CHECK-UPS BEFORE SCHOOL (CUBS)

FINAL REPORT OF THE PILOT STUDY

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ABSTRACT

A child's development in the first five years of life has the potential to influence future educational attainment and wellbeing into adulthood. Australia has universal child health and development screening programs available from birth to school entry. However, there are significant issues relating to equitable access, with research demonstrating low levels of uptake in disadvantaged communities. The Check-Ups Before School (CUBS) project sought to redress current inequities within the greater Mt Druitt area of NSW. This initiative was led by The Hive in collaboration with NSW Health and early childhood education and care services. Child and family health nurses (CFHNs) were embedded within local early childhood education and care settings to conduct health and development screening for children in the prior-to-school years.

This report presents an overview and findings from a research study designed to explore the feasibility and impact of the CUBS pilot project. A multi-methods approach was employed, including interviews and focus groups with parents and carers (n=48), community service providers (n=3), and health and educational professionals (n=10). Data from the child health records (n=24) of consenting families were examined to assess local need and referral pathways. Study findings suggest that the location of the CUBS program in familiar early childhood education (ECE) and community settings was effective as a strategy for engaging families. Participants reported that the program was successful in engaging families with health and development screening, building parents' confidence in communicating with healthcare services, and increasing their knowledge about child development and how they can support their own child. Through coordinated cross-disciplinary collaboration, health and education professionals and social workers at The Hive successfully delivered a holistic, place-based service in which relationships with families were built on trust.

As evidence of the success of CUBS, the NSW Government has recently credited the program with informing a new policy to implement 4-year-old health and development check-ups in pre-schools in NSW.

SECTION 1: INTRODUCTION

This report presents an overview and findings from a research project focused on the child, family and service level impacts of the Check-ups Before School (CUBS) pilot project, which operated in pre-schools, child care centres and community hubs within the Mt Druitt (2770) postcode area from 2019 to 2022 (August). The pilot project engaged a child and family health nurse to undertake health and development screening for children in the prior-to-school years, in collaboration with early childhood education and care services. The CUBS implementation team subsequently expanded to include a speech therapist and a social worker. The research project was conducted by a team from the Centre for Transforming early Education and Child Health (TeEACH) at Western Sydney University in collaboration with The Hive during the pilot phase of the CUBS program to explore its impact and inform decision-making with respect to program sustainability and scale-up. This research is described in this report. The report is organised as follows:

BACKGROUND

The CUBS program: Rationale, progress and challenges

The CUBS Program was developed in 2018 through a partnership of social, community and health services in the Mt Druitt area of NSW under the leadership of The Hive. The Hive is a collective impact program established by not-for-profit organisation, United Way Australia, with the primary aim of helping all children within the 2770 (Mt Druitt) postcode area to start school well. Since 2015, The Hive has initiated a range of early childhood initiatives and community activities such as cleaning public spaces, renovating parks and organising school holiday programs and children's days. Collectively, these activities have focused on building trust with local families and strengthening community support for young children and their families.

The CUBS program was designed to directly address a need identified by the Hive: a gap in the information and support available to local families in relation to child health and development in the years immediately preceding the transition to primary school. Families were not accessing the standard development screening program ('Blue Book' screening) delivered by GPs or CFHNs at Child and Family Health Centres, and were consequently missing vital opportunities to engage with early intervention services and identify any areas of concern relating to their children's health and development. Known barriers to family engagement with screening checks included difficulties with transport, fear of accessing health services as the result of past trauma, fear that they will be judged for their parenting, family stressors, and a lack of awareness of the screening program.

Such barriers create a situation in which developmental challenges often remain undetected until children start formal schooling, leading to delays in establishing appropriate support structures. To address this gap, The Hive partnered with the Western Sydney Local Health District to provide a dedicated child and family health nurse (CFHN) who would be embedded within early childhood education and care settings and community centres to conduct health and developmental screening across nine sites in Mt Druitt. It was anticipated that, in addition to facilitating early identification of needs, referral and support for children, CUBS would facilitate the building of relationships of trust and collaboration between families and health and early childhood education professionals. The CUBS program was designed to be relational, integrated, place-based and trauma-informed.

Between August 2019 and March 2020 the pilot program was funded by the NSW Department of Communities and Justice and check-ups were conducted for children aged 3–5 years in pre-schools, child care centres and community hubs in Willmot and Lethbridge Park. As well as checking children's general health and development, the screening included referrals to specialist services for children with identified needs. In addition, for children with identified needs, the health nurse prepared reports for schools to support the planning of individualised teaching and learning programs.

