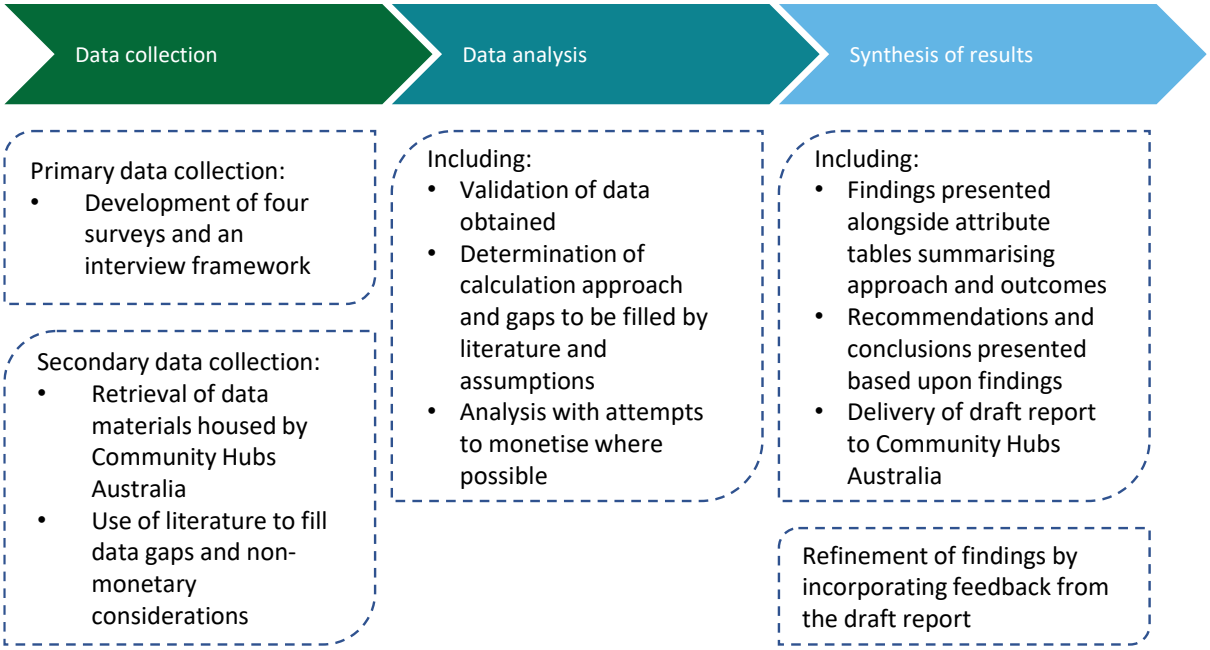
A SROI evaluation examines programs through a stakeholder and experience-focused lens to examine and monetise the program's social value against its funding costs. In doing so, the SROI method provides a way to quantify and monetise their impacts in so far as their impacts can be materially measured. Alongside the qualitative and quantitative analysis which contributes to an SROI, a ratio of monetised benefits against program costs is provided, with a value greater than one indicating a positive return on investment.

[6] Community Hubs Australia (2021). National Community Hubs Program: 2020 Year in Review.
[7] Murdoch Children's Research Institute (2017). Exploring the impact of Community Hubs of school readiness.

1.3 Approach

Phase B consisted of a three-stage approach, incorporating the development and dissemination of data collection tools, analysis of collected data alongside CHA portal data and literature, and the synthesis of results (Figure 2.1).

Figure 1.2 Summary of methodology



Source: Deloitte Access Economics

1.3.2 Data collection

A mixed-methods approach of data collection was employed in this evaluation, drawing upon a range of primary and secondary data sources. Table 1.1 provides an overview of the data sources used.

Table 1.1 Data sources

Source	Collection	Explanation
Primary Data		
Hub participant and volunteer survey 2021	The survey was fielded across 15 randomly selected sites over a 6-week period. There were 234 completed responses for this survey.	A survey of hub participants and volunteers to understand their perceptions on the impact of community hubs on social connection, English confidence, and feeling of belonging in school environment and community, among other variables.
Hub leader survey 2021	The survey was fielded across 90 sites over a 6-week period. There were 76 responses recorded.	A survey of hub leaders to understand their perceptions on the impact of community hubs on participant outcomes.
School principal survey 2021	The survey was fielded across 90 sites over a 6-week period.	A survey of school principals based in schools with a community hub. The purpose of the survey was to

	There were 59 responses recorded.	understand the perceptions of school principals on the impact of community hubs on child development and the school environment.
Support coordinator survey 2021	The survey was fielded to 13 support coordinators over a 6-week period. Nine responses were recorded.	A survey of support coordinators to understand their perceptions on the impact of community hubs on participant outcomes.
Hub leader interviews	In total, 14 in-depth interviews were conducted with a representative sample of hub leaders.	These interviews provided important context into the impacts that community hubs were having on migrant families.
Secondary Data		
CHA activity portal data	Data collected by community hubs on their programs, referrals, and attendance.	The CHA portal is a consistent cloud-based activity data collection tool used across the network of hubs to collect hub activity data.
CHA English Census 2019	Data collected by community hubs on their English class participants.	A point-in-time collection on participants at community hubs in 2019.
CHA financial operations data	Data recorded by CHA on their annual financial inflows.	Annual data on the financial investment supporting the operations of the NCHP in 2019.
Desktop research	Conducted by Deloitte Access Economics as appropriate.	Additional data was obtained through desktop research and targeted literature reviews, where relevant.

1.3.3 Data Analysis

The analytical techniques used to synthesise and summarise the key findings across each of the data sources is described below.

1.3.3.1 Analysis of quantitative data

Quantitative methods were used to identify impacts attributable to the NCHP. The analytical approaches used to analyse quantitative data included:

- Statistical analysis to identify key cohorts, population sizes and patterns over time, including significance testing, cross-tabulations, and correlation analysis
- Regression analysis to identify complex and dynamic relationships between variables and to isolate impacts attributable to the NCHP
- Benchmarking of results to ensure that they align with findings in the literature (if available).

1.3.3.2 Analysis of qualitative data

All quantitative findings were triangulated with qualitative evidence from the hub leader interviews, qualitative responses from surveys, as well as findings from the literature. Qualitative data was analysed thematically using a structured process of review, reflection, and refinement:

- **Review:** collation of information, and coding of topics and key issues
- **Reflection:** team discussion of the key emergent themes, including an assessment of their 'substantive significance'
- **Refinement:** describing the key themes clearly and concisely.

1.3.4 Synthesis of results

The emergent findings were triangulated and synthesised across all data sources and summarised by each outcome measured in this report. Findings are divided into those that can be measured qualitatively, quantitatively, and those that can be monetised. Findings that are monetised form part of the SROI assessment.

1.4 Limitations and assumptions

1.4.1 Limitations

This report focuses upon measuring the main impacts that the NCHP seeks to affect, and it does so by following the framework built from the program logic in Phase A. There are several limitations of this analysis that should be kept in mind:

- The analysis is conservative in its estimation of hub impact. This reflects a desire to be confident of both the attribution of an observed effect to the NCHP distinct from other factors, as well as the inherent limitations of monetising social impact.
- This analysis evaluates the impacts the NCHP has had upon the lives of participants. Some impact measurements rely on pre-post self-reporting information where baseline data is not available. In these instances, data collection tools ask their audiences to consider aspects of their lives before and after they were part of a hub. This exposes findings to biases which would be avoided were baseline data available.
- CHA provided administrative data on referrals, programs and attendance for the year 2019. While data from 2020 would have been preferable, the COVID pandemic has meant this data does not provide a fair representation of the NCHP. Accordingly, it was decided that 2019 would be used in its stead. The data collection tools developed to collect supplementary data are, consequently, measured 1.5 years after the CHA data provided.
- Some data limitations have meant that assumptions needed to be made to approximate impact. Where such assumptions have been made, discussion is provided in the text and appendix. This includes discussion of non-market valuation methods used where available and appropriate to monetise impact.

1.4.2 Impacts that were not able to be monetised

It is important to note that this analysis could not value several impacts of the NCHP, including:

- **The impact upon vaccination rates of the children of migrants**: There was insufficient data for referrals to vaccination services in current data collection.
- **Improved maternal health outcomes from involvement in community hubs**: While data was provided by CHA detailing the number of referrals to child and maternal health services, it did not include the granularity to derive any impacts from the referrals.
- **Value of family participation and engagement in school activities and the school community**: There was not enough data for family participation in school activities in current data collection.
- **The impact upon preschool attendance**: Analysis undertaken by Deloitte did not find a statistically significant impact of community hubs upon preschool attendance at the SA2 level. As additional data is produced (for example through the 2021 census), there is scope for this analysis to be undertaken again over a longer period of time, particularly given the expansion of the program to more than double the number of community hubs able to be included in this analysis.

Valuing these impacts would provide a more complete evaluation of the SROI of NCHP in Australia. Additionally, there is a possibility that the SROI would be larger than what has been reported in this analysis if all benefits were able to be sufficiently monetised. Where possible, CHA should consider collecting additional data to better measure these impacts in the future.

1.5 Structure of this report

The remainder of the report is structured as follows:

- Chapter 2 presents the social impact analysis framework that guided this evaluation.
- Chapter 3 presents the results from the SROI conducted by Deloitte Access Economics. Findings are presented across the four strategic goals set by the NCHP, including engagement, English language, early childhood, and vocational pathways, and are examined across outcome criteria.
- Chapter 4 provides values for monetary assessment and sensitivity analysis of the results.

2 Social Return on Investment Framework

2.1 Overview

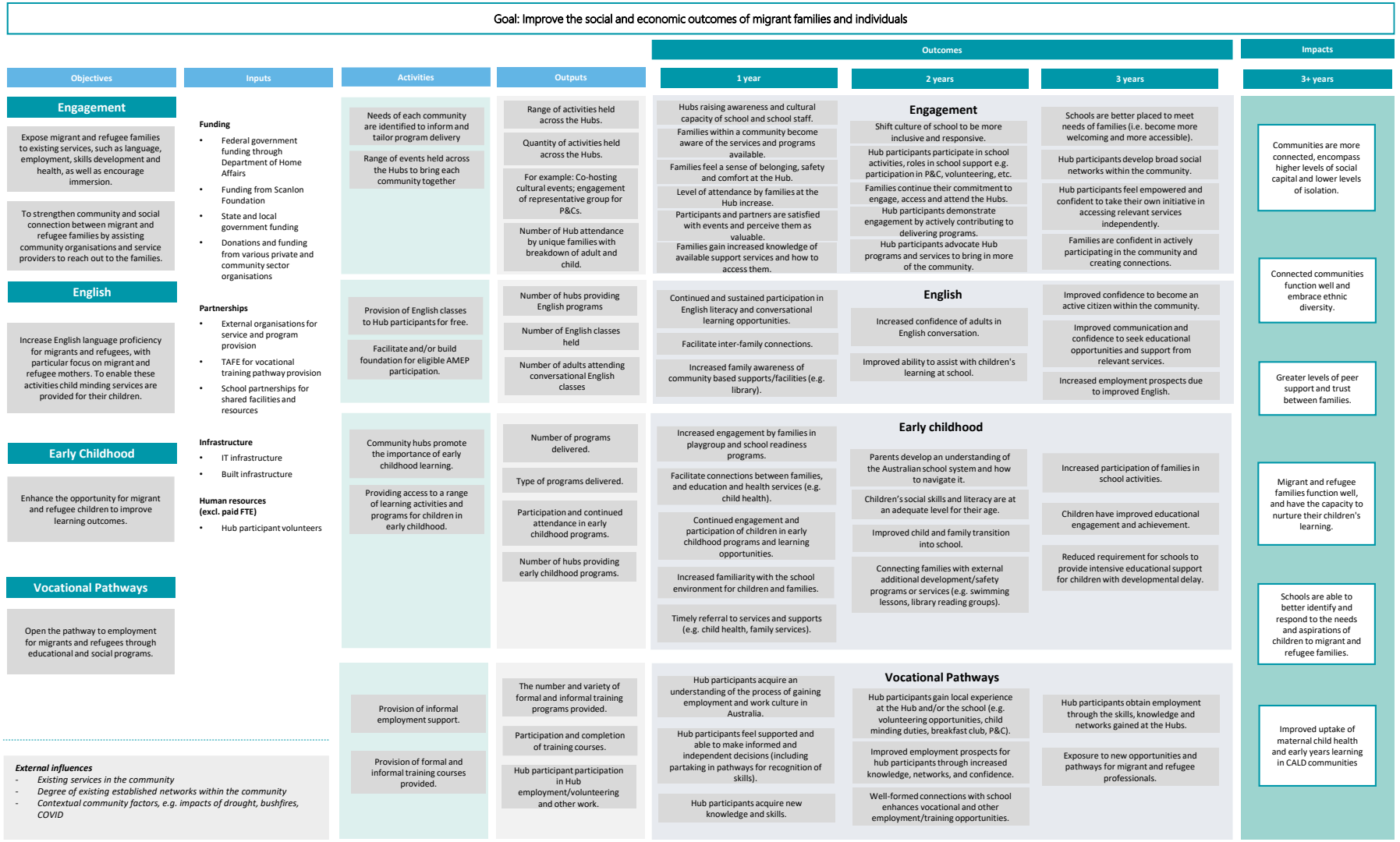
This chapter outlines the theoretical approach to measuring the impact of the NCHP and assessing the SROI. The measurement of the SROI of the NCHP in 2019 is guided by this framework.

2.2 Program logic model

A program logic model is used to identify and map out the broad range of impacts of the NCHP and forms the basis of the SROI framework. It provides a pictorial representation of what the program is intended to do and where it is expected to lead. It identifies the intended outcomes to monitor and evaluate the likelihood of continued success or if there is need to take corrective action.

Through collaborative consultation with CHA, a program logic model was developed (Figure 2.1). This model was developed based on CHA's objectives and mission as detailed on their website. From this, outcomes were identified across both short and long-term time frames, as well as intended long-term impacts. The outcomes are detailed within the program logic below.

Figure 2.1 National Community Hubs Program logic model



Source: Deloitte Access Economics

2.3 Social impact framework

The social impact framework below builds on the program logic. For each unique outcome, reporting measures were developed. For those outcomes reported in the findings, the framework identifies the key assumptions and whether the outcome is reported using qualitative descriptions, quantitative data, or monetary value (a dollar value placed on the outcome).

An abridged version of the framework developed to guide the analysis is provided in Table 2.1 and provided in full in Appendix A.

Table 2.1 Abridged social impact framework

Outcome	Data source	Approach
Engagement		
The value of increased confidence, social participation, engagement, and connections	CHA portal data, participant survey, literature	Monetised
Value of contribution to hub program delivery and in-school activities	CHA portal data, literature, principal survey	Monetised
Value of school-based activities and initiatives that contribute to inclusion and cultural representativeness	Participant survey, stakeholder interviews, principal survey	Quantitative and qualitative
Families experience improved access to services and supports they needs	CHA portal data, participant survey, stakeholder interviews	Quantitative and qualitative
English		
Value of increased confidence due to English	Participant survey, stakeholder interviews	Quantitative and qualitative
Early childhood education		
Value of improved educational engagement	Participant survey, stakeholder interviews, literature	Monetised
Value of reduced need for intensive learning intervention	CHA portal data, participant survey, principal survey, literature	Monetised
Value of family participation and engagement in school activities and the school community	Principal survey	Quantitative and qualitative
Vocational		
Value of external paid employment that would be forgone had the Hub not existed	CHA portal data, literature	Monetised

3 The Social Impact of the National Community Hubs Program

3.1 Overview

This chapter presents the key findings of the social impact of the National Community Hubs Program. A summary of the key findings related to each is presented in Table 3.1. Monetary values have only been estimated for those with sufficient evidence and data to do so.

Table 3.1 Summary of findings

Finding	Outcome	Key finding
Engagement		
2.1	The value of increased confidence, social participation, engagement and connections	**Quality of life improvements** for adults participating in community hubs is valued at **$20.3 million** in 2019.
2.2	Value of volunteer contributions to hub program delivery and in-school activities	The **volunteer support** contributed by hub participants in running and facilitating events at community hubs and schools is valued at **$307,390** in 2019.
2.3	Value of school-based activities and initiatives that contribute to inclusion and cultural representativeness	Evidence from consultations with hub leaders identifies that **community hubs enhance the welcoming and culturally inclusive activities of schools.**
2.4	Families experience improved access to services and supports they needs	Approximately **53.4 per cent of hub participants** identify that they are **more satisfied with their access to health and support services** after participating in a community hub.
English		
3.1	Value of increased confidence due to English	**84.7 per cent of hub participants improve their English speaking and reading** competency through participation in community hubs. Evidence from hub leader interviews and survey data shows that people feel **more confident to engage in society due to improved English competency.**

Early childhood education		
4.1	Value of improved educational engagement	Through participation in community hub programs, **children experience life-time benefits valued at $4.6 million** related to improved school readiness.
4.2	Value of reduced need for intensive learning intervention	**Schools are expected to save approximately $360,889** due to reduced need to provide intensive educational supports throughout primary school for children who participated in the community hub in 2019.
4.3	Value of family participation and engagement in school activities and the school community	School principals estimate that more than **55.0 per cent of hub participants** with school-aged children **improve their engagement in school activities** and the school community, due to participation in the community hub.
Vocational		
5.1	Value of external paid employment that would be forgone had the Hub not existed	**Hub participants have gained employment directly due to participation in the community hub.** The value of this employment equals **$8.4 million** in 2019.

Source: Deloitte Access Economics

3.2 Engagement

This section presents the impacts of the NCHP on engagement with the broader society in 2019.

3.2.1 The value of increased confidence, social participation, engagement and connections

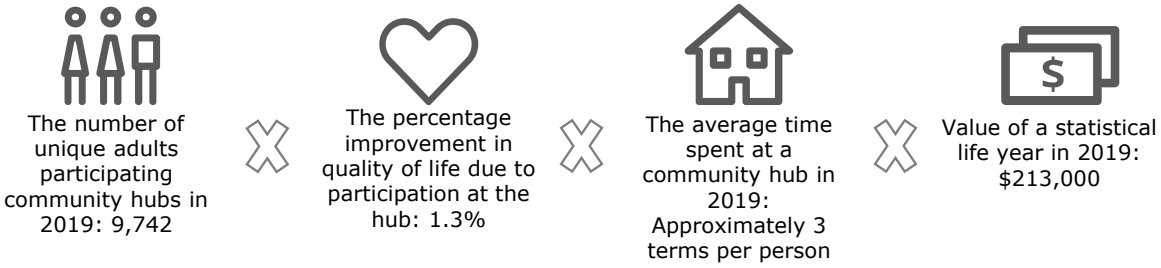
Finding 2.1

Quality of life improvements for adults participating in community hubs was valued at $20.3 million in 2019.

Finding

The community hub program is estimated to have increased the quality of life of participants by approximately 1.3 per cent, equating to a value of $20.3 million in 2019 – $2,080 per participant. This value is calculated as per Figure 3.1, which is explained in greater detail in Appendix B.

Figure 3.1 The calculation of quality of life improvements associated with participation at the community hub

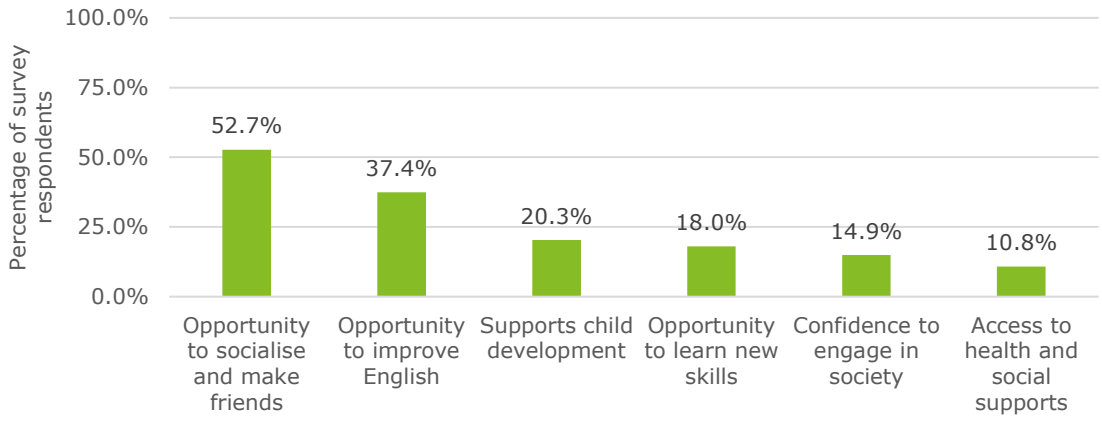


Notes: See Appendix B for additional detail on calculations, data sources and evidence
Source: Deloitte Access Economics

Context and evidence

Improvements in quality of life due to participation in community hubs is enabled by a range of factors. Evidence from the hub participant and volunteer survey (2021) shows that opportunities to socialise and make friends was the most common reason identified for how participation in hubs improves quality of life (52.7 per cent of hub participants). This is followed by opportunities to improve English language (37.4 per cent), child development through educational programs and access to support services (20.3 per cent), and opportunities to learn new skills (18.0 per cent), as show in (Chart 3.1).

Chart 3.1 Identified reasons of how participation in community hubs improves quality of life



Notes: N=234
Source: Deloitte Access Economics analysis using the CHA hub participant and volunteer survey 2021

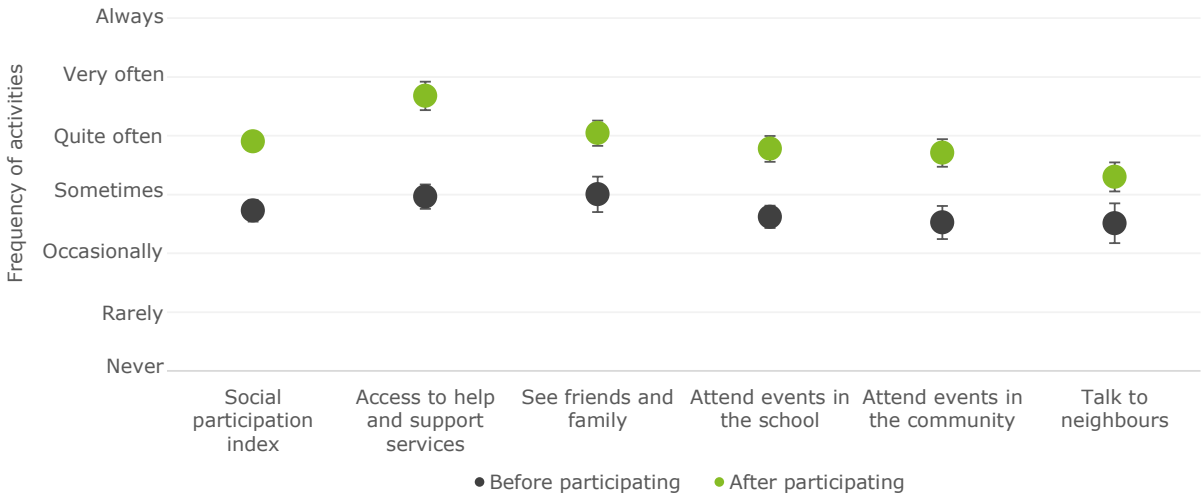
Evidence from consultations with hub leaders highlights the impact of improving the engagement of migrant families with broader society on a person's quality of life. When migrant families first arrive to Australia, they often face significant barriers to participating in their new communities. Many people do not speak English well, do not know how to access support services available to them, and have limited support networks within the community. This leads to families becoming socially isolated, with survey results from hub leaders estimating that approximately 70.0 per cent of newly arrived migrants feel socially isolated when first engaging with the community hub.[8] This is supported by results from the participant and volunteer survey (2021) which indicates that 65.0 per cent of hub participants saw friends and family 'sometimes' or 'rarely'.

Barriers such as knowledge of English language and 'fear of the unknown' reduce a migrant's willingness or confidence to engage in society.[9] This includes limiting a person's confidence to visit a GP, to talk with their child's teacher or neighbour, or even to eat at restaurants in fear of not understanding the menu.

For many migrants, community hubs provide families with their first opportunity to engage in society, in a comfortable and non-judgemental environment, and with people who have shared experiences. From here, participants form important social relationships and participate in other programs offered by the hub, including English classes, mental and physical wellbeing classes such as yoga and Zumba, and skill development through courses in floristry and barista training. Hub participants also gain more formal qualifications, with some examples including Certificate IV in Education Support, Certificate III in Aged Care, and Certificate III in Community Services. Throughout this process, hub participants build their confidence and community connections, helping them to break-down cultural barriers and reducing their feelings of social isolation.

Evidence from the participant and volunteer survey (2021) shows the degree to which community hubs impact the extent that families participate in broader society (Chart 3.2). The survey asked respondents to identify the extent to which they participated in society prior and after engaging in community hubs. In this case, social participation was measured across five dimensions. Overall, 84.5 per cent of hub participants showed an improvement in social participation (as measured by the social participation index) after participating in community hubs, with the largest improvement in access to support services and attending events in the school and community.

Chart 3.2 Measures of extent to which hub participants engaged in society, mean scores before and after participating in the community hub



Notes: N=234. Bars are confidence intervals at 95% significance level. Social participation index is an average score of the five domains of social participation.
Source: Deloitte Access Economics analysis using the CHA hub participant and volunteer survey 2021

[8] Hub leader survey results for the question: The proportion of migrants who feel socially isolated before attending the community hub?
[9] Findings from hub leader interviews.

3.2.2 Value of contributions to hub program delivery and in-school activities

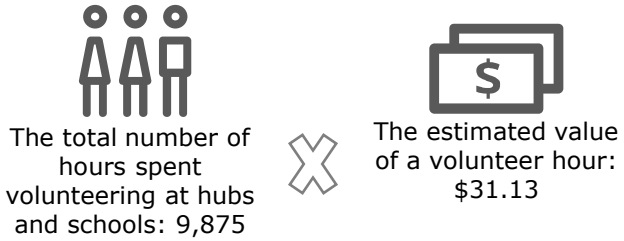
Finding 2.2

The volunteer support from hub participants in running and facilitating events at community hubs and schools was valued at $307,390 in 2019.

Finding

Community hub participants are estimated to have spent 5,530 hours contributing towards hub activities, and a further 4,346 hours contributing towards school-based activities in 2019. This equates to an economic value of $307,390 of contribution to society through volunteering, including $172,124 associated with facilitating programs at the hub and $135,266 associated with facilitating programs in the school. This value is calculated as per Figure 3.2, which is explained in greater detail in Appendix B.

Figure 3.2 The calculation of the value of volunteering by hub participants in 2019



Notes: See Appendix B for additional detail on calculations, data sources and evidence
Source: Deloitte Access Economics

Context and evidence

Community hubs provide volunteering opportunities such as running playgroups, classes and events. Schools provide volunteering opportunities as classroom assistants, partaking in excursions and other education aid positions.

Evidence from the participant and volunteer survey (2021) suggests that as many as 33.2 per cent of hub participants will volunteer with the hub at some stage. Of these, 59.0 per cent volunteer for more than a year, and 29.5 per cent volunteer for more than two years. The average time spent volunteering at the hub per week is just over 5.2 hours.

Evidence from consultations with hub leaders identifies that volunteering opportunities at hubs provide more than experience; they develop a sense of pride and purpose in volunteers who become further validated through the acquisition of official documentation such as a blue card in order to partake in these opportunities. The volunteering roles taken up by participants are aligned to their interests, and in some cases lead to employment opportunities in roles like learning assistants.

As such, the value of volunteering may exceed the valuation method utilised here. This is because the replacement valuation method utilised does not account for the private value or the social value of volunteering. These were not estimated due to insufficient data, as well as to prevent double-counting benefits monetised in other sections (such as quality of life improvements). It should be noted, however, that this method may overestimate the economic value of volunteering because while the average volunteer may be more enthusiastic than the average employee doing the same work, they are often not as skilled.

3.2.3 Value of school-based activities and initiatives that contribute to inclusion and cultural representativeness

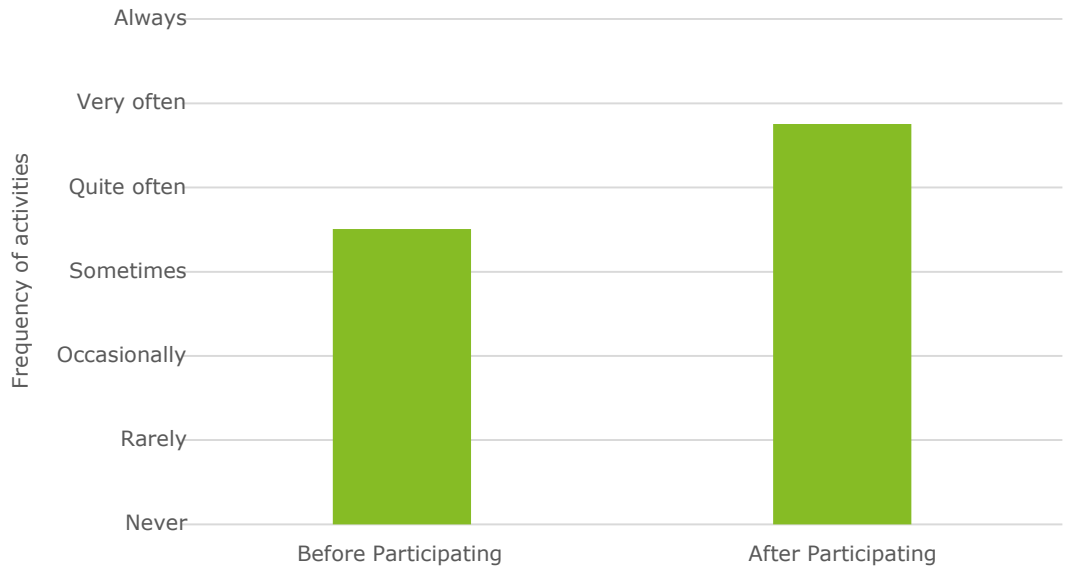
Finding 2.3

Evidence from consultations with hub leaders identifies that community hubs enhance the welcoming and culturally inclusive activities of schools.

Finding

Evidence from interviews with community hub leaders, as well as survey results from the school principal survey (2021), indicates that community hubs contribute to the inclusion and cultural representativeness of schools. Furthermore, evidence from the participant and volunteer survey (2021) shows that migrant families with children are more likely to participate in school events and activities after participating in the community hub (Chart 3.3). This suggests that community hubs contribute to improving the likelihood that families will engage with the school and school activities.

Chart 3.3 Mean responses before and after participating in the community hub to the question: "To what extent do you attend events at the local school in Australia?"

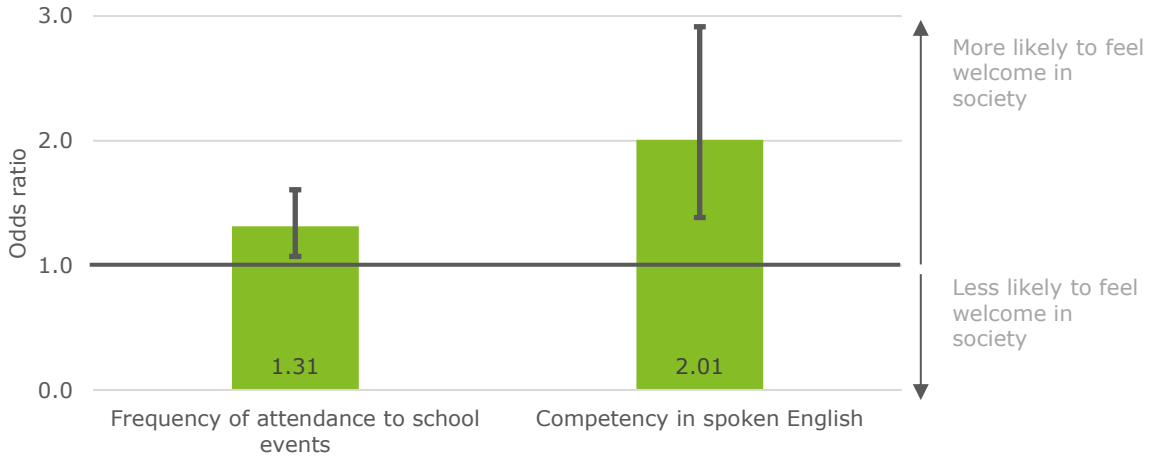


Notes: N=155 Bars are confidence intervals at 95% significance level.
Source: Deloitte Access Economics analysis using the CHA hub participant and volunteer survey 2021

Context and evidence

Hub leaders identified that schools are, for many migrant families, one of the primary institutions that people engage with when first arriving to Australia. Therefore, schools can play an important role in increasing the degree to which migrant families feel welcome and included in society. Results from the participant and volunteers survey (2021) shows that this may be true. Specifically, people from migrant families that more frequently attend school events were 1.31 times more likely to feel included in society, prior to engaging with the community hub (Chart 3.4). This suggests that people who felt more comfortable to attend school events also felt more welcome in society. Although, the causation in this relationship is not clear.