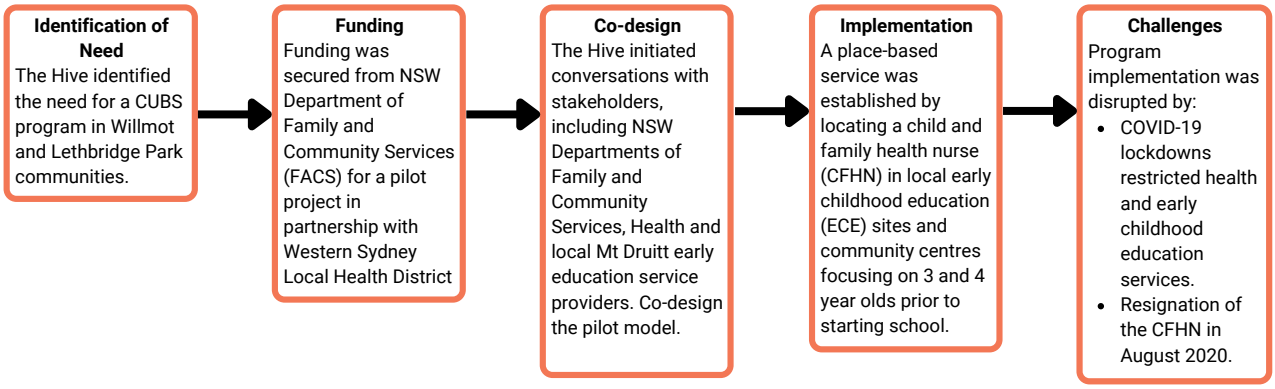
In 2020, COVID-19 disrupted the project. External funding for the pilot ended in mid 2020. From July 2020, the program moved forward relying on existing resources with The Hive and United Way Australia, with a COVID-safe model of screening being implemented in a community site based in the Willmot Community Hub and was advertised for children aged 0–5 to expand the reach of the program and provide an opportunity to identify children's developmental support needs as early as possible. This Community Hub initiative struggled with low rates of uptake, reinforcing the importance of running the CUBS program in early childhood centres where family trust in local early childhood educators was key to engagement with the program.

A small number of traditional check-ups were conducted at Willmot Kids Early Learning Centre in July and August, slowed by COVID lock-downs and illness and isolation within the community. In August the nurse left the role. After a very disrupted year in 2020, CUBS recommenced with additional resources in April 2021. A new CFHN was appointed to conduct check-ups. In addition, a new health linker (social worker) position was established to assist families with following up on referrals made by the CFHN by making appointments with allied health services, accompanying parents to appointments and, in cases where families were experiencing financial difficulties, paying for services. The third member of the expanded CUBS team was a part-time speech pathologist, appointed to provide on-site speech intervention for children in need of additional support, professional learning for Early Childhood Education staff and advice to parents on strategies to assist their children at home.

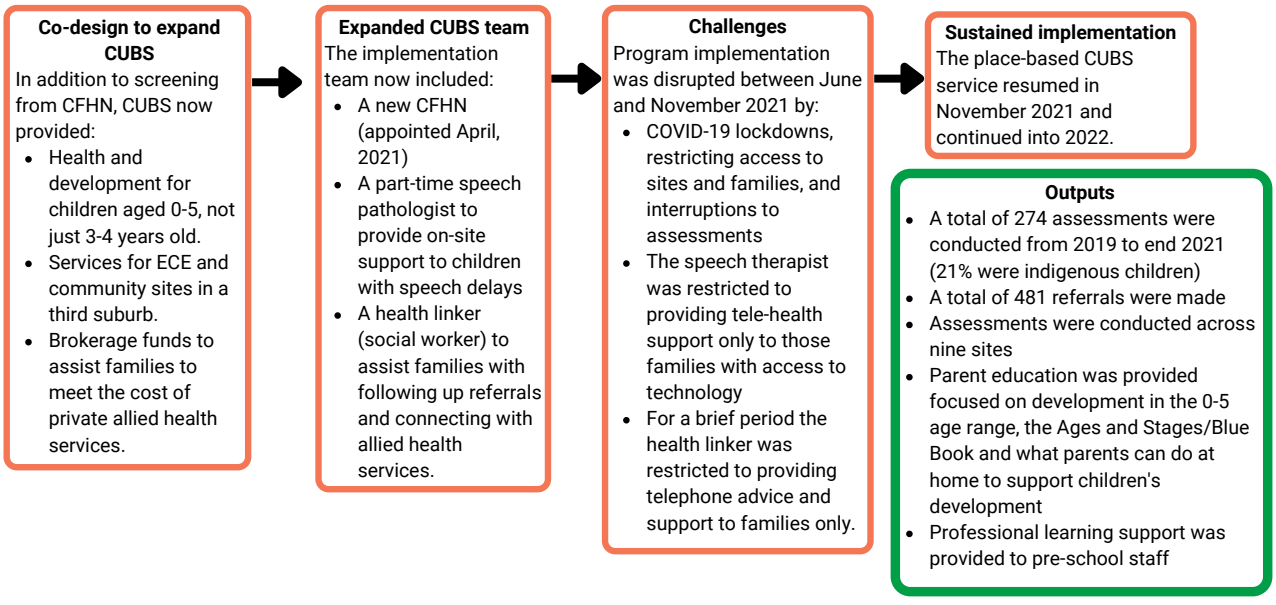
Figure 1 provides a summary of the timelines and outputs of the CUBS pilot project.

Figure 1: CUBS timelines and outputs 2019-2022

2019-2020 Pilot phase 1 (funded by NSW Department of Family and Community Services)



2021-2022 Pilot phase 2: Relaunch with expanded services and team (funded by United Way Australia)




Evaluation of the CUBS program

In 2019, The Hive engaged researchers from TeEACH at Western Sydney University to conduct independent evaluative research to examine the outcomes of CUBS. A pilot study was commissioned to inform decision-making around the value of the program and the potential to scale-up to other communities.