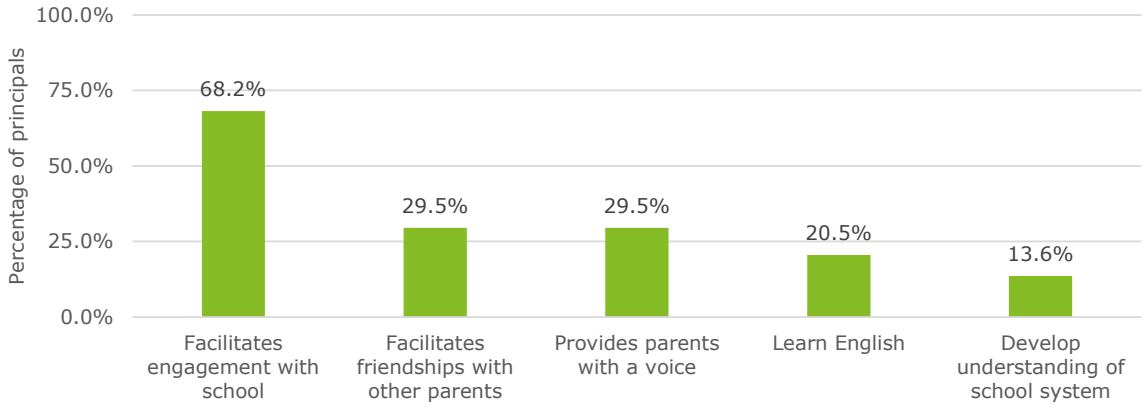
Chart 3.4 Odds ratios relating a person's feelings of being included and welcome in society, and the degree to which they engage with schools and speak English language, prior to engaging with the community hub



Notes: N=161 Bars are confidence intervals at 95% significance level.
Source: Deloitte Access Economics analysis using the CHA hub participant and volunteer survey 2021

School principals identify that community hubs play an important role in increasing the inclusivity of local schools, mainly because hubs provide a 'soft-entry' platform to engagement with the local school for new families (Chart 3.5). Further, engagement with community hubs can provide those families that are low in confidence and English competency with a 'voice' as the hub is able to facilitate conversations with school teachers and leaders.

Chart 3.5 School principal perceptions: The main reasons the community hub impacts the inclusivity of the local school



Notes: N=59
Source: Deloitte Access Economics analysis using the CHA school principal survey 2021

3.2.4 Families experience improved access to services and supports they need

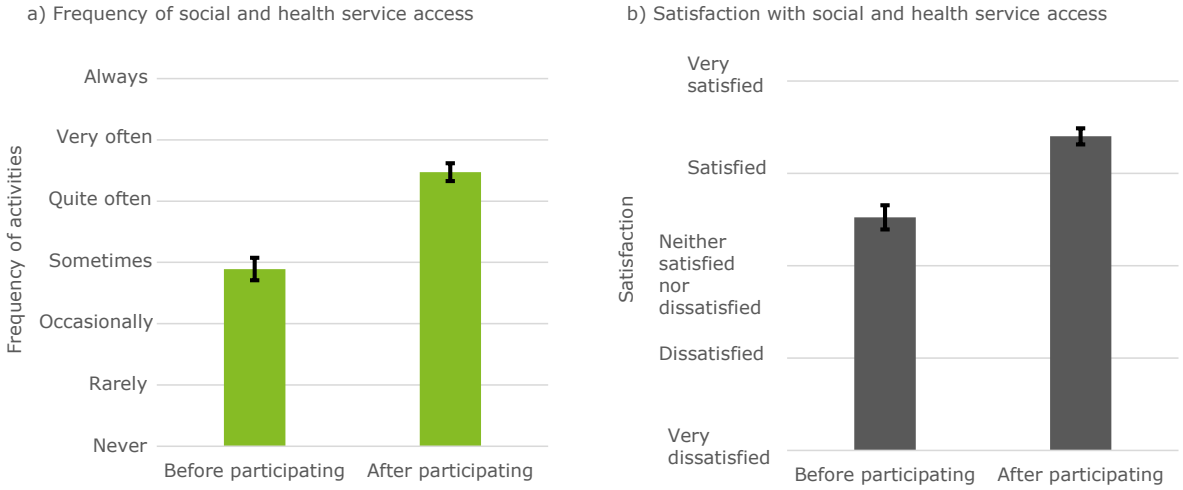
Finding 2.4

Approximately 53.4 per cent of hub participants identify that they are more satisfied with their access to health and support services after participating in a community hub.

Finding

Evidence indicates that community hubs contribute to improved access to health and social services to meet the needs of migrant families. Results from the hub participant and volunteer survey (2021) show that approximately 53.4 per cent of hub participants have experienced an increase in satisfaction with their access to health and social services since participating in the community hub. Further, the average hub participant has increased their utilisation of health and social services since participating in community hubs (Chart 3.6).

Chart 3.6 Frequency and satisfaction with access to social and health services, mean responses before and after participating in a community hub



Notes: N=222. Bars are confidence intervals at 95% significance level.
Source: Deloitte Access Economics analysis using the CHA hub participant and volunteer survey 2021

Context and evidence

Hub leaders identified two key barriers to service access for newly arrived migrants:

- **Knowledge of the Australian support system, how to access services, and what services are available**. Hub leaders identified that just 20.0 per cent of migrant families are aware of the support programs and services available to them before attending the community hub.[10]
- **Confidence and comfort to engage in support and health services.** Hub leaders identified a range of factors contributing to this, including the English language competency of people and a lack of trust in western medicine.

Community hubs break down these barriers by providing services at the hub facility, directly referring families to services, or providing information about the services available to families. Further, hubs build trust in the support services by acting as the mediator between newly arrived migrant families and the support system, sometimes even bringing the likes of child health nursing services and allied health into the hub to provide services and raise familiarity and awareness of the support systems available to people in their community.

[10] Hub leader survey results for survey question: What proportion of migrants are aware of the support programs and services available to them before attending the community hub?

Hub leaders estimate that access to health and support services increases for approximately 80 per cent of families who attend a community hub. In 2019, community hubs made 13,669 referrals for approximately 4,108 participants to social, health, early childhood, and skills and development services. A breakdown of these services is presented in Table 3.2.

Greater access to health services for migrant families can lead to long-term benefits, such as improved health and quality of life, avoided medical costs due to early intervention, and greater productivity through improved abilities to work. However, these long-term impacts were unable to be measured in this evaluation due to data limitations.

Table 3.2: Referrals by type and frequency

Referral type	Number of referrals
Social services	
Family support	2,684
Migrant resource and settlement	912
Domestic and family violence	281
Financial counselling	281
Accommodation	159
Total social services	*4,317*
Health services	
Community health centres	789
Child health and maternity	773
General practitioners	556
Emergency aid	457
Total health services	*2,575*
Early childhood services and programs	
Preschool	1,247
Early intervention programs	870
Total early childhood services and programs	*2,117*
Skills and development services	
Education and training	1,178
Total skills and development services	*1,178*
Other services	***3,482***
Total referrals	**13,669**

Source: Deloitte Access Economics analysis using CHA portal activity and referral data 2019

3.3 English

This section presents the impacts of the NCHP on English language attainment of participants in 2019.

3.3.1 Value of increased confidence due to English

Finding 3.1

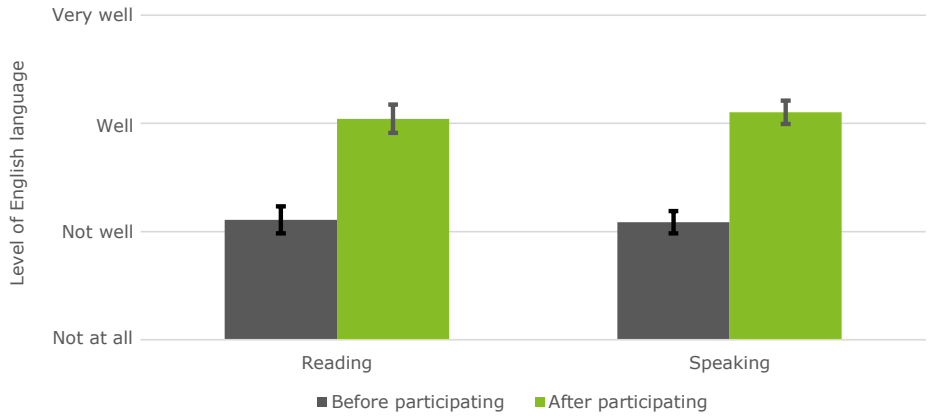
Evidence from hub leader interviews and survey data shows that people feel more confident to engage in society due to improved English competency

Finding

English language competency plays a role in each of the other strategic goals of the NHCP. Therefore, the development of English competency is a key driver of the success and outcomes of the NCHP, and it will be a major contributor to all the benefits, both monetised and not monetised, discussed throughout this report.

Community hubs play an important role in improving English competency of newly arrived migrants. Overall, 84.7 per cent of adults improved their English language capabilities while participating in community hubs. The average participant in community hubs experienced improved reading and oral English language competency from a rating of 'not well' to 'well' (Chart 3.7).

Chart 3.7 Self-rated English language competency of hub participants, before and after participating in the community hub

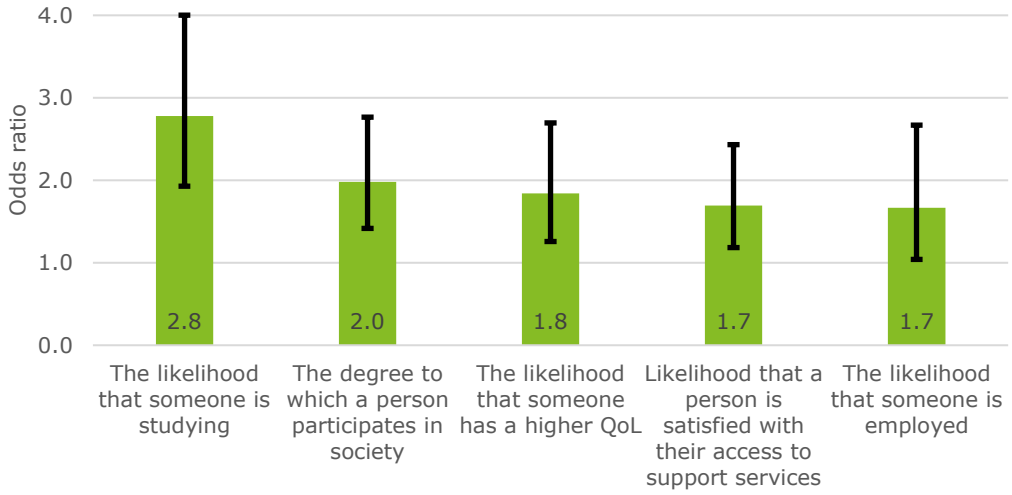


Notes: N=186. Bars are confidence intervals at 95% significance level.
Source: Deloitte Access Economics analysis using the CHA hub participant and volunteer survey 2021

Results from the participant survey show that, overtime, English competency is associated with improved outcomes and greater engagement in society (Chart 3.8). Specifically, hub participants with a higher level of English language competency are:

- 2.8 times more likely to have studied higher education, or are currently engaged in study
- 2.0 times more likely to frequently socially engage in society
- 1.8 times more likely to report a higher level of quality of life
- 1.7 times more likely to be satisfied with their access to health and support services
- 1.7 times more likely to be employed.

Chart 3.8 Odds ratios relating a higher competency in English language with quality of life (QoL), social participation, satisfaction with services and likelihood of participating in employment or study



Notes: N=186. Bars are confidence intervals at 95% significance level.
Source: Deloitte Access Economics analysis using the CHA hub participant and volunteer survey 2021

Context and evidence

Evidence from consultations identified that English language competency of recently arriving migrant families serves as the enabling factor that facilitates greater social engagement, parent involvement in child development, and employment. This is consistent with evidence found in the literature linking a migrant's proficiency in English to education and employment,[11] as well as quality of life and social engagement.[12] Consequently, benefits measured and monetised throughout the domains of engagement, early childhood education, and vocational outcomes are attributable in part to improvements in English language competency.

Consultations with hub leaders identified English language competency as the highest need of migrant families when they first start participating in a community hub. Approximately 69.5 per cent of adults that engage in a community hub for the first time report that they speak and read the English language 'not well' or 'not at all'.[13] Of these families with poor self-reported English, 92.3 per cent participate in English language programs held at the hub.

Consultations highlight that English language programs facilitated by community hubs have been successful in terms of adoption, retention, and effectiveness due to the flexibility and practicality of the program structures. More specifically:

- English taught through community hubs is seen by participants to be more useful for developing practical and conversational English skills than programs held at TAFE (such as AMEP).
- Community hubs are more flexible and easier to attend for migrant families, compared to programs held in learning institutions. Families are allowed to bring their children along to English classes at hubs, with many hubs also providing child minding programs (both formal and informal) that occur concurrently with the English language program.

[11] Blake, H.L.; Mcleod, S.; Verdon, S.; and Fuller, G. (2018). The relationship between spoken English proficiency and participation in higher education, employment and income from two Australian censuses. International Journal of Speech-Language Pathology, 20(2), 202-215.
[12] Khawaja, N.G. and Hebbani, A. (2019). Factors impacting life satisfaction of refugees in Australia: A mixed method study. The Australian Community Psychologist, 30(1), 30-50.
[13] Participant and volunteer survey results for survey questions: Please provide a response to your level of English language proficiency in reading; Please provide a response to your level of English language proficiency in speaking.

- Community hubs have a broader variety of opportunities to learn English, including formal and informal programs, skill development programs, and English programs of varying difficulty. This is different to TAFE, which teaches English in a more academic structure.

In some areas, hub leaders identified that they were collaborating with local learning institutions to facilitate English programs in the hub, as learning institutions recognised the advantages of utilising the hub to better engage migrants.

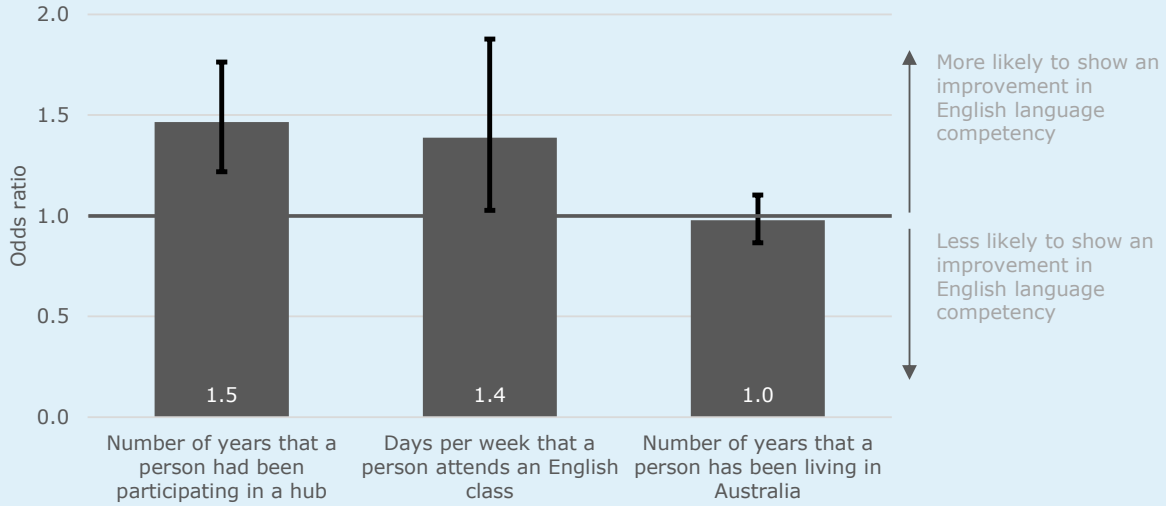
Other enablers of improved English language competency associated with hub participation are discussed in Box 3.1.

Box 3.1: The enablers and drivers of improved English language competency

Analysis of the participant and volunteer survey (2021) shows improvement in English competency is enabled or driven by several factors associated with participation at a hub (Chart 3.9). Findings include:

- **Length of participation at hubs is associated with improved English language:** Hub participants who have participated in the community hub for one additional year are 1.4 times more likely to show an improved level of English language competency. This is independent of the degree to which hub participants engage in English classes, indicating that participants have opportunities to learn English across a variety of hub activities (not solely from English classes).
- **Greater engagement in English classes is associated with improved English competency:** Hub participants who participate in English classes at hubs for an additional day per week are 1.4 times more likely to show an improved level of English language competency.
- **There is no relationship between the time that someone has lived in Australia and their improvement in English language:** This indicates that participation in hubs, or other programs, is an important driver of improving English language competency of newly arrived migrants.

Chart 3.9 Odds ratio associating the likelihood that some experiences improvements in English language competency with other variables



Notes: N=127. Bars are confidence intervals at 95% significance level.
Source: Deloitte Access Economics estimates using the CHA hub participant and volunteer survey 2021

3.4 Early childhood education

This section presents the impacts of the NCHP on early childhood development in 2019.

3.4.1 Value of improved educational engagement

Finding 4.1

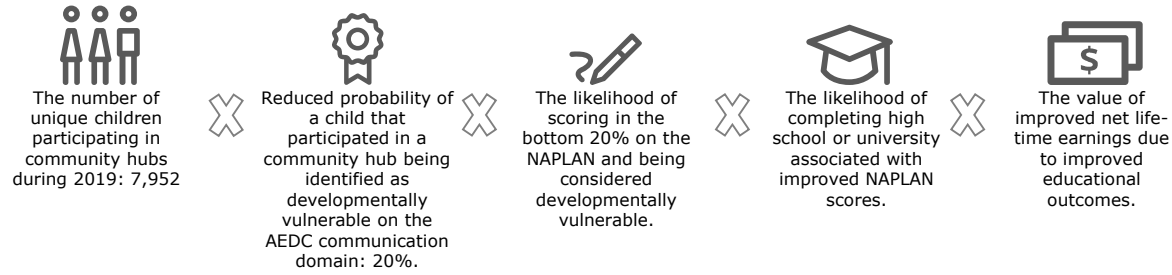
Through participation in community hub programs, children experience life-time benefits valued at $4.6 million related to improved school readiness.

Finding

Community hubs are estimated to improve educational outcomes for children through participation in playgroups and improving parent engagement in early education. Overall, the lifetime benefits associated with improved educational outcomes is valued at $4.6 million in 2019. This is associated with hubs facilitating the improvement of educational outcomes of children, resulting in increased lifetime earnings in the long-term.

Overall, it is estimated that participation at the community hub in 2019 could result in improved lifetime earnings of approximately $580 per child participating in community hubs in 2019 on average, discounted to present value terms. This value is calculated as per Figure 3.3, which is explained in greater detail in Appendix B.

Figure 3.3 The calculation of improved educational outcomes associated with participation at the community hub



Notes: See Appendix B for additional detail on calculations, data sources and evidence. Changes in net life-time earnings that are directly linked to participation in community hubs is discounted to 2019 dollar value using a real discount rate of 4%.
Source: Deloitte Access Economics

Context and evidence

Child development is a key focus of community hubs throughout Australia. According to the participant and volunteer survey (2021), approximately 56.2 per cent of families are estimated to engage in child development activities within community hubs in 2019, with approximately 7,952 children participating in hubs throughout the year. For approximately 90.0 per cent of families, the hub playgroups are the first early years programs they engage with in Australia.[14] Therefore, community hubs play an important role in supporting the development of children from migrant families prior to engaging in school.

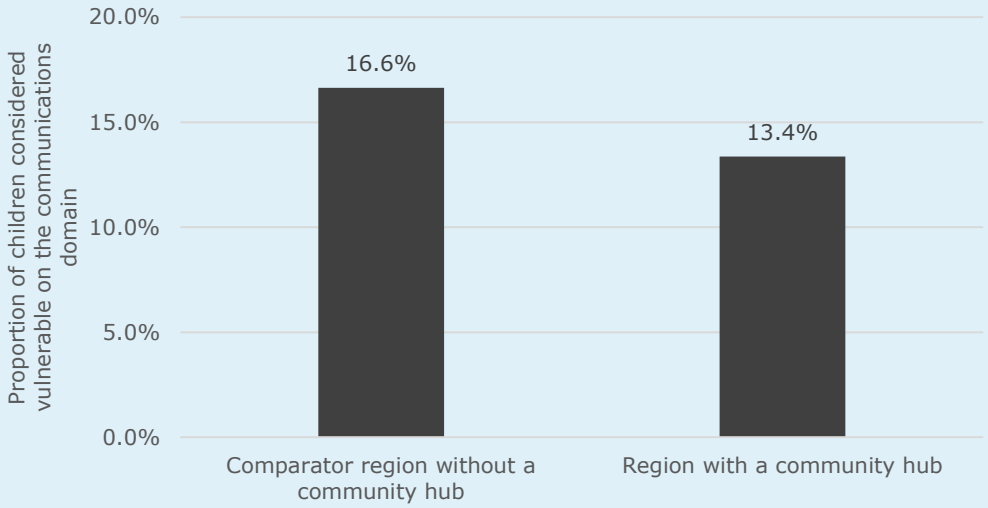
There is evidence to suggest that community hubs are having a tangible impact on the development and school readiness of children. Approximately 65.0 per cent of school principals surveyed (2021) identified that community hubs are improving school readiness and child development through improved language, social, communication and behavioural skills and habits. Box 3.2 details further evidence of the impact of community hubs on school readiness, highlighting the potential impact of community hubs on AEDC results, particularly the proportion of children considered developmentally vulnerable on the communication domain.

[14] Hub leader survey results for survey question: What is the proportion of migrant families that participate in Playgroups before attending the community hub?

Box 3.2: The association between community hubs and improvements in AEDC developmental vulnerability

To understand the potential impact of community hubs on developmental vulnerability, a weighted difference-in-difference analysis was conducted to measure if community hubs contributed to reducing the proportion of children considered developmentally vulnerable through in the AEDC. The analysis found that SA2 regions that had a community hub since 2013 tended to record a lower percentage of children considered developmentally vulnerable on the communication domain over the period 2015 to 2018, falling from 16.8 per cent to 13.4 per cent – an improvement of approximately 3.4 percentage points (Chart 3.10). These findings were demonstrated to be robust once controlling for other known factors influencing developmental vulnerability, such as income, level of disadvantage, and percentage of Aboriginal and/or Torres Strait Islander children in an SA2. See Appendix B for a more detailed description of the analysis and its limitations.

Chart 3.10 Estimated proportion of children considered vulnerable on the communication domain (AEDC) over period 2015 to 2018



Notes: N=2,586
Source: Deloitte Access Economics estimates using AEDC and ABS data

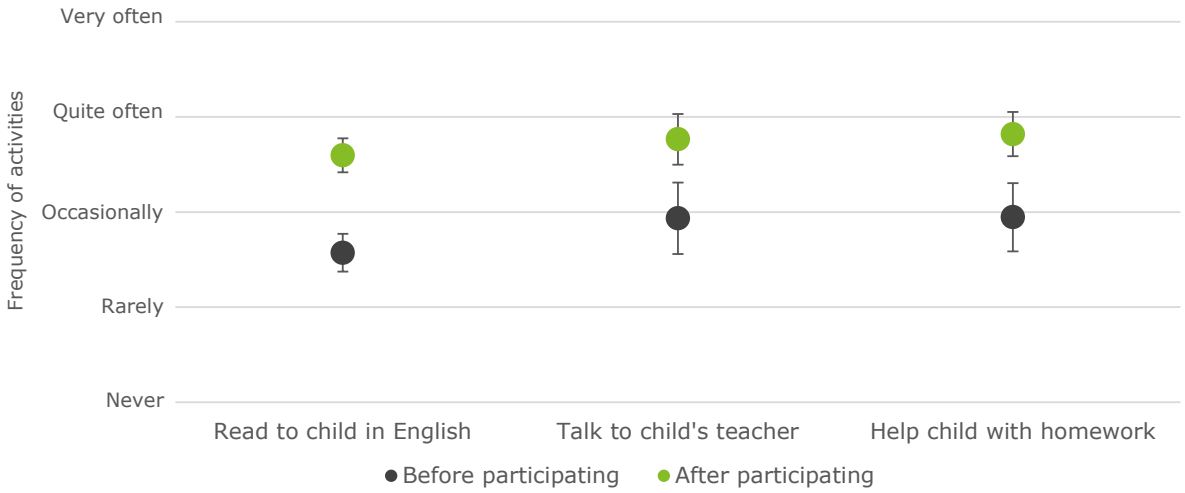
Evidence from consultations with hub leaders shows that community hubs impact the development of children in a variety of ways, including:

- Community hubs facilitate parents and children to become familiar with the school, the school principal, and school teachers. This improves the level of comfort for parents and children in engaging with people at the school.
- The hub supports and facilitates interactions and relationship building between parents and teachers. Parents often feel intimidated to talk to teachers, particularly if they do not speak English well. Community hubs support parents to improve their English and provide guidance and support to parents when preparing for meetings and interactions with their child's teacher.
- Playgroups support child development across several domains, including social skills, communication skills, cognitive development, and physical development. Playgroups also increase engagement of parents in their child's development by actively involving parents in the sessions. Playgroups at community hubs are often based on a structured framework and are run by an experienced teacher aide.

The impact of community hubs on parent engagement in their child's education is elevated when considering the specific barriers that parents from migrant backgrounds face to engage in their child's education. Consultations with hub leaders highlighted that many parents did not feel confident to engage in their child's education due to a combination of limited education and English competency. Further, cultural barriers exist which emphasise a separation between education and home for families.

The participant and volunteer survey (2021) highlights the important impact that community hubs are having in parent engagement in child development. Overall, parents are more likely to be involved in their child's education after participating in the community hub. This includes: being more likely to read to their child in English at home; being more likely to engage and talk to their child's teacher about their education; and being more likely to support their child with their homework in the house (Chart 3.11).

Chart 3.11 Mean scores of measures of extent to which parents are involved in their child's development, before and after participating in the community hub



Notes: N=174. Bars are confidence intervals at 95% significance level.
Source: Deloitte Access Economics estimates using the CHA hub participant and volunteer survey 2021

Box 3.3 below provides evidence from the participant and volunteer survey (2021) about the drivers and enablers of increased parent engagement in their child's education across community hubs.

Box 3.3: Contributions to improved engagement in child development of hub participants

Analysis of the participant and volunteer survey (2021) shows that improvement in parent engagement with their child's development is enabled or driven by several factors associated with participation at a community hub (Chart 3.12). Findings include:

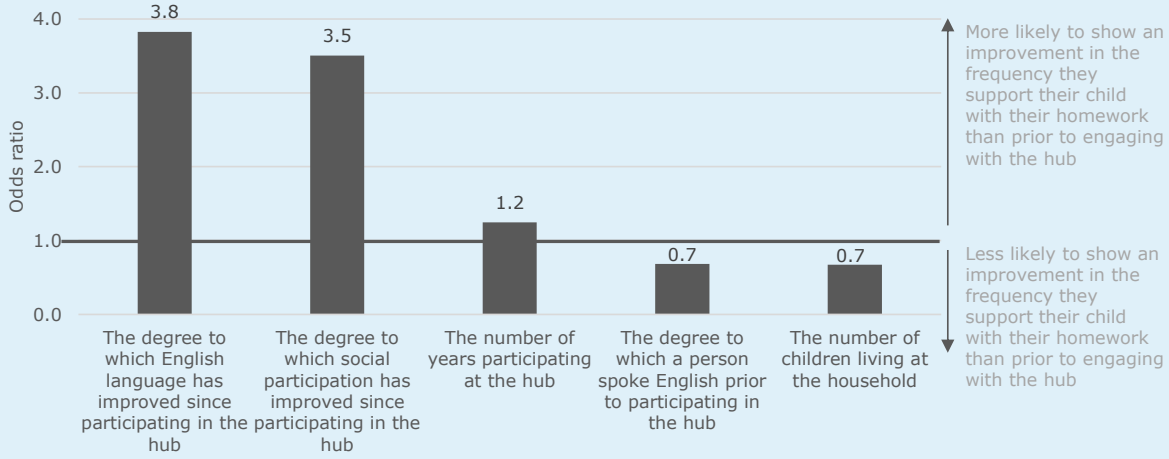
- **English language competency is associated with improved parent engagement in their child's education:** Parents who show improved levels of English language competency during their engagement with a hub are 3.8 times more likely to show improvement in the frequency that they support their child with their homework.
- **Participation in society is associated with improved parent engagement in their child's education:** Parents who show improved levels of social participation during their engagement with a hub are 3.5 times more likely to show improvement in the frequency that they support their child with their homework.
- **The longer a parent engages with a hub, the more likely they are to engage in their child's education:** Parents who have engaged with a hub for an additional year are 1.3 times more likely to show improvement in the frequency that they support their child with their homework.

Several factors appeared to reduce the frequency that parents support their child in completing homework, including:

- **Parents with low competency in English language when initially engaging with a hub tend to improve their engagement in their child's education at a slower pace:** Parents who had a low level of English language competency prior to engaging with a hub are 0.68 times as likely to show improvement in the frequency that they support their child with their homework.
- **Parents who have more children are less likely to show improvement in engagement in their child's education:** Parents who have one additional child living at their household are 0.7 times as likely to show improvement in the frequency that they support their child with their homework. This may be due to parents with more than one child having less time to dedicate to supporting their child's education in the home.

Overall, the findings show that greater exposure to a community hub, as well as improved English language competency, is associated with improved support and engagement in their child's education and development.

Chart 3.12 The drivers of greater parental support for their child's homework



Notes: N=146.
Source: Deloitte Access Economics estimates using the CHA hub participant and volunteer survey 2021

3.4.2 Value of reduced need for intensive learning intervention

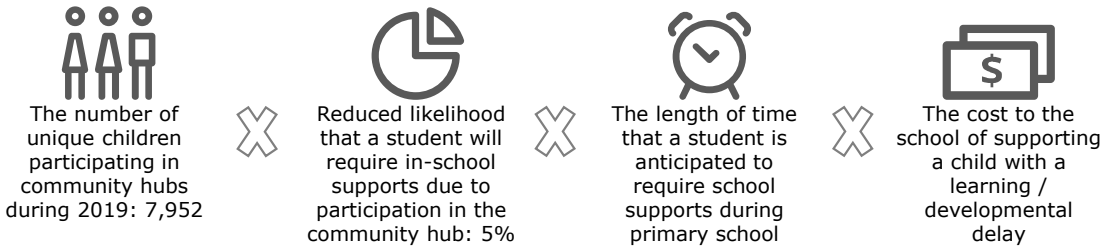
Finding 4.2

Schools are expected to save approximately $360,889 due to reduced need for primary schools to provide intensive educational supports for children who participate in the community hub in 2019.

Finding

Community hubs are estimated to improve child development by increasing access to health services which facilitate early diagnosis of developmental delays, as well as through educational and parenting programs to support the development of a child prior to commencing school. Results from the school principal survey (2021) identifies that participation in community hubs reduces the likelihood that a student from a migrant background will require additional in-school supports when enrolled at the school. It is estimated that the costs saved due to the reduced need of in-school supports equates to $360,889 in 2019. This value is the present value of the estimated cost savings throughout primary school (from age 6 to 12). This value is calculated as per Figure 3.4, which is explained in greater detail in Appendix B.

Figure 3.4 The calculation of reduced need for in-school supports due to participation in the community hub



Notes: See Appendix B for additional detail on calculations, data sources and evidence. Changes to the costs throughout primary school associated with a reduced need for development delays that is directly linked to student participation in community hubs is discounted to 2019 dollar value using a real discount rate of 4%.
Source: Deloitte Access Economics

Context and evidence

By supporting child development, community hubs play an important role in supporting early diagnoses of developmental delays in children. This has important ramifications to the ability of children with developmental delays to get the supports they need in a timely manner, leading them to be more prepared for commencing school.

Many families face barriers in accessing health and support services for their child, such as knowledge of the system and confidence to engage with services. The NCHP plays an important role in breaking down these barriers by facilitating service access within hubs, direct referrals to services and providing information about services to community members (see section 3.2.4 for a discussion on this).

In 2019, community hubs facilitated access to services related to child health and development, including:

- Approximately 16.7 per cent of families with children accessed maternal and child health services, accounting for 773 activities in 2019
- Approximately 5.8 per cent of families with children accessed early intervention services through the hub, accounting for 870 activities in 2019
- Approximately 38.4 per cent of families with children were referred to preschool programs through the hub, accounting for 1,247 referrals in 2019.