More specifically, this research was guided by the following overarching aims:

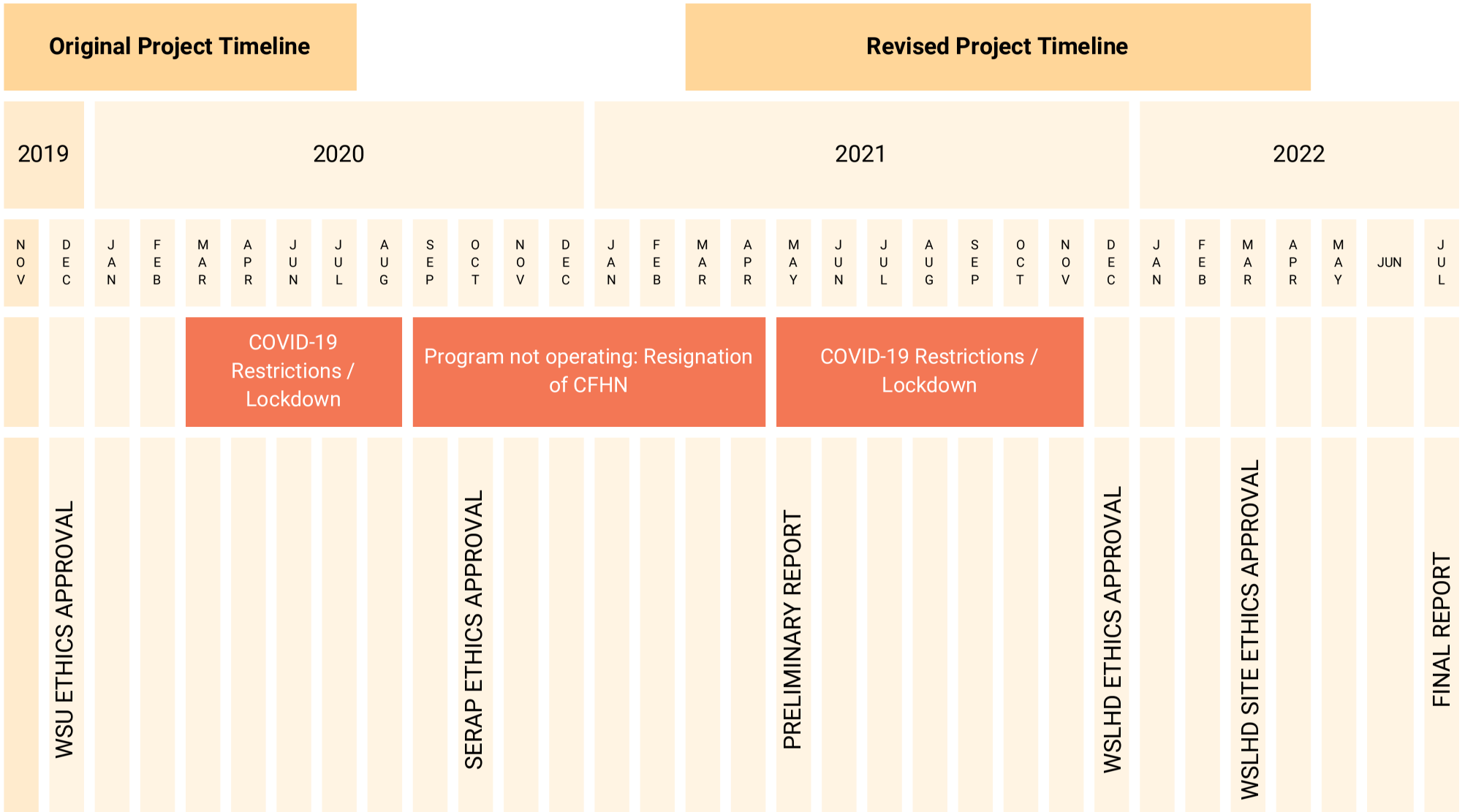
- To understand the barriers and facilitators to family participation in early childhood health and development screening programs.
- To examine the extent to which participation in the CUBS program led to early identification of child health and development challenges, family engagement with health and other services, and high levels of parent satisfaction with the supports available to them.
- To explore the impact of the CUBS screening program on school readiness and cross-sector partnerships to support children in the first year of school.

Just as Covid-19 impacted the progress of the CUBS implementation pilot project, the pandemic also resulted in data collection challenges that delayed the progress of the research. Due to restricted access to community and education sites, interviews and surveys had to be redesigned to be conducted by telephone. Engaging participants in the project became more difficult than it might otherwise have been due to community concern related to the pandemic. At-home schooling meant that parents with school-age children had limited time, energy and availability to engage in interviews focused on a CUBS check-up which may have occurred prior to the Covid-19 outbreak.

The process of applying for ethics approval from the Western Sydney Local Health District (WSLHD) to access child health data began in late 2020 and approval was granted in December 2021, followed by site-specific governance approval in March 2022. This timeline complicated data collection by delaying the process of gaining parent consent for access to child health records; consent could not be obtained at the same time as the majority of parent interviews which were conducted in 2020 and 2021, and covered under ethics approval through Western Sydney University and the NSW Department of Education. Obtaining consent by email was difficult due to some parents' limited access to technology, as well as the length and detail of the approved Participant Information and Consent Form (PICF) required by the WSLHD. Telephone as a medium for explaining the research in enough depth to facilitate parents' understanding and their confidence in navigating the PICF also had its limitations. Successful contact with parents to seek consent for access to health records occurred in community centres early in 2022; in some cases at the time of CUBS assessments. The same strategy could not be used during check-ups at government pre-schools due to NSW Department of Education restrictions on the engagement of schools with researchers during the post-pandemic recovery period. The timing and complexity of this component of data collection resulted in a greatly reduced number of children's health records available for analysis, from 100 to 24.

Figure 2 provides a timeline of the evaluation, including milestones and disruptions.