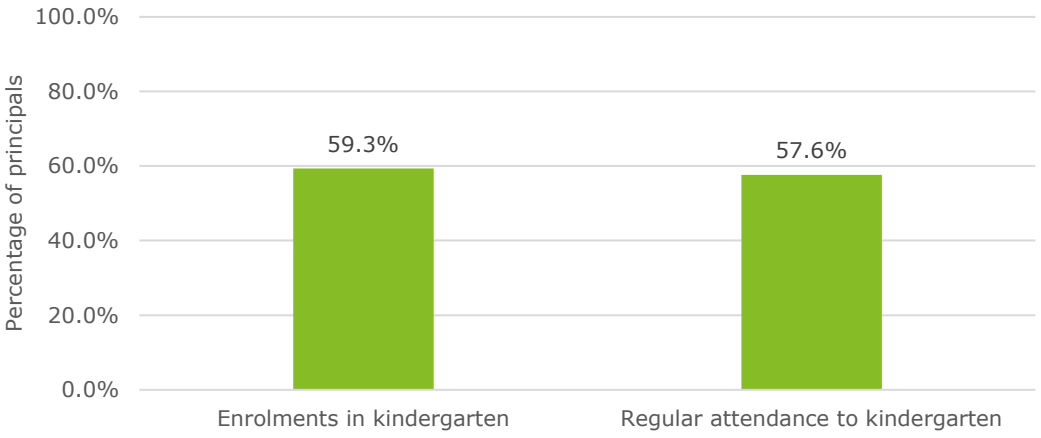
Evidence suggests that many children receive delayed diagnosis of learning and development difficulty, with the average delay in diagnosing children with autism being approximately 2.2

years.[15] Community hubs provide access to child health services, which are important to ensuring that families receive early diagnoses of development delays and access supports for their child. Community hubs further facilitate access to health professionals and support services which could lead to improved developmental progress of children and reduced in-school costs as they enter school.

Further, community hubs facilitate access to kindergarten. The evidence-base of the relationship between participation in kindergarten and child development is significant.[16] However, many families face barriers in accessing and regularly attending kindergarten, with evidence showing that people from low socio-economic backgrounds and from non-English backgrounds less likely to enrol and participate in kindergarten.

Almost six in ten school principals who were surveyed in support of this evaluation identified that community hubs improve enrolments and attendance to kindergarten (Chart 3.13). This was mainly attributed to the improvements in migrant family engagement in the early education system in Australia, as well as the provision of information to migrant families on how to enrol and the supports available to families to pay for kindergarten. At this time, this impact has been found to be difficult to observe through quantitative analysis, possibly due to data limitations (see Appendix Bfor details on this analysis). Therefore, it is suggested that the link between community hub participation and kindergarten participation continues to be studied to understand the magnitude of the aggregated impacts of the NCHP.

Chart 3.13 Percentage of school principals surveyed that believe that the community hub improves enrolments and regular attendance to kindergarten



Notes: N=62.
Source: Deloitte Access Economics estimates using the CHA School Principal survey 2021

[15] Zuckerman, K., Lindly, O.J., Chaves, A. (2017). Timeliness of Autism Spectrum Disorder Diagnosis and Use of Services among U.S. Elementary School-Aged Children. Psychiatric Services, 68(1), 33–40.
[16] First Five Years (2020). The benefits of high-quality preschool.

3.4.3 Value of participation and engagement in school activities and the school community

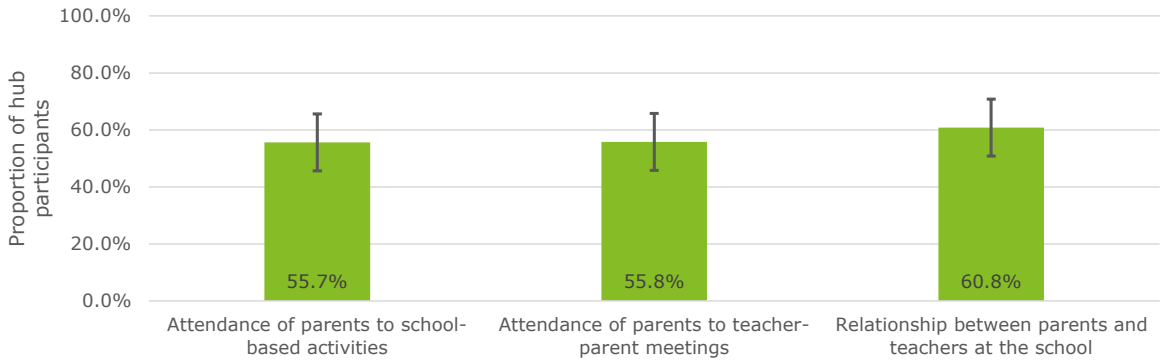
Finding 4.3

School principals estimate that, due to participation in the community hub, more than 55.7 per cent of hub participants with school-aged children improve their engagement in school activities and the school community.

Finding

Evidence from the school principal survey (2021) indicates that community hubs impact the extent to which parents engage in school-based activities and parent-teacher relationships. School principals estimate that approximately 55.7 per cent of hub participants with children improve their attendance to school-based activities, 55.8 per cent improve their attendance to teacher-parent meetings, and 60.8 per cent improve their relationships with their child's teacher (Chart 3.14).

Chart 3.14 Estimated proportion of hub participants with school-aged children that increase engagement with schools due to participation in community hubs



Notes: N=60. Bars are confidence intervals at 95% significance level.
Source: Deloitte Access Economics estimates using the CHA School Principal survey 2021

3.5 Vocational Pathways

This section presents the impacts of the NCHP on employment opportunities of migrant adults in 2019.

3.5.1 Value of external paid employment that would be forgone had the Hub not existed

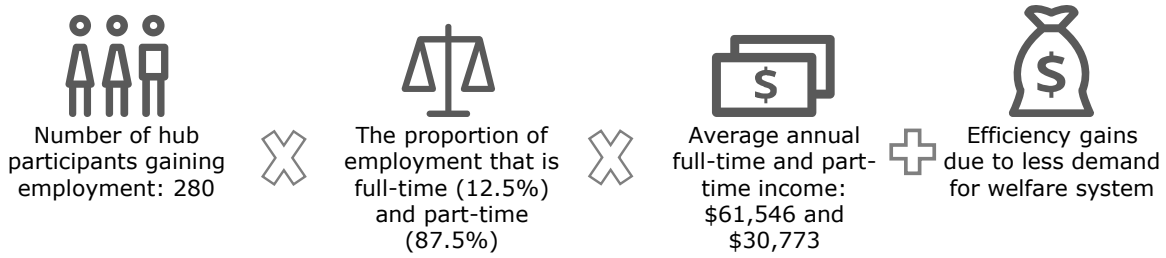
Finding 5.1

Hub participants have gained employment directly due to participation in community hubs. The value of this employment was $8.4 million in 2019.

Finding

Community hubs are estimated to have contributed to the employment of 280 hub participants in 2019. This employment is valued at $8.4 million, which includes $7.9 million in increased wages for the first year of employment, and $499,699 in efficiency gains due to a reduced demand for welfare support from the government. This value is calculated as per Figure 3.5, which is explained in greater detail in Appendix B.

Figure 3.5 The calculation of the value of employment gained due to participation at community hubs



Notes: See Appendix B for additional detail on calculations, data sources and evidence
Source: Deloitte Access Economics

Context and evidence

The primary focus of community hubs is to initially develop English skills and build connections between community members. However, over time, it is often the case that once hub participants have built a sense of confidence, they expand their horizons towards volunteering, training, education, and employment prospects. This is reflected in community hub activities; in 2019, 1,178 referrals to training and education services were provided. Further, participant survey results indicate that almost 31.9 per cent of participants will receive at least one referral to such a service throughout their time with a community hub, and in 2019, 280 hub participants gained employment.

Box 3.4 provides some examples of how community hubs have supported participants to obtain paid employment, as heard in consultations with hub leaders.

Box 3.4: How community hubs connect participants to employment opportunities

Community hubs create employment opportunities for hub participants by building their confidence, developing their experience base, and by connecting them to employers directly.

In some cases, hub participants are highly skilled, however lack confidence either due to poor English skills or through the culture shock of moving to Australia. One hub participant, for example, had English skills but struggled with conversational confidence, using their community hub's English classes as a comfortable and welcoming place to improve their English abilities. Eventually, she received assistance fixing up her CV to apply for work and has since been employed as a project manager.

Other hub participants become employed after gaining experience in areas they have an interest in. One hub participant, for example, had an interest in working in childcare and was able to run playgroups at the hub as a volunteer. Through this experience, the participant has now started up a day care program through her home. Childcare and school care related employment are amongst the jobs most commonly acquired through the hubs.

Finally, on some occasions, community hubs capitalise on employer relationships to help participants to gain employment. One such example arose through COVID; when lockdowns were alleviated, building cleanliness requirements rose, leading to greater need for cleaners. One community hub partnered up with a company which provided cleaning services, and this partnership led to eight hub participants being hired by the firm, all of whom remain employed there today.

4 Social Return on Investment of the NCHP

4.1 Overview

This chapter presents the SROI assessment of the NCHP in 2019. Further, this chapter presents sensitivity analysis of the SROI to ensure that the results are robust to uncertainty in the estimates.

4.2 Social return on investment assessment of the NCHP

Overall, it is estimated that the SROI of the NCHP is approximately 2.23. This means that for every dollar spent funding the program, $2.23 of benefits are produced for the community (Table 4.1).

Table 4.1 Summary of findings of the SROI assessment

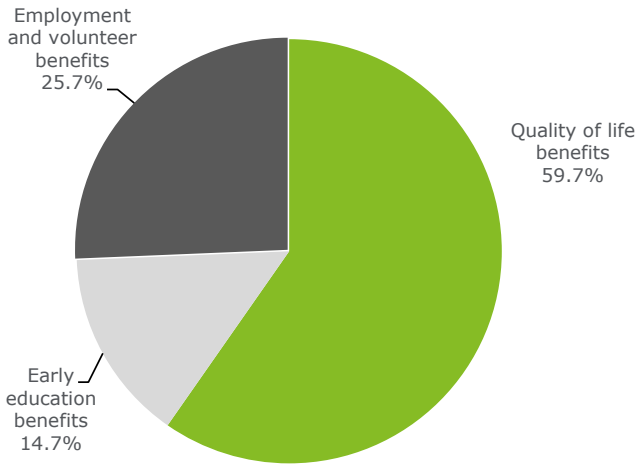
Outcome	Value ($2019)
Benefits (monetisable)	
Quality of life improvements of participants	$20,261,466
Economic value of volunteering	$307,390
Improvement long-term incomes due to improved early childhood outcomes	$4,613,152
Value of reduced need for intensive learning intervention	$360,889
Value of employment obtained through a community hub	$8,404,212
Total benefits	**$33,947,109**
Costs of the program	
Federal government costs	$5,089,000
State / local government costs	$904,335
Other monetary costs	$1,631,203
Direct costs to schools	$3,800,000
In-kind contributions of schools	$3,800,000
Total costs	**$15,224,538**
Social return on investment	**$2.23**

Notes: Costs of the program in 2019-20 are used to proxy for 2019 costs.

Source: Deloitte Access Economics

Overall, the analysis shows that the largest impact of the NCHP is through the quality of life of participants, accounting for 59.7 per cent of its total social impact in 2019. Employment and volunteer benefits account for 25.7 per cent of the social benefits of the program in 2019, which are realised through increased productivity in the economy. Finally, early education benefits account for approximately 14.7 per cent of the total social impact of the program in 2019 (Chart 4.1).

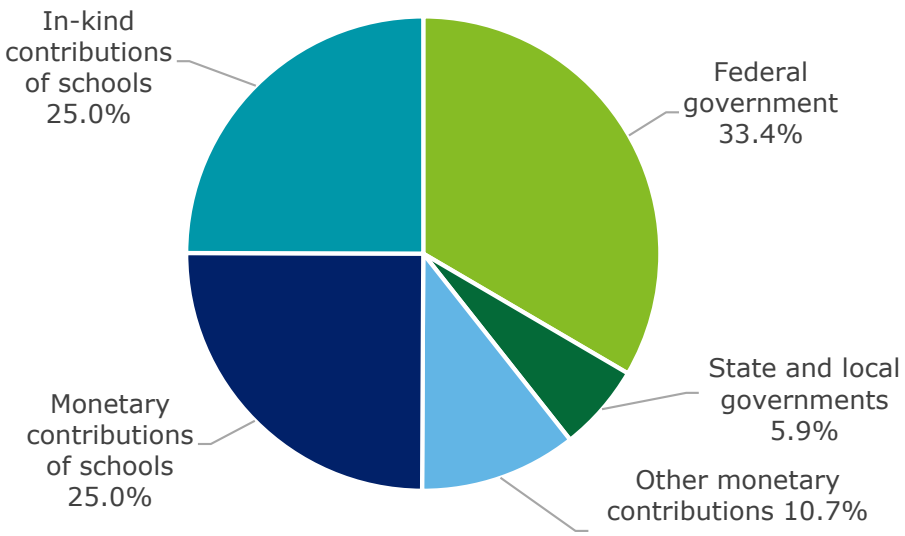
Chart 4.1 Distribution of benefits associated with the NCHP



Source: Deloitte Access Economics estimates

The estimated program benefits in 2019 are a result of the totality of investment, including monetary and in-kind contributions, in the NCHP. Program delivery contribution data was provided by CHA (Chart 4.2). The largest contribution to program delivery came from schools and local services, with $3.8 million provided in direct costs associated with running hubs, and $3.8 million provided in non-monetary in-kind supports. In total, schools and local services were estimated to contribute to 50.0% of the total contribution to program delivery in 2019. Federal and State government funding contributed just under $6.0 million, or 39.3% of total program delivery contributions. Finally, other funding for the program amounted to just over $1.6 million, or 10.7% of total program delivery contributions.

Chart 4.2 Distribution of funding associated with the NCHP



Source: Deloitte Access Economics estimates

4.3 Sensitivity analysis

Two types of sensitivity analysis are conducted to support the SROI analysis:

- **Partial sensitivity analysis:** This analysis assesses the impact of a change in one parameter on the overall SROI.
- **Probabilistic sensitivity analysis:** This analysis assesses the sensitivity of the overall SROI to uncertainty in all parameter estimates.

The results of the two sensitivity analyses are presented as follows.

4.3.1 Partial sensitivity analysis

Overall, the partial sensitivity analysis highlights that the SROI is robust to changes in parameters (Table 4.2). No variation in parameters results in an SROI of less than 1.0. However, the results of the SROI analysis are most sensitive to the assumptions of the impact of community hubs on quality of life of participants.

Table 4.2 Sensitivity analysis of key parameters

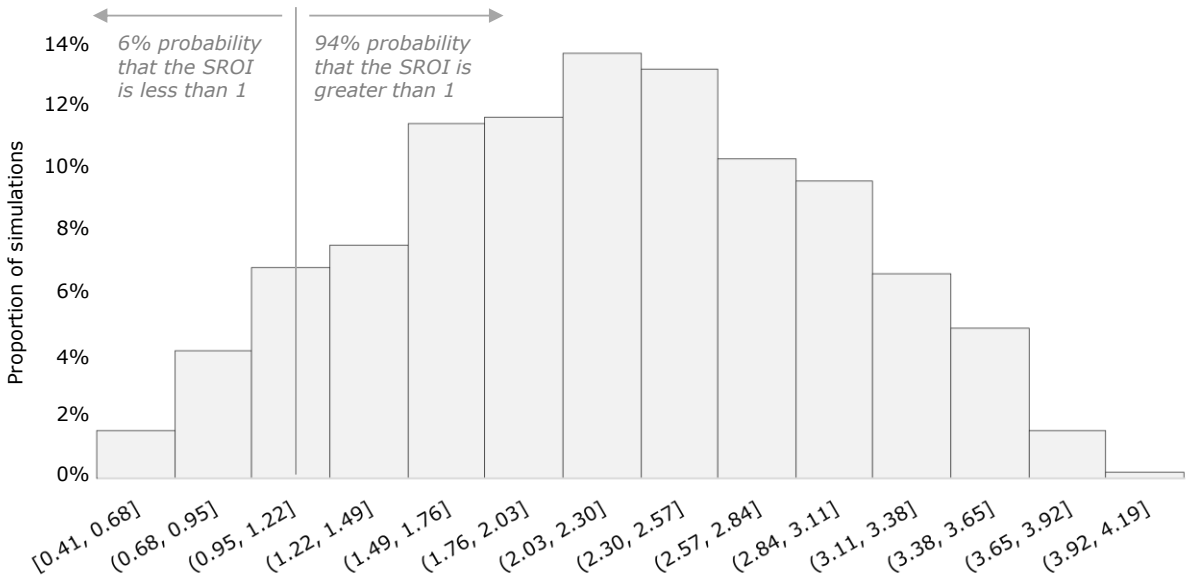
Adjusted parameter	Mean value and sensitivity adjustments	SROI
Quality of life improvements of participants		
The percentage improvement in quality of life associated with participation in a community hub	Mean: 1.3%	$2.23
	Lower bound: 0.7%	$1.64
	Upper bound: 2.0%	$3.02
Economic value of volunteering		
The value of an hour of volunteering[a]	Mean: $31.13	$2.23
	Lower bound: $15.56	$2.22
Improvement long-term incomes due to improved early childhood outcomes		
Discount rate used to discount lifetime earnings	Mean: 4.0%	$2.23
	Lower bound: 6.0%	$2.08
	Upper bound: 2.0%	$2.55
The impact of the community hub on reducing the probability that a child would be considered developmentally vulnerable on the communication domain	Mean: 20%	$2.23
	Lower bound: 8%	$2.22
	Upper bound: 40%	$2.25
Value of reduced need for intensive learning intervention		
Reduction in the proportion of children that require in-school developmental supports due to community hub engagement	Mean: 5.0%	$2.23
	Lower bound: 1.0%	$2.21
	Upper bound: 9.0%	$2.25
Per-child cost of in-school developmental supports	Mean: $1,376	$2.23
	Lower bound: $856	$2.22
	Upper bound: $1,897	$2.24
Value of employment obtained through the NCHP		
Average annual salary of a newly employed migrant in their first year of work	Mean: $28,230	$2.23
	Lower bound: $16,500	$1.98
	Upper bound: $39,000	$2.40

Notes: a) no upper bound was considered for this assessment as the method used was already considered an over-estimate of a productive hour of volunteering
Source: Deloitte Access Economics estimates

4.3.2 Probabilistic sensitivity analysis

A probabilistic sensitivity analysis was conducted to further assesses the robustness of the results of the SROI analysis. A probabilistic sensitivity analysis involves assigning a distribution to parameters of the analysis to reflect uncertainty. The analysis then performs a Monte Carlo simulation to draw randomly from these distributions. See Appendix B for more information on this analysis. Overall, the analysis shows that, given the uncertainty in parameters, there is a 94 per cent probability that the NCHP has a positive SROI (Chart 4.3). The SROI was less than 1 in only 6 per cent of simulations.

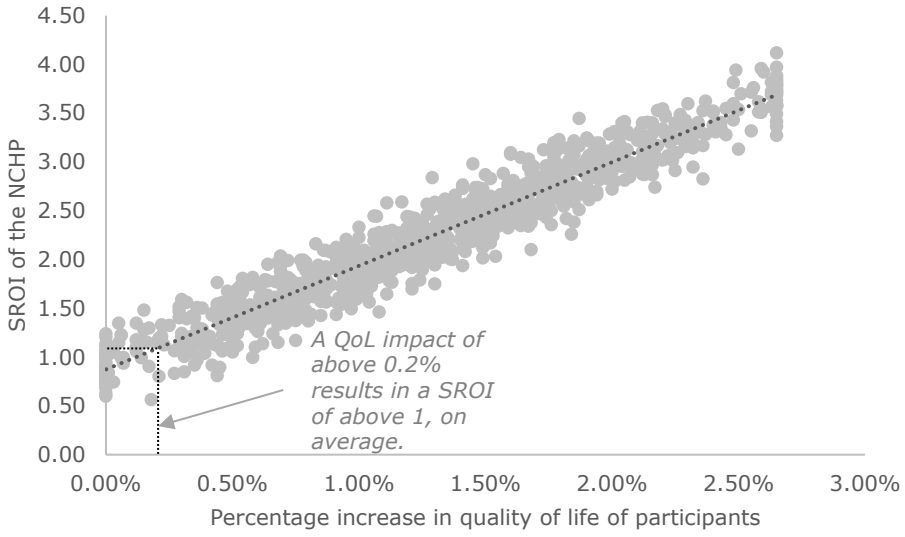
Chart 4.3 Distribution of SROI outputs of the probabilistic sensitivity analysis



Notes: 1,000 simulations of a Monte Carlo model.
Source: Deloitte Access Economics estimates

The results of the SROI analysis are most sensitive to variations in the degree to which community hubs impact quality of life of participants. On average, if the community hub increases quality of life of hub participants by 0.2 per cent or more in 2019, the SROI of the NCHP is above 1 (Chart 4.4).

Chart 4.4 Correlation between assumptions of the impact of community hubs on quality of life and the SROI of the NCHP



Notes: 1,000 simulations of a Monte Carlo model.
Source: Deloitte Access Economics analysis

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Appendix A Indicator Framework

This appendix presents the complete indicator framework. This indicator framework has been updated to include the calculated values for each outcome that is measured in the report, as well as where in the report these values are presented.

Table A.1 SROI framework

Outcome	Related outcome(s)	Indicator(s)	Measure(s)	Data source(s)	Section in the report
Engagement					
Hub participants develop broad social networks within the community (LT)	Families continue their commitment to engage, access and attend the Hubs (MT)	Value of increased social participation and connection	Number of unique clients attending CHA Proportion of CHA clients who subsequently participate in broader society Change in quality of life through increased social participation	CHA Portal data CHA hub leader, volunteer, and participant surveys Hub leader interviews Support coordinator survey Literature review	Section 3.2.1
Hub participants feel empowered and confident to take their own initiative in accessing relevant services independently (LT)		Value of empowerment and self-efficacy	Number of unique clients attending CHA Average number of self-initiated service access episodes per hub participant	CHA Portal data CHA hub leader, volunteer, and participant survey Hub leader interviews Support coordinator survey	Insufficient evidence to report on
Families are confident in actively participating in the		Value of increased confidence	Number of clients attending CHA Proportion of clients who are socially isolated	CHA Portal data CHA hub leader, volunteer, and participant survey	Section 3.2.1

Outcome	Related outcome(s)	Indicator(s)	Measure(s)	Data source(s)	Section in the report
community and creating connections (LT)		Value of increased social capital Value of reduced social isolation	Change in quality of life through increased social participation	Hub leader interviews Support coordinator survey Literature	
Hub participants advocate Hub programs and services to bring in more of the community (MT)		Extent of community member referral	Increase in new participants over time, referred by peers	CHA census CHA hub leader, volunteer and participant survey	Insufficient evidence to report on
Hub participants demonstrate engagement by actively participating and contributing to delivering programs (MT)		Value of hub participant contribution to hub program and activity delivery	Number of hub participants contributing to program delivery Average number of hours contributed per year Value of time	CHA Portal data CHA Portal data (referrals and activities) Literature	Section 3.2.2
Schools are better placed to meet needs of families, being more welcoming and more accessible (LT)	Shift culture of school to be more inclusive and responsive (MT)	Value of school-based activities and initiatives that contribute to inclusion and cultural responsiveness	Number and nature of newly initiated culturally appropriate and inclusive practices, processes, and activities Reported feelings of belonging and inclusion by families	CHA Portal data CHA hub leader, volunteer, and participant survey Hub leader interviews School principal survey	Section 3.2.3

Outcome	Related outcome(s)	Indicator(s)	Measure(s)	Data source(s)	Section in the report
Hub participants participate in school activities and take up roles in school support (e.g. participation in P&C, volunteering, breakfast club or tuckshop roster, etc.) (MT)		Value of hub participant contribution to school program and activity delivery	Number of hub participants participating in school-based activities Average number of hours contributed per year Value of time	CHA Portal data School principal survey Literature	Section 3.2.2
English					
Improved confidence to become an active citizen within the community (LT)	Increased confidence of adults in English conversation (MT)	Value of increased confidence due to English language	Number of hub participants completing conversational English program Proportion of program completions with proficient conversational English Change in quality of life attributable to confidence and communication due to English proficiency	CHA Portal data CHA census CHA hub leader, volunteer, and participant survey Hub leader interviews Literature	Section 3.3.1

Outcome	Related outcome(s)	Indicator(s)	Measure(s)	Data source(s)	Section in the report
Improved communication and confidence to seek educational opportunities and support from relevant services (LT)	*As above*	Extent of self-initiated participation and access to education and services	Number of hub participants completing conversational English program Proportion of program completions with proficient conversational English Average number of self-initiated participation and access to external education and services	CHA Portal data CHA census CHA hub leader, volunteer, and participant survey Hub leader interviews	Section 3.3.1
Improved ability to assist with children's learning at school (MT)		Value of enhanced at-home learning and educational support	Number of hub participants completing conversational English program Proportion of program completions with proficient conversational English Change in educational outcomes attributable to family ability to support learning Qualitative discussion based on workshops and consults	CHA Portal data CHA census CHA hub leader, volunteer, and participant survey Hub leader interviews	Insufficient evidence to report on
Increased employment prospects due to improved English (LT)		Value of paid employment that would be forgone had the CHA not existed	Number of hub participants completing conversational English program Proportion of program completions with proficient conversational English Proportion of program completions gaining employment attributable to English proficiency (*without	CHA Portal data CHA census CHA hub leader, volunteer, and participant survey Hub leader interviews Support coordinator survey	Insufficient evidence to report on

Outcome	Related outcome(s)	Indicator(s)	Measure(s)	Data source(s)	Section in the report
			additional hub intervention through vocational pathways support) Average hours of paid employment per year		
Early childhood					
Children have improved educational engagement and achievement (LT)	Children's social skills and literacy are performing at an adequate level for their age (MT)	Value of improved educational engagement Value of improved educational achievement	Number of clients attending CHA early childhood programs Proportion of children who would not have otherwise engaged in early childhood Average improvement in AEDC by school Change in educational achievement attributable to improved school readiness (e.g. change in AEDC)	CHA Portal data CHA census CHA hub leader, volunteer, and participant survey AEDC data Literature	Section 3.4.1
Increased participation of families in school activities (LT)	Parents develop an understanding of the Australian school system and how to navigate it (MT) Improved child and family transition into school (MT)	Value of family participation and engagement in school activities and the school community	Number of hub participants participating in school-based activities Proportion of participation attributable to child engagement in playgroup and school readiness Average number of hours of participation per year Value of time	CHA Portal data CHA census CHA hub leader, volunteer, and participant survey School principal survey Literature	Section 3.4.3

Outcome	Related outcome(s)	Indicator(s)	Measure(s)	Data source(s)	Section in the report
Timely referral to services and supports (e.g. child health, family services) (ST)		Value of development and safety skills that would be forgone had the CHA not existed	Number of referrals, by program/service	CHA Portal data	Section 3.2.4 and section 3.4.2
Connecting families with additional development programs or services (e.g. swimming lessons, library reading groups) (MT)		Value of enhanced skills and knowledge acquired	Number of unique external referrals Number of hub-facilitated programs or services Average number of unique attendees per program	CHA Portal data	Insufficient evidence to report on
Increased access to universal health services (e.g. maternal health, vaccination) (MT)	Raise awareness and facilitate connections between families and health services (ST)	Extent of improved maternal health outcomes due to access to appropriate services	Number of unique referrals to maternal health services Proportion attributable to hub involvement Improved maternal outcomes resulting from appropriate prenatal care	CHA Portal data CHA hub leader, volunteer, and participant survey Hub leader interviews	Section 3.2.4 and section 3.4.2
		Extent of improved child health outcomes due to access to appropriate services	Number of unique referrals to vaccination programs Proportion attributable to hub involvement Improved child health outcomes resulting from appropriate immunisation	CHA Portal data CHA hub leader, volunteer, and participant survey Hub leader interviews	Section 3.2.4 and section 3.4.2

Outcome	Related outcome(s)	Indicator(s)	Measure(s)	Data source(s)	Section in the report
Reduced requirement for schools to provide intensive educational support for children with developmental delay (LT)	Children's social skills and literacy are performing at an adequate level for their age (MT)	Value of reduced need for intensive learning intervention	Change in proportion of children requiring additional schooling support Proportion attributable to participation in hub facilitated early childhood learning Average additional funding for supporting children with developmental delay	School principal survey CHA hub leader, volunteer, and participant survey Hub leader interviews Literature	Section 3.4.2
Vocational pathways					
Hubs contribute to hub participant employment through skills, knowledge and networks gained at hubs (LT)	Hub participants acquire new knowledge and skills (ST) Improved employment prospects for hub participants through increased knowledge, networks, confidence (MT)	Value of external paid employment that would be forgone had the Hub not existed	Number and nature of external employment attained through vocational support Economic value of paid employment	CHA Portal data CHA hub leader, volunteer, and participant survey Hub leader interviews Literature	Section 3.5.1
Hub participants provided opportunities to gain local experience at the Hub and/or the school (e.g.	Hub participants acquire new knowledge and skills (ST)	Value of direct paid employment that would be forgone had the Hub not existed	Number and nature of direct employment attained through vocational support Economic value of paid employment	CHA Portal data CHA hub leader, volunteer, and participant survey Hub leader interviews Literature	Insufficient evidence to report on

Outcome	Related outcome(s)	Indicator(s)	Measure(s)	Data source(s)	Section in the report
volunteering opportunities, child minding duties, breakfast club, P&C) (MT)					

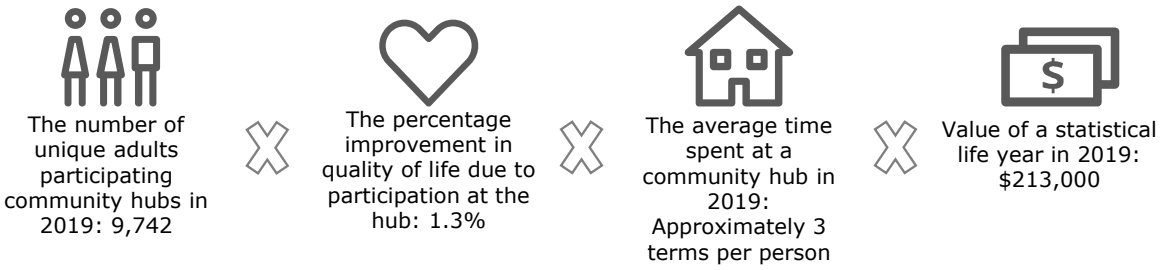
Appendix B Technical appendix

This appendix presents the detailed research and inputs that supported the calculation of the SROI of the NCHP.

B.1. The value of increased confidence, social participation, engagement and connections

This outcome was measured by an improvement in quality of life by participants of the community hub in 2019. An overview of the calculation is provided in Figure B.1.

Figure B.1 The calculation of quality of life improvements associated with participation at the community hub



Source: Deloitte Access Economics

B.1.2. Key assumptions

There were several key assumptions made about the analysis. These include:

- **Number of community hub members receiving the benefit:** 9,742 unique families participated in community hubs in 2019. It is assumed that one adult from each family participated in the community hub, equating to 9,742 unique adults. All adults are assumed to receive some improvement in quality of life. This is justified by the fact that the impact of community hubs on quality of life is derived from the survey results, which is intended to be a representative sample of all community hub participants.
- **Length of time spent at the community hub in 2019:** This was determined through the term in which a participant commenced contact with the community hub in 2019, with a participant commencing in term one estimated to have spent 100.0 per cent of 2019 engaging with the community hub. Overall, the average participant is estimated to have spent 77.7 per cent of 2019 engaging with the community hub. The time spent engaging with the community hub is used to determine the proportion of the year of which the participant experiences an improved quality of life.

B.1.3. Measuring quality of life

Quality of life was measured using an abridged version of the validated survey tool; WHOQOL-BREF.[17] This survey instrument measures quality of life along four domains:

- Physical health
- Psychological wellbeing
- Social relationships
- Environment.