Figure 2: CUBS evaluation timeline, milestones and disruptions



SECTION 2: LITERATURE REVIEW

A child's development in the first five years of life influences future educational attainment and wellbeing into adulthood (Phair, 2021), with research evidence also linking inequities in health and development to poorer education outcomes (Goldfeld et al., 2014; McLachlan et al., 2013). Furthermore, disengagement with screening processes and high levels of child developmental vulnerability is common across disadvantaged communities in Australia (ABS, 2016: Australian Government 2018) and poses a significant challenge to be addressed if we are to break cycles of intergenerational disadvantage (Australian Government, 2018). However, the meaningful integration of services designed to support children and their families across sectors can assist young children to achieve their developmental potential (Britto et al., 2017).

Australia, like many other developed nations, implements health and development surveillance programs from birth to school entry. These programs involve a "continuous and cumulative process whereby knowledgeable healthcare professionals identify children who may have developmental problems" (Eapen et al., 2014, p. 2). Such programs aim to identify and document health and developmental difficulties, parent concerns, risk and protective factors in the child's early years (Lipkin & Macias, 2020; Goldfeld et al., 2012; Eapen et al., 2014).

In NSW, parents of newborns are provided with a Personal Health Record (PER), known as the 'Blue Book', which provides information about early child development milestones and needs, including immunisations and health screening checks administered by a general practitioner (GP) or child and family health nurse (CFHN). Screening checks are recommended at 6 months, 12 months, 18 months, 2 years, 3 years and prior to school entry (NSW Ministry of Health, 2020). As a strategy to address inequities in health, development and education outcomes, this screening initiative has been significantly ineffective in disadvantaged communities because of the low rates of uptake. In addition, there are inconsistencies in both the implementation of and family engagement with developmental surveillance (Eapen et al., 2014; Jose et al., 2020). Barriers

to its effectiveness include long waiting periods for assessment and intervention services, particularly for those children with identified speech and language disorders or global developmental delay (Eapen et al., 2014). In 2014, Eapen and colleagues called for more research on the barriers and enablers to the uptake of developmental surveillance, particularly in areas of socio-economic disadvantage. In essence, research suggests that those children who would be most likely to benefit from screening and early intervention are the least likely to participate in it. The implications for school readiness and growing inequalities are considerable.

The Watch Me Grow (WMG) study, which was conducted in south-western Sydney NSW, aimed to maximise the early identification of children with developmental problems through partnerships among policy makers, service providers and researchers (Eapen et al., 2014). Specifically, the objectives of WMG were to: assess risks for non-completion of regular health screening in early childhood from the perspectives of parents; determine the prevalence of developmental risk in the early years; and assess the diagnostic test accuracy of the NSW surveillance program undertaken by the Parents' Evaluation of Developmental Status (PEDS) (previously included in the Blue Book, but replaced in 2017 by developmental questions for parents under the heading of Learn the Signs. Act Early). A birth cohort of 2,000 children were followed up at 6 months, 12 months and 18 months, with data collected at 18 months compared to a reference standard of data representing all 18 month-old children (Eapen et al., 2014). Qualitative data collected from the WMG study suggested the need for improved communication about health surveillance and the Blue Book for parents from culturally and linguistically diverse (CALD) backgrounds (Garg et al., 2017). The WMG study identified socio-economic disadvantage and culturally and linguistically diverse (CALD) background as factors associated with moderate to high developmental risk (Woolfenden et. al., 2016). Study findings also suggested that children with multiple risk factors were more likely to experience developmental vulnerability, and that their developmental vulnerability was less likely to be identified and documented (Ayer, et al. 2020; Woolfenden et al. 2016).

South-western Sydney is a region with a significant CALD population. Approximately 35% of residents have English as a second language, with that proportion increasing to 70% in some locations (Garg et al., 2017). Qualitative data from the WMG study found that parents' limited awareness and understanding of child development and health surveillance, including the purpose of the Blue Book, were key factors in the reduced engagement with primary health care for CALD families. Some acknowledged the importance of the Blue Book as a resource for information and for tracking growth and development. Others said that they relied on their own instinct and family expectations of their child's development, and did not feel the need for regular check-ups with health professionals. Another key factor was the choice of provider, which for some parents was influenced by previous interactions with GPs and CFHNs. Many parents indicated that they attended a GP for all health care needs; this choice was linked to feelings of trust and confidence in the knowledge of the GP as the main health provider. Some participants chose to seek advice from the CFHN, but in general participants were less likely to attend Early Childhood Health Clinics. Shared cultural background and language with health providers was shown to be important for participants (Garg et al., 2017). Finding suitable ways to enable and empower parents from disadvantaged and diverse cultural backgrounds to engage with health professional in the first five years of their child's life is therefore critical.

While identification and follow-up of health and development problems prior to school entry can support the child's transition to school and assist in the planning of appropriate educational programs, many developmental difficulties are not identified until the child starts school (Goldfeld et al., 2012). A study of three successive population cohorts of Australian children identified the prevalence of teacher-identified special heath care needs (SHCN) and their distribution across disadvantaged communities (O'Connor et al., 2019). Data were collected through the teacher-rated checklist in the Australian Early Development Census (Australian Government 2018) for children in their first year of schooling in 2009, 2012 and 2015, across government, independent and Catholic education systems. The cohort of 853,123 children represented 96% of

the estimated 5-year old population for each year. The study found that the proportion of children commencing school with either emerging and established needs was generally stable across the three cohorts with 17.1-18.9% identified as having
emerging needs and 4.4–4.9% established needs. Furthermore, the study found that the odds of children having SHCN was higher in disadvantaged communities (O'Connor et al., 2019). Health and development screening in the year prior to school entry, therefore, has the potential to identify and support appropriate interventions in the management of problems that may negatively impact on educational performance.

Such an approach is used in New Zealand with a study of prior-to-school health and development screening reporting that uptake has increased each year since 2013 (Richards et al., 2019). The New Zealand before school check-ups (B4SC) are voluntary and offered free of charge to all four-year-old children whose families are enrolled in a primary health organisation (93% of the population is estimated to be enrolled in primary health organisations). The service is provided in different locations according to community accessibility and needs, such as pre-schools, medical practices, community centres, churches and marae (sacred place in Maori culture). Since 2013, over 90% of all eligible four-year-olds have participated each year, and 92% of all eligible children were screened in 2015–16 (Richards et al., 2019). These data demonstrate the importance of an approach that provides support to families in the places in which they feel most comfortable.

Partnerships between health providers, early childhood education and care, and community organisations can thus provide the basis for collaborative models of implementing health and development surveillance. Edwards et al. (2020) reported on an evaluation of developmental surveillance in which CFHNs were located in non-government organisation (NGO) early childhood services alongside early education and care staff and family workers. NGO staff were trained in child development and the use of the PEDS, the NSW Health developmental surveillance tool at the time. Commencing in June 2014, the evaluation utilised a mixed-methods design to identify children from CALD backgrounds at developmental risk and to provide referrals to support services. Data were collected through focus groups, interviews, pre- and post- training surveys, and existing data sets capturing developmental vulnerability and

contact with services. Of the participating 159 children, 39% had one or more predictive concerns on the PEDS, indicating developmental vulnerability and requiring referral and follow-up. Co-location of CFHNs in an NGO setting was identified as an enabler for parents to access developmental assessments. Parents who might have felt reluctant to attend child and family health clinics were introduced to nurses in a safe, familiar environment. The training provided for NGO staff was regarded as key to the success of the model; NGO staff valued the team effort and reported increased confidence arising from their relationship with CFHNs and other health service providers (Edwards et al., 2020). This study demonstrates the potential for improving access to health screening for CALD and vulnerable communities through partnerships between health and early childhood providers.

Practitioners' and policy makers' concerns about vulnerable families' uptake of early childhood services in Tasmania led to the Tassie Kids Project, an investigation conducted by a cross sectoral partnership involving the Departments of Health and Human Services, Education and Premier and Cabinet. Specifically, the project employed an ethnographic research design, gathering data from 43 service providers and 32 parents to investigate families' uptake of early childhood services and how services were engaging with families (Jose et al., 2020). The study found that outreach was a key element in the effective delivery of services to vulnerable families with young children. Defined as the

delivery of service outside the usual location of the service (Wakerman et al., 2008), outreach strategies used in the Tasmanian context included home visits, telephone calls, attending services with parents, providing transport to families without cars and with limited access to public transport, and social media communication. Parents reported positive impacts of support, which they recognised as beyond usual care. The Tassie Kids Project identified effective outreach activities as those informed by the principles of consistency, reliability, flexibility, responsiveness and persistence, and with a clear purpose to engage families, connect them with services and provide support. The study identified structured service delivery models and staff capacity as constraints to the delivery of outreach. Whilst outreach strategies were practiced across all early childhood services, the study found that outreach practice was implicit; policy and practice frameworks lacked guidance on the role of outreach. Jose et al. (2020) concluded that the development of explicit guidelines to clarify the role of outreach for service providers would increase its visibility in facilitating engagement with vulnerable families.

Models that co-locate health and learning services within early childhood education settings and community centres have the potential to identify and address barriers and risks to families' participation as well as protective factors that enhance uptake. For families in disadvantaged communities, supporting protective mechanisms to flourish is arguably the most important work a service organisation can do to set children on a trajectory that will lead to positive outcomes across the lifespan (Hertzman, 2010; Moore, McDonald & McHugh-Dillon, 2014). The success of such service delivery models relies on building and sustaining strong relationships across health, early education and community sectors, as well as with families themselves.

Doveton College Victoria, which opened in 2012, offers an integrated early learning, family support, maternal and child health service for children from birth to age four, as well as teaching and learning spaces to year 9. This place-based, integrated model illustrates how the involvement of many partners with a shared vision "has allowed a well-grounded concept to evolve into the creation of an integrated, wrap-around community-focused school" (McLoughlin & Newman, 2015, p. 10). The three levels of support provided by Doveton College are: funded education on a daily basis for early learning, primary and secondary

cohorts of children; services provided by partner organisations, such as maternal and child health, family support, playgroups and parent support, offered on a sessional or ongoing basis; and services delivered off-site by partners and available to children and families on a referral basis (McLoughlin & Newman, 2015). The Doveton model of early learning provides support to families through on-site maternal and child health services for children from birth to age five (Newman et. al. 2020). This integrated model of health and educational service delivery and social support offers a protective mechanism for families through the years from birth to school and (potentially) beyond.