Quality of life is measured on a scale between 0 and 100, where 100 equates to a 'perfect' quality of life. Survey respondents were asked to respond to perceptions of their quality of life prior to engaging in the community hub and after participating in the community hub. It is acknowledged

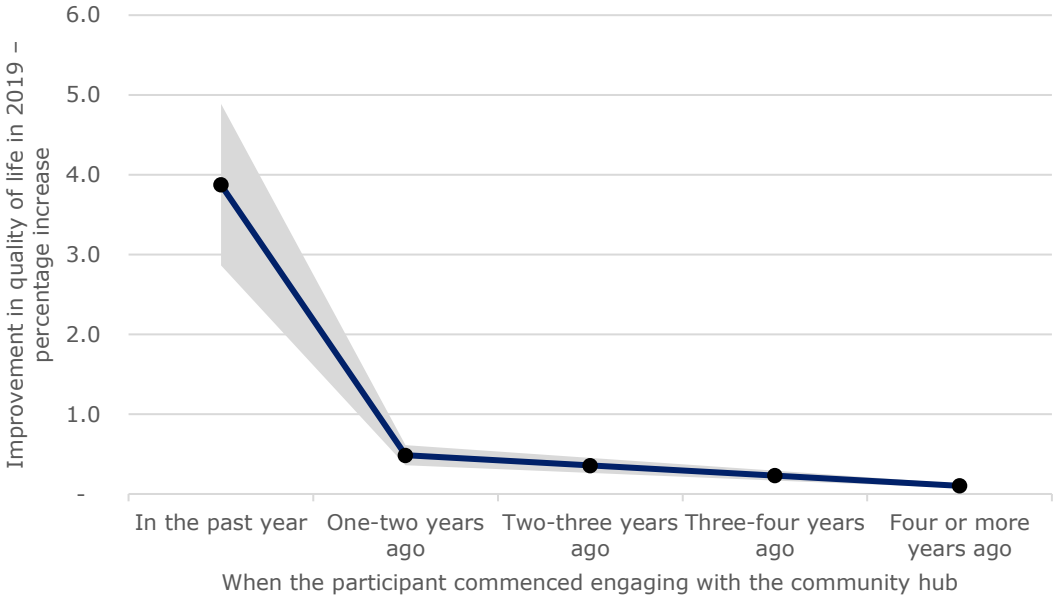
[17] https://www.who.int/mental_health/media/en/76.pdf

that this method may incur some bias in its responses, such as recall bias. This is acknowledged as a limitation of this evaluation.

B.1.4. The impact of community hubs on quality of hub participants in 2019

Analysis of the participant and volunteer survey (2021) revealed that community hubs have a larger impact on the quality of life of participants in the first year that they engage with the hub. In subsequent years, community hubs were estimated to have a positive, but smaller, marginal impact on quality of life (Chart B.1). The marginal impacts of the community hub on participant quality of life was applied to the distribution of participants by when they commenced engagement with a hub, allowing a weighted average impact on quality of life to be derived. This equated to an average improvement in quality of life of 1.3 per cent for all hub participants who participated in a community hub in 2019.

Chart B.1 The estimated increase in quality of life in 2019 by the year in which the participant commenced engaging with the community hub



Notes: N=234. Shaded areas are confidence intervals at 95% significance level.
Source: Deloitte Access Economics estimates using the CHA School Principal survey 2021

B.1.5. The value of quality of life

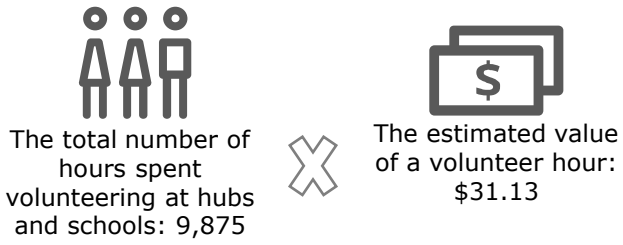
The value of a statistical life year used in this analysis was $213,000 in 2019. This value is adapted from the Office of Best Practice Regulation.[18]

[18] Office of Best Practice Regulation (2019). Value of a statistical life guidance note. Retrieved from https://www.pmc.gov.au/sites/default/files/publications/value-of-statistical-life-guidance-note_0_0.pdf

B.2. Value of contributions to hub program delivery and in-school activities

This benefit was valued by monetising the impact of volunteering which occurred through the community hub. An overview of the calculation is provided in Figure B.2.

Figure B.2 The calculation of the value of volunteering by hub participants in 2019



Source: Deloitte Access Economics

B.2.2. Key assumptions

There were several key assumptions made about the analysis. These include:

- **The number of hours spent volunteering to deliver community hub programs:** Data provided by CHA indicated that 5,530 hours were voluntarily contributed to school program delivery in 2019.
- **The number of hours spent volunteering to deliver school activities:** Data provided by CHA indicated that 4,346 hours were voluntarily contributed to school program delivery in 2019.
- **The hourly economic value of volunteering contributions:** Hub leader interviews indicated that many of the volunteering opportunities tend to include the running and facilitation of education programs and events. Consequently, volunteering contributions have been valued using the hourly wage of education aids through the replacement method. Data was retrieved from the Australian Bureau of Statistics (ABS) where it was found that, in 2018, the average hourly wage of an education aid was $30.40. Conservatively adjusting this hourly rate by 2.4 per cent, the growth of median wages from 2018 to 2019, provided an hourly wage of $31.13.

B.2.3. The replacement method of measuring the economic value of volunteering

The replacement cost method proposes that the value of an hour of volunteering should be equal to the cost of hiring a market replacement for that type of service. This analysis uses a per-hour wage of an educational aid to proxy for a market replacement of the types of services provided by volunteers at community hubs, and in schools.

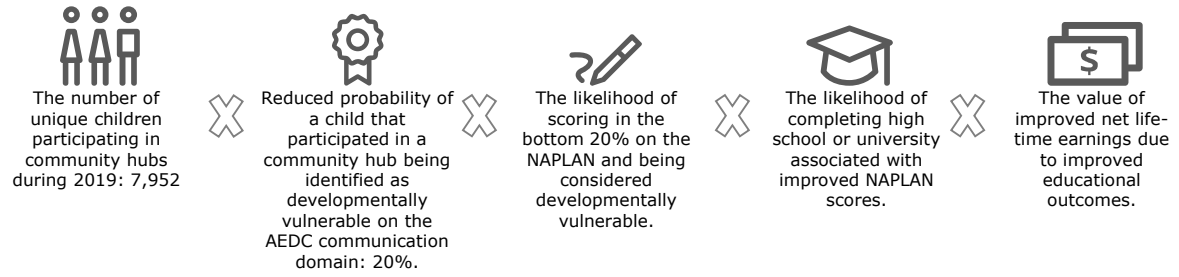
It should be noted that the replacement method often overestimates the value of volunteering as it assumes the value of volunteer work to be equivalent to the average worker in that field. Without more data, however, it is considered to be a better valuation method than the opportunity cost measure. There is no widely accepted analytical technique for overcoming this bias.

Further, the true value of volunteering comprises private, economic and social contributions. However, due to limited available data, and a risk of double counting across outcome categories, only the economic value of volunteering is considered here.

B.3. Value of improved educational engagement

This outcome was measured by an improvement in quality of life by participants of the community hub in 2019. An overview of the calculation is provided in Figure B.3.

Figure B.3 The calculation of improved educational outcomes associated with participation at the community hub



Source: Deloitte Access Economics

B.3.2. Key assumptions

There were several key assumptions made about the analysis. These include:

- **The number of children participating in community hubs in 2019:** 9,742 unique families participated in community hubs in 2019. Survey results from the participant and volunteer survey (2021) indicate that approximately 0.8 children per adult participate in the community hub. Therefore, it is estimated that approximately 7,952 children participated in the community hub in 2019.
- **Length of time children spend at the community hub receiving educational supports:** It is estimated that each child engages with the community hub for approximately 2.2 years prior to engaging in school. Therefore, it is estimated that children participating in the community hub in 2019 have a 45.5 per cent chance of receiving the estimated benefit in 2019 (which equates to a 100.0 per cent chance of receiving the benefit over 2.2 years). This method reduces the risk of double counting benefits over time.
- **Discount rate:** A discount rate of 4.0 per cent was used to discount future earnings.

B.3.3. The relationship between AEDC developmental vulnerability and community hubs

To understand the potential impact of community hubs on developmental vulnerability, a weighted difference-in-difference analysis was conducted to understand if community hubs contributed to a reduction in the proportion of children considered developmentally vulnerable through the AEDC. Key features of the analysis included:

- **Research question:** Do regions with a community hub tend to have lower levels of children considered developmentally vulnerable on the communication domain when starting their first year of school?
- **Technique:** Weighted difference-in-difference regression.
- **Treatment and impact period:** Two period model: 2012 and 2018. Intervention occurs in 2013-2018. 2012 is the year prior to the intervention.
- **Population:** Individual SA2s were used as the population. Community hubs that commenced operations in 2013 were matched to SA2s. Then, AEDC data on the proportion of children considered developmentally vulnerable on the communication domain was gathered for each SA2. Only SA2s in Victoria, NSW and QLD were considered as community hubs were only operating in these three states in 2013.
- **Dependent variable:** The proportion of children considered developmentally vulnerable on the communication domain. The average of the proportion of children considered developmentally vulnerable on the communication domain in 2009 and 2012 in each SA2 was used as the dependent variable observation for the 2012 period. The average of the proportion of children considered developmentally vulnerable on the communication domain in 2015 and 2018 in each SA2 was used as the dependent variable observation for the 2018 period. The average was taken to reduce the fluctuations in the data so as to better measure differences in trends.
- Additional regression analyses were conducted using the following three dependent variables; the proportion of children considered developmentally vulnerable on the language domain; the

proportion of children considered developmentally vulnerable on one domain; and the proportion of children considered developmentally vulnerable on two or more domains. However, there was no significant relationship identified between a region with a community hub and the proportion of children considered developmentally vulnerable.

Propensity scores were used to weight the regression so that SA2s with similar characteristics to those that have a community hub were given more importance. Propensity scores are determined through a logistic regression model of the probability that a hub would be located in an SA2 in 2013.

The analysis found that SA2 regions that had a community hub since 2013 tended to record a lower percentage of children considered developmentally vulnerable on the communication domain in 2018, by approximately 21.9 per cent (Table B.1). These findings were proven to be robust once controlling for other known drivers of developmental vulnerability, such as incomes, level of disadvantage, and percentage of Aboriginal and/or Torres Strait Islander children.

Table B.1 Regression output of the difference-in-difference analysis of the relationship between community hubs in SA2s and the proportion of children considered developmental vulnerable in SA2s

Percentage of children vulnerable on the communication domain (log)	**Coefficient**	**Interpretation**
Difference-in-difference components		
Time (0 = 2012 and 1 = 2018)	0.0132 (0.791)	No statistically significant relationship found between the proportion of children developmentally vulnerable in an SA2 and time, once controlling for other variables.
Community hub in SA2 (1 otherwise 0)	0.165*** (0.000)	Hubs tended to be located in regions that had a higher proportion of children developmentally vulnerable on the communication domain.
Interaction term: Time*Hub in SA2	-0.219*** (0.002)	The proportion of children developmentally vulnerable in an SA2 with a hub is 21.9 per cent lower than an SA2 without a hub.
Other control variables		
Percentage of one parent families (log)	0.106 (0.170)	No relationship with the proportion of children developmentally vulnerable and the proportion of one parent families.
Percentage of low-income families (log)	0.343*** (0.000)	The higher the proportion of low-income families in a region, the higher the proportion of children considered developmentally vulnerable.
Percentage of 4 and 5 year old children that participated in preschool	-0.872** (0.023)	The higher the participation rate in preschool, the lower the proportion of children considered developmentally vulnerable.
Percentage of children aged 3-5 that are Aboriginal and/or Torres Strait Islander (log)	2.417*** (0.003)	The higher the proportion of the children that are Aboriginal and/or Torres Strait Islander, the higher the proportion of children

Percentage of children aged 3-5 that are Aboriginal and/or Torres Strait Islander (log) - squared	-3.458** (0.031)	considered developmentally vulnerable. It plateaus in regions with a high Aboriginal and/or Torres Strait Islander population.
Percentage of children aged 3-5 that are from Culturally and linguistically diverse backgrounds	0.639*** (0.004)	The higher the proportion of children that are CALD, the higher the proportion of children considered developmentally vulnerable.
Percentage of families that are recently arrived migrants (in last 10 years)	0.383*** (0.008)	The higher the proportion of families that arrived in Australia in the last 10 years, the higher the proportion of children considered developmentally vulnerable. It increases in high-migrant areas.
Percentage of families that are recently arrived migrants (in last 10 years) – squared	0.0420* (0.050)	
State (1=Vic, 2=NSW, 3=QLD)	F-test of joint significance (0.000)***	QLD has a higher average of children considered developmentally vulnerable on the communication domain.
Rural area (1=metro city)	F-test of joint significance (0.000)***	Major cities have a higher average of children considered developmentally vulnerable on the communication domain.
SEIFA	F-test of joint significance (0.000)***	Highly vulnerable regions tend to record a higher average level of children considered developmentally vulnerable on the communication domain.
Constant	3.859*** (0.000)	-

Notes: N=2,586. P-values are in brackets. ***Significant at 1% level, **Significant at 5% level *Significant at 10% level.
Source: Deloitte Access Economics estimates using AEDC and ABS data

While this analysis provides statistically significant results, it should be discussed with a clear consideration of the limitations, including:

- It is undertaken at the regional level. A more robust analysis would use individual linked-data so that the researcher can evaluate the relationship between the attendance at community hubs of individual children, compared to those that do not participate.
- The sample size of the treatment cohort is small (n=25).
- There is no ability to assess the parallel trends assumption, which is an important assumption to ensure the validity of the difference-in-difference assessment.
- The dependent variable is averaged over two periods to smooth the data and reduce individual-year fluctuations. While this may be an effective measure to reduce noise in the data, it should be validated with additional data over time to ensure that the trends are consistent.

B.3.4. The relationship between AEDC developmental vulnerability and NAPLAN results

Brinkman et al. (2013) finds that a child that is considered developmentally vulnerable on any one domain is 2.03 times more likely to score within the bottom 20th percentile of the NAPLAN in year 7.[19] For the purposes of this analysis, this relationship is expected to be consistent with the relationship between AEDC vulnerability and NAPLAN scores in year 9.

[19] Brinkman, S., Gregory, T., Harris, J., Hart, B., Blackmore, S., Janus, M. (2013). Associations Between the Early Development Instrument at Age 5, and Reading and Numeracy Skills at Ages 8, 10 and 12: a Prospective Linked Data Study. Child Indicators Research, 6(1), 695–708.

B.3.5. The relationship between NAPLAN results in year 9 and higher education attainment

Huong and Justman (2014) find that a child that scored in the bottom 25th percentile in the NAPLAN in year 9 is 0.5 times as likely to complete year 12.[20]

B.3.6. The relationship between NAPLAN results in year 9 and high school completion

Marks (2014) found that a child that scored in the bottom 20th percentile in the NAPLAN in year 9 is 1.7 times more likely to have an Australian tertiary admission rank (ATAR) of 50 or below. Department of Education data shows that a ATAR of below 50 is associated with a 40.0 per cent chance of completing a higher educational degree, compared to a 52.0 per cent chance of the population.[21]

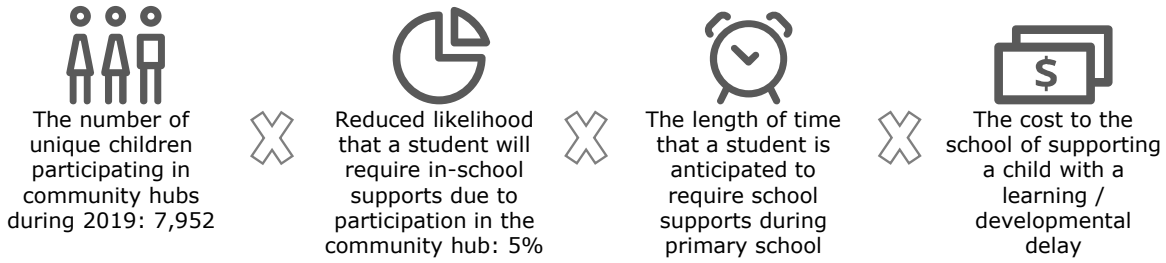
B.3.7. The estimated increase in lifetime earnings associated with completing high school or having a higher education degree

Differences in lifetime earnings of different skill levels and occupations were determined using ABS data on returns to occupations. The analysis considers foregone income during study, as well as study costs, which are assumed to occur at the time of study. Study costs are sourced from StudyinAustralia.gov.au.

B.4. Value of reduced need for intensive learning intervention

This outcome measured the economic value of reduced government funding allocated towards children who would have had developmental delays were it not for community hubs. An overview of the calculation is provided in Figure B.4.