The effect of the Doveton model on early learning for school readiness and academic achievement has been the subject of research. Newman et. al. (2020) investigated whether students who attended the Doveton early learning program in 2013 demonstrated improved academic outcomes at school entry in 2014, compared with their peers who did not attend the Doveton early learning program. If academic advantage was identified in 2014, the study aimed to determine whether students who had attended Doveton early learning maintained an academic advantage in the subsequent four years of schooling to 2017, compared to students who did not. Participants were 56 students (27 girls and 29 boys) who attended Year 3 at Doveton College in 2017, of whom 75% were born in Australia. Of the total sample, 17 students had attended the Doveton early learning program and 39 had attended early learning elsewhere or not at all. Preliminary findings indicated that students who attended the early learning program at Doveton showed significant academic advantage on entry to school, compared to students who did not. In light of Doveton's wrap-around service model which integrates education with family support and maternal and child health services from birth to age five, and support for parents and community members, the researchers acknowledged that it is difficult to determine which factors may have had the most significant effects. However, the outcomes of this study suggest that improvements identified at school entry may be sustained as children grow, thus contributing to lifelong achievement (Newman et. al., 2020). The success of the Doveton model has been enabled by the strength of relationships amongst partners as well as their commitment to understanding and responding to community needs (McLoughlin & Newman, 2015).

Supporting children in the Mt Druitt area of NSW to start school well is the core focus of the CUBS project, initiated by The Hive. The CUBS project was developed in direct response to a need identified by the Australian Early Development Census (Australian Government, 2018), consultation with families, and concerns raised by local early years partners and school principals. The research described in this report contributes to the existing body of research examining the effectiveness of integrated health and education services in the early years. The findings will inform future health planning, policy and practice in early health and education in disadvantaged communities.

SECTION 3: RESEARCH DESIGN AND METHODLOGY

A mixed-methods research design was employed, including focus groups, individual interviews, surveys and linkage with health records, An overview of the project design is captured in Table 1.

Table 1: Summary of research and participant numbers

Research Questions	Recruitment	Method / Tools	Participants
Aim 1: Barriers and facilitators to participation in health and developmental screening			
• What are the barriers for families in participating in screening programs? • What are parent views on how families could be better supported to engage with screening programs? • How satisfied are parents with screening programs and other services they access for their child? • What are their key sources of information relating to child health and development?	In 2020 and 2021 all families whose children attended the partnering ECE settings, regardless of whether or not they had participated in CUBS screening, were invited through the centres to participate.	Three parent focus groups	12 parents or carers participated in focus groups
Aim 2: The role and impact of the CUBS program on child and family outcomes			
• What are the health and development support needs of the participating children? • To which medical, allied health and development support services are the children referred? • To what extent do families follow up on the referrals? Do they have a GP that they see regularly to discuss the health and development of their child? • How satisfied are parents with the screening program and other services they access for their child? • What are the key sources of information relating to child health and development for parents? In what ways has the program informed parents, or facilitated greater understanding of their children's developmental needs? • To what extent do parents perceive that the professionals involved in supporting their child (including health, allied health and education professionals) work in a coordinated and coherent way?	All parents whose child received a CUBS assessment in 2020-2022 were invited to participate. Late 2021 and early 2022 (after secuiring WSLHD HREC approval), parents whose children had CUBS were invited to provide consent for the research team to access their child's CUBS assessment. There were 24 children's health records included from 19 families.	Health, development and referral information: Data Linkage with WSLHD to access CUBS screening data, including ASQ & ASQ-SE and CFHN notes Family experiences and satisfaction: Individual parent interviews and parent completed survey	A total of 51 parents/carers participated in this phase 36 participated in individual interviews. 25/36 also completed the survey, and 4/36 consented to the research team accessing their child's health records. 15 parents/ carers gave consent for the research team to access their child's health records only.

Table 1: Summary of research and participant numbers (Continued)

Research Questions	Recruitment	Method / Tools	Participants
Aim 3: Cross-Sector partnerships to support children and parents, and facilitate a smooth transition to school			
• What were the experiences of professionals engaging in cross-disciplinary collaborative work through the CUBS program? Did they observe practice or system change as the result of collaboration? • What are the experiences of educators as this relates to the role of health and developmental screening to support the transition to school? • How was information shared between parents, early childhood and primary school education settings, and health and allied health professionals? • How do parent and professional stakeholders describe the benefits and challenges associated with participation in the CUBS program?	Local service providers, education and allied health professionals who had supported the CUBS pilot were invited to participate. Five children and their families who had participated in the CUBS program and in the family interviews were invited to serve as case studies to explore school	Individual interviews with cross-sector service providers. Case study approach with diverse children and their families to explore the role of CUBS in their school transition.	3 community service providers 3 allied health professionals 7 educators (representing ECE, school principals and kindergarten teachers) 5 parents or carers.

RESEARCH SITES

Data were collected across education and community sites, including three public schools, three early childhood education and care centres, and four community centres.

Demographic data for these suburbs indicate that residents experience the highest levels of disadvantage within the Blacktown Council area (Blacktown City Council, 2016). According to the 2016 census (Australian Bureau of Statistics), English was the only language spoken at home by most families (65%). Samoan, Arabic, Turkish, Tongan, Tagalog and Hindi were the most prevalent first languages in this area (Australian Bureau of Statistics, 2016).

RESEARCH PARTICIPANTS: CHILDREN AND FAMILIES

The total number of participants was 76, comprising 13 education, health and community service professionals. 36 participated in an interview, and of these, 25 also completed the survey. 19 families gave consent for access to their children's health records, for 15 of these it was their only form of research participation. Of the parents and carers who provided consent for access to their children's health records, 15 provided consent for access to a single child's data, while four provided consent for access to more than one child's data.

Parent, family and child demographic data from the survey (n = 25) is summarised in Table 2.

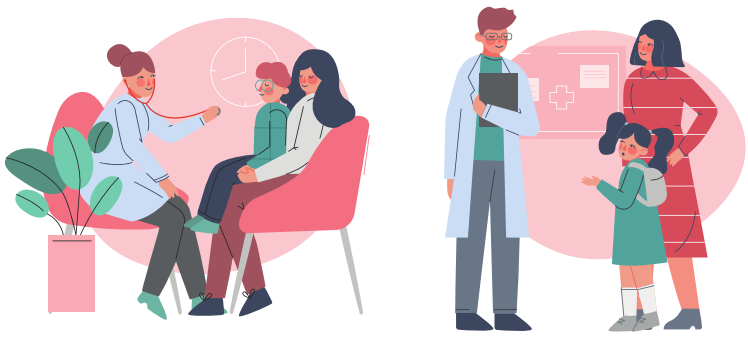


Table 2: Research participants: Children and Families - Parent, family and child demographic data from the survey (n = 25).

Family Variables	Demographic Data
Parent data	
Parents / Caregivers	Mothers: n = 21 Fathers: n = 2 Grandmothers: n = 1 Aunts / Guardians: n = 1
Parent / Caregiver Age	18-25 years: n = 1 26-35 years: n = 15 35-40 years: n = 3 >40 years: n = 6
Parent/Caregiver Highest level of education	< Year 10: n = 1 Year 10: n = 5 Year 11: n = 2 Year 12: n = 7 TAFE certificate / diploma: n = 9 University Bachelors degree: n = 1
Family data	
Number of children in the family	Range: 1 - 6 children Average: 3 children
Family composition	One parent family: n = 14 Two parent family: n = 10 Step-family: n = 1
Cultural background	Non-indigenous Australian: n = 10 Indigenous Australian: n =7 Other (Tongan, Bangladeshi, French Polynesian, Timorese, Lebanese, Sudanese) n = 8
Language spoken at home	English: n = 19 English plus one other language: n = 5 Languages other than English: n = 1
Access to the internet at home	100%
Child data (for those who had linked health data only)	
Child gender	Female: n = 12 Male: n = 12
Child age	Range: 2 - 6 years old Average: 4 years old

DATA COLLECTION AND ANALYSIS

This section provides a detailed outline of the processes employed to collect and analyse data in each of the three phases (aligned with the three aims) of this study.

PHASE 1: Barriers and facilitators to participation in health and developmental screening

Phase 1 was designed to address the first of the research aims, to understand the barriers and facilitators for families in participating in early childhood health and development screening programs in the year before school. This aim was investigated by collecting data through three community focus groups: one in a local preschool, and two in community settings. The focus groups were all conducted face-to-face, as they occurred prior to Covid-19 lockdowns, and questions are included in Appendix 3. The participants were 12 local parents with children aged under five years. The parents represented diverse cultural groups within the community, including parents of children with a diverse range of abilities and health needs. The research questions linked to Aim 1 are listed in Table 1.

Focus groups were recorded, transcribed and a thematic analysis was undertaken to address the research questions.

PHASE 2: The role and impact of the CUBS program on child and family outcomes

This phase was designed to address Aim 2, to examine whether participation in CUBS leads to early identification diagnosis of child health and development challenges, family engagement with health and other services, and high levels of parent satisfaction with the supports available to them. It employed a mixed-methods design with data linkage.

Due to Covid-19 restrictions, most interviews and surveys were conducted by telephone. The research questions and measurement tools used to investigate Aim 2 are summarised in Table 1.

Data from the screening reports for the 24 children whose parents gave consent were collated and analysed to identify the health and development needs and challenges for children within the CUBS program.

Interviews with 36 parents were conducted, audio recorded and transcribed. In 2021 a second wave of Covid-19 lockdowns restricted access to pre-school and community sites resulting in interviews being conducted by telephone. The interview questions are included in Appendix 3. Transcripts were analysed thematically. This involved careful reading of each transcript, assigning codes to specific responses and identifying categories of information as themes in the data.

Twenty-five parent responses were collected through an online survey. Despite all parents reporting internet access in their homes, many sought researcher support to complete the survey. Disruptions to face-to-face contact with parents due to Covid-19 resulted in most surveys being conducted by telephone, facilitated by the research assistant who completed print copies of survey questions during telephone interviews. As survey and interview responses were audio recorded, having transcripts to complement print records enabled data entry to be checked for accuracy against the audio recordings. Data analysis and reports generated by the online platform were considered in light of the themes identified in the interview data. Survey items are included in Appendix 4.

PHASE 3: Cross-sector partnerships to support children and parents, and facilitate a smooth transition to school

This phase was designed to address Aim 3, to explore the impact of CUBS on school readiness and cross-sector partnerships to support children in the transition to the first year of primary school. Interviews were conducted with key service providers including two CFHNs, the CUBS speech pathologist and school principals. Interview questions are included in Appendix 3. Professional conversations were also conducted with a representative of The Hive and others within the local community who were part of the CUBS collaboration.

In addition, transition to school interviews were conducted with five parents, two pre-school directors/assistant principals, one primary school principal and three kindergarten teachers. Interview questions are included in Appendix 3. The data collected from these interviews informed the development of case studies on the transition to school process for five children. All interviews were recorded and transcripts analysed thematically. Narrative case studies were compiled to exemplify the transition to school experience for five individual children. Study findings are presented in Sections 4, 5 and 6.

Understanding the barriers and facilitators to family participation in early childhood health and development screening programs

There were five themes identified in the focus group data that directly informed our understanding of the barriers and facilitators to engagement with screening program.