Figure B.4 The calculation of reduced need for in-school supports due to participation in the community hub



Source: Deloitte Access Economics

B.4.2. Key assumptions

There were several key assumptions made about the analysis. These include:

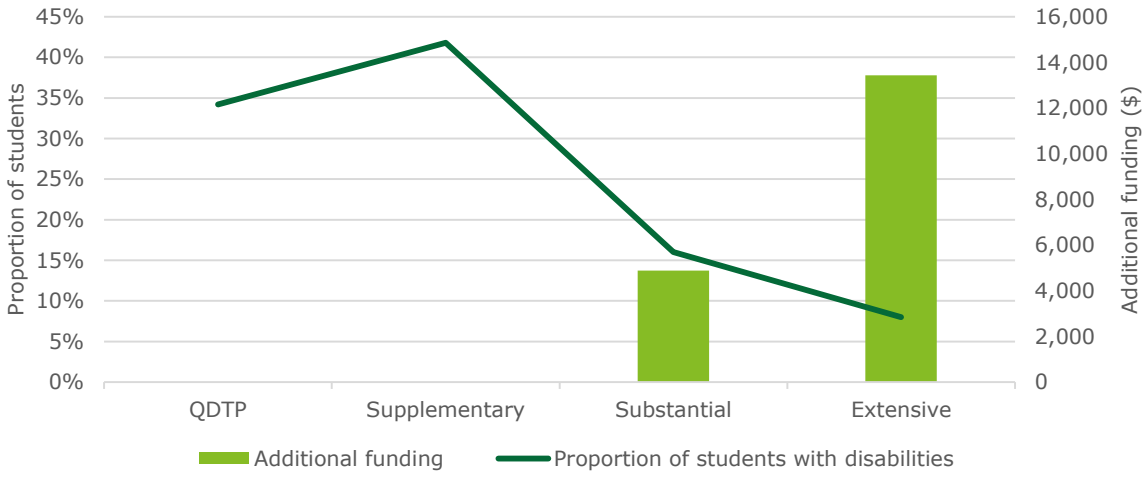
- **The number of children participating in community hubs in 2019:** 7,952 children were assumed to be participating in community hubs in 2019, as discussed in B.3.2.
- **Length of time children spend at the community hub receiving educational supports:** 45.5 per cent chance of receiving the estimated benefit of participating in community hubs in 2019, as discussed in B.3.2.
- **The proportion of children who would have had developmental delays were it not for community hubs:** The impact of community hubs on the proportion of children from migrant backgrounds that require in-school supports was derived from the school principal survey (2021). In this survey, school principals were asked to compare the proportion of children that require in-school supports between those that participate in the community hub and those from migrant backgrounds that do not participate. Overall, survey results estimated that community hubs were contributing to a reduction in the proportion of migrant children that need in-school supports by approximately 5.3 per cent.
- **Discount rate:** A discount rate of 4.0 per cent was used to discount future impacts.

[20] Marks, G. (2014). Reaching Year 12 in Victoria, Australia: student and school influences. Educational Research and Evaluation, 20(5), 333-347.
[21] Huong, B., Justman, M. (2014). NAPLAN Scores as Predictors of Access to Higher Education in Victoria. Melbourne Institute, working paper no. 22/14.

B.4.3. The additional cost of support for students with developmental delays

Children with additional needs can gain access to additional funding through Federal government programs. Generally, Federal school funding for students with disabilities is dependent upon the degree of adjustment required, broken down into four categories: quality differentiated teaching practices (QDTP) (33.3 per cent), supplementary adjustment (41.9 per cent), substantial adjustment (16.8 per cent) and extensive adjustment (8.0 per cent).[22] The average cost of a student in each of these categories in 2018 was $10,374, $10,374, $15,256 and $23,803 respectively, with the average student not experiencing a disability costing $10,374 (Chart B.2).[23]

Chart B.2 Additional funding and distribution of students with disabilities across adjustment categories (2018 dollars)



Source: Deloitte Access Economics; ACARA; DESE

It was assumed for the base SROI that children with developmental delays who would require assistance would fit within the supplementary and substantial adjustment categories. A weighted average of the additional costs of these students was therefore found to be when approximately $1,351, or $1,376 in 2019 dollars accounting for CPI inflation of 1.8 per cent between 2018 and 2019.

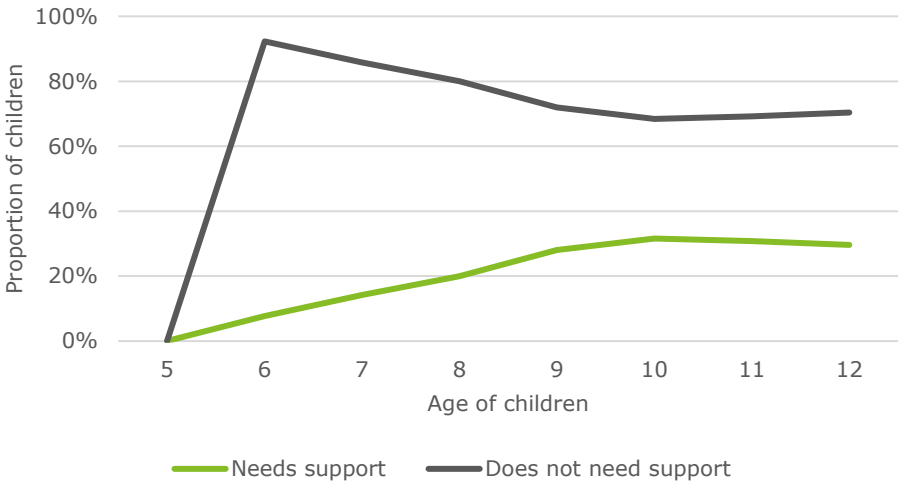
B.4.4. Estimating the baseline of proportion of students that require in-school supports for learning delays

To determine what would have occurred if community hubs were not in existence, two data sources were used. First, the school principal survey (2021) results estimating the proportion of children that require in-school supports for those that do not attend the community hub is used as the baseline.

Second, data from the Survey of Disability, Ageing and Carers (SDAC) 2018 was used to determine the proportion of children that require substantive in-school supports for developmental delays by age, during primary school (Chart B.3). It was assumed that those who require substantive in-school supports are the only cohort of children with a developmental delay that incur an additional cost to the school.

[22] Australian Curriculum, Assessment and Reporting Authority (ACARA) (2020). School Students with Disability.
[23] Department of Education Skills and Employment (DESE) (2020). A review of current government approved system authorities' arrangements for funding of students with disability and common reform directions.

Chart B.3 Proportion of children with a learning delays that require substantive in-school supports

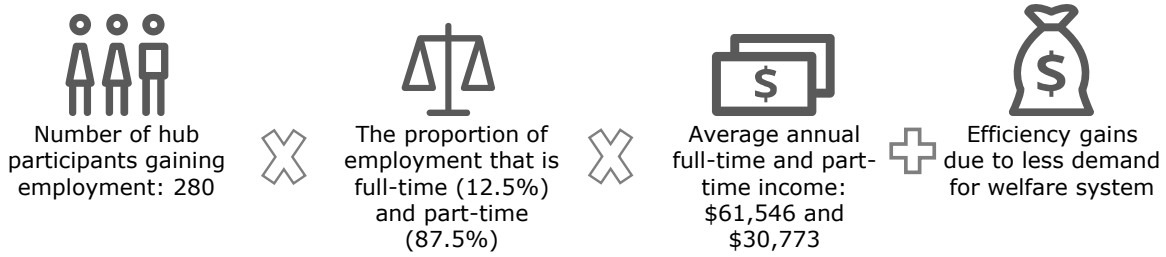


Source: Deloitte Access Economics; SDAC 2018

B.5. Value of external paid employment that would be forgone had the Hub not existed

This outcome was measured by monetising the economic value of employment gained by community hub participants in 2019. An overview of the calculation is provided in Figure B.5.

Figure B.5 The calculation of the value of employment gained due to participation at community hubs



Source: Deloitte Access Economics

B.5.2. Key assumptions

There were several key assumptions made about the analysis. These include:

- **Number of community hub participants who were employed:** Data provided by CHA indicated that 280 hub participants gained employment in 2019 due to the support provided by community hubs throughout Australia.
- **Labour market assumptions:** For simplicity, it is assumed that the labour market is at capacity, i.e. at full employment. This means that any one person wanting to work can find a job. Therefore, this analysis does not consider any potential negative impacts associated with increasing the labour force.

B.5.3. Characteristics of employment obtained by hub participants

To determine the average wage earnt by community hub participants that gain employment, several assumptions are made about the characteristics of employment obtained by participants, including:

- **The distribution of part-time and full-time employment:** The community hub participant and volunteer survey (2021) was used to determine the proportion of hub participants employed in either part-time or full-time work. Two things should be noted. Firstly, the survey did not provide an option to state how many hours are worked per week, so some part-time hub participants may work more hours than others. Secondly, when hub participants gain full-time employment, they may leave their community hub as

they are no longer available during weekdays. Therefore, there may be a bias against accounting for full-time employment outcomes from community hubs in this data.

- **Average income of part-time and full-time employment:** Hub leader interviews indicated that a lot of employment by hub participants is education-adjacent, so it was assumed that the average hourly earnings of education aids would be an appropriate proxy for average hourly earnings of employed hub participants. Data was sourced from the ABS Employees and Earnings database (2018), and annualised based on a 52-week working year. Full-time workers were assumed to work 37.5 hours per week, while part-time workers were assumed to work 18.75 hours per week.
- **Length of employment:** Labour force data of migrants in Australia was retrieved from the Characteristics of Recent Migrants dataset held by the ABS (2019). The average length of the first job held by a recently arrived migrant was applied to this study. This equated to 9.87 months.

B.5.4. Estimating the value of a reduction in welfare support required by newly arrived migrant families due to employment

An additional benefit associated with gaining employment for migrant families is the reduced demand for government welfare supports. While the reduction in welfare expenditure is a transfer payment, the reduction in required taxation to generate welfare expenditure does have a social impact through an efficiency gain in the economy (or a reduction in dead weight loss). In this analysis, there is an estimated to be a $0.24 efficiency gain in the economy due to a $1.00 decline in taxation associated with reduced demand for welfare supports.[24] It is assumed that, without employment, families from non-English speaking backgrounds earn $9,041 per annum in government supports, which is equivalent to the average income earnt by non-English speaking families who are unemployed, according to the ABS Census 2016.

B.6. The relationship between preschool attendance and community hubs

To understand the potential impact of community hubs on preschool attendance, a weighted difference-in-difference analysis was conducted to understand if community hubs contributed to increasing the proportion of children aged four and five attending preschools. Key features of the analysis included:

- **Research question:** Do regions with community hubs experience increased preschool attendance of children aged four and five due to the establishment of a community hub?
- **Technique:** Weighted difference-in-difference regression.
- **Treatment and impact period:** Two period model: 2011 and 2016. Intervention occurs in 2013-2016. 2011 is two years prior to the intervention.
- **Population:** Individual SA2s were used as the population. Community hubs that commenced operations in 2013 were matched to SA2s. Then, census data on the proportion of children aged four and five attending preschools was gathered for each SA2. Only SA2s in Victoria, New South Wales and Queensland were considered as community hubs were only operating in these three states in 2013.
- **Dependent variable:** The proportion of children aged four and five attending preschools. This data was gathered for both 2011 and 2016 and was calculated from the measures of the total number of children aged four and five who were attending preschools and the total children aged four and five in each SA2.

Propensity scores were used to weight the regression so that SA2s with similar characteristics to those that have a community hub were given more importance. Propensity scores are determined through a logistic regression model of the probability that a hub would be located in an SA2 in 2013.

The analysis found that SA2 regions that had a community hub since 2013 recorded a statistically insignificant impact of community hubs upon preschool attendance (Table B.2).

[24] Harrison, M. (2013). A Critique of the Productivity Commission's Cost-Benefit Analysis in the 'Disability Care and Support' Report. Journal of Policy Analysis and Reform, 20(2), 77-88.

Table B.2 Regression output of the difference-in-difference analysis of the relationship between community hubs in SA2s and the proportion of children attending preschools

Percentage of children attending preschools (log)	Coefficient	Interpretation
Difference-in-difference components		
Time (0 = 2011 and 1 = 2016)	-0.119*** (0.000)	Negative relationship between the proportion of children attending preschool and time, once controlling for other variables.
Community hub in SA2 (1 otherwise 0)	-0.057* (0.095)	Negative relationship between preschool attendance and SA2s where hubs were located.
Interaction term: Time*Hub in SA2	0.035 (0.317)	Statistically insignificant relationship between the proportion of children attending preschools in an SA2 with a hub over time
Other control variables		
Percentage of children aged 3-5 that are Aboriginal and/or Torres Strait Islander (log)	-0.010** (0.033)	Negative relationship between the proportion of children attending preschool and the percentage of children that are ATSI.
Percentage of children aged 3-5 that are from Culturally and linguistically diverse backgrounds (log)	-0.028** (0.021)	Negative relationship between the proportion of children attending preschool and the percentage of children that are CALD.
Percentage of families that are recently arrived migrants (in last 10 years) (log)	-0.062** (0.000)	Negative relationship between the proportion of children attending preschool and the percentage of families that arrived to Australia in the last 10 years.
Percentage of total Australian population (log)	-0.204*** (0.000)	Negative relationship between the proportion of children attending preschool and the percentage of Australia's population located in the SA2 region.
Percentage of parents who finished year 12 (log)	0.193** (0.002)	Negative relationship between the proportion of children attending preschool and the percentage of parents who finished year 12.
State (1=Vic, 2=NSW, 3=QLD)	F-test of joint significance (0.000)***	Compared to Victoria, New South Wales experienced lower preschool attendance, but Queensland experienced the lowest.
SEIFA	F-test of joint significance (0.000)***	As a region becomes more vulnerable, preschool attendance rates fall.
Constant	-1.536*** (0.000)	-

Notes: N=2,586. P-values are in brackets. ***Significant at 1% level, **Significant at 5% level *Significant at 10% level.
Source: Deloitte Access Economics estimates using AEDC and ABS data

This analysis should be discussed with a clear consideration of the limitations, including:

- It is an analysis completed at the regional level. A more robust analysis would use individual linked-data so that the researcher can evaluate the relationship between the attendance at community hubs of individual children, compared to those that do not participate.
- The sample size of the treatment cohort is small (n=25).
- There is no ability to assess the parallel trends assumption, which is an important assumption to ensure the validity of the difference-in-difference assessment.
- Due to data availability, census data was used for preschool attendance. This differs from administrative data as it is point-in-time rather than wholistic, so data may be of a lower quality.

B.7. Partial sensitivity analysis

The partial sensitivity analysis tests the robustness of the SROI by adjusting parameters used to estimate impacts of the NCHP. Table B.3details SROI outcomes alongside explanations of how parameters were determined to vary.

Table B.3 Sensitivity analysis of key parameters with explanation

Adjusted parameter	Justification
The percentage improvement in quality of life associated with participation in a community hub	The mean estimate was varied by the confidence intervals of the estimated results from the participant and volunteer survey 2021.
The value of an hour of volunteering	The value of an hour of volunteering was varied by reducing the assumed value of an hour of volunteering by 50.0 per cent.[25]
Discount rate used to discount lifetime earnings	An assumption was made to vary the discount rate by between 2.0 per cent and 6.0 per cent.
The impact of the community hub on reducing the probability that a child would be considered developmentally vulnerable on the communication domain	The mean estimate was varied by the confidence intervals of the estimated results from regression analysis, described in sectionB.3.3.
Reduction in the proportion of children that require in-school developmental supports due to community hub engagement	The reduced proportion of children experiencing developmental delays was varied using the confidence interval derived from principal survey data.
Per-child cost of in-school developmental supports	Per-child cost of in-school developmental supports were varied by changing assumptions around which adjustment category of children would be included in the average cost. The lower bound included children falling in the quality differentiated teaching practices category, while the upper bound included children falling in the extensive support category.
Average annual salary of a newly employed migrant in their first year of work	Average annual salary was varied through the difference between the average annual part-time and full-time income of

[25] Brown, E. (1999). Assessing the Value of Volunteer Activity. Nonprofit and Voluntary Sector Quarterly, 28(10), 3-17.

	education aids and part-time and full-time earnings of the average employee, as stated by the ABS.

B.8. Probabilistic sensitivity analysis

Probabilistic sensitivity analysis was used to include a degree of uncertainty around the model parameters used in the SROI. In this analysis, each parameter adjusted for the partial sensitivity analysis, described in section B.7, was assumed to have a distribution of possible values (assumed to be a normal distribution for all variables). A Monte Carlo simulation was then run for 1,000 repetitions drawing a value for each parameter from these distributions. The results of the simulations were then plotted in a histogram to draw conclusions on the probability of a positive SROI.

Limitation of our work

General use restriction

This report is prepared solely for the internal use of Community Hubs Australia Ltd. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity. The report has been prepared for the purposes set out in the engagement letter with Community Hubs Australia for a Social Return on Investment of National Community Hubs Program. You should not refer to or use our name or the advice for any other purpose.

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