Theme 1.1: "Health checks are for sick children"

A clear theme in the focus group data was the perception that health checks are for sick children or those with identified health or development issues. This finding is illustrated by parent statements such as:
"My kids are just healthy … the health check, is it if they are sick?" (F22).
Parents did not subscribe to the notion of well child healthcare and expressed concern that if they took up the time of a busy GP for a child who was not sick, they were "wasting" the GP's time: "I'd much rather them go to a new parent who's struggling" (F21).
Participants reported positive experiences of visiting their GPs when their child was sick or required immunisation, however they were reluctant to take a well child to the GP and risk exposing them to contagious diseases:
"I hate going into the doctor's surgery for three hours just to get the immunisation, which he's not sick. So I'm sitting around everybody that's sick for that long" (F31).
Parents, particularly those who were on temporary migrant visas, raised the issue of the cost of going to the doctor, and a reluctance to find the money to pay for a GP visit for a child who is well.

Theme 1.2: "You've got enough to think about when you're a mother"

Parents expressed value in receiving SMS reminders about immunisations that were due, but saw limited value in the Blue Book, reflected in comments such as: "I don't even go through the Blue Book" (F35) and "… you've got enough to think about when you're a mother. You're barely even remembering his appointments, but when someone sends you a text, oh that's right, I've got to go" (F33).

Parents expressed positive experiences of baby health centre visits in the first few months after birth, particularly for their first baby. While child and family health nurses were seen as supportive in the very early years, parents did not associate child and family health nursing with health care for their child beyond infancy.

Theme 1.3: The importance of relationship and a culture of care and consistency

Focus group data suggested that the culture of health service settings could be both a barrier or facilitator to participation. Having to see many different GPs rather than being able to establish a relationship with one, and long wait times resulted in frustration at having to provide the same information at each visit. This culture of GP surgeries made it difficult to build a relationship with their preferred GP and presented a barrier to participation. One participant commented that the culture of GP surgeries, because of how busy the environment is, wait times, and constant new faces, was traumatising for her child. This culture was also frustrating for parents, exemplified by comments such as:

"We try to keep the same doctor but she's only in certain days. So some days we'll go in and she's not on [duty]" (F35); and "You can't pick what day you're going to be sick" (F31).

Dismissive attitudes from health professionals was raised by some participants as a barrier to engaging with health services. For example, one mother described her attempts to follow up with a CFHN who had visited her at her home:

"…and she never contacted me again, so I was … trying to message her about certain different things … like for tips and tricks and stuff like that. And she was blunt with it, so I was like, okay, well I'm not really going to continue to ring you" (F34).

Some participants perceived health services to be less responsive to parents who have had multiple children, for example:
"When I had my number three here … they didn't offer a lot … they think that you know everything … you're pretty much forgotten about really … I think because … this is my fifth child, 'Oh no, you don't need help'. That's the attitude". (F33)

Participants' reports of positive experiences engaging with responsive, sensitive GPs with whom they felt rapport emerged as a facilitator to participation. One parent recounted her experience of seeing a new GP with whom she felt an immediate connection:
"I'm not going to let her go … she really welcomed me and explained everything to me" (F22).

Having a positive relationship with one health care provider reduced the need for parents to tell their story many times to multiple people. Parents spoke of the need for streamlined systems for storing and communicating informationacross service providers. They also expressed frustrations and recounted delays in immunisation records being transferred to Centrelink and pre-school, negatively impacting on family benefits and pre-school enrolment, and saw these delays as reflecting a health care service culture that did not prioritise children and families.

Parent satisfaction with healthcare services was strongly linked to the extent to which they felt a connection with the provider. They valued healthcare that was relational. When they perceived that the healthcare provider took an interest in them and their children, and/or shared a common language or cultural background, they felt valued, and expressed satisfaction with the service.

Theme 1.4: Immunisation is the priority in the early years, development will come with time

In relation to their children's health and development needs, most participants in focus groups emphasised immunisation and weight checks as the health priority

areas in the years from birth to school. An interesting aspect of the data was the common parent belief that child development would happen in its own time.

For example, one participant said:

"Well my second child, he's two. He didn't walk until he was almost two … He only just started talking a couple of months ago. So compared with my first he was very behind … I'm like 'what's wrong with him?' And now you wouldn't think there was anything wrong with him 12 months ago. He has just picked up … Just like overnight he just woke up and was able to do everything … So sometimes I've found that when you just let things happen on their own they tend to happen. "(F21)

This perception that child development will happen in its own time exemplifies data suggesting that, with the exception of immunisations and weight checks, health and development screening is not a high priority for the parents who participated in the focus groups. Parents did not talk about healthcare providers as a source of information about child health and development. Some indicated that they received advice and information from families and friends and others placed value in their own experience as parents.

Theme 1.5: The CUBS program is a good idea

Participants responded positively to the idea of child health and development screening services being embedded in early childhood settings. They expressed the view that a service ("with no sick people") would be of value and they appreciated the easy access to screening that such a service would provide.

Summary of Phase 1 findings

The participating families equated support and information about child health and wellbeing with healthcare from GP's. They did not identify CFHNs as having a role in supporting them and their child beyond infancy, potentially suggesting a lack of awareness of the support available from local Child Health Clinics. They felt reluctant to engage with GP clinics for well child healthcare, seeing this as using the Dr's time unnecessarily and exposing their child to risk of illness. They also felt resistant to seeking out GP care when they did not have a relationship of care and trust with the GP. A further barrier to participating in screening programs was the belief that child development would happen in it's own time, and not something a parent should worry about too much. Immunisation was seen as the health priority.

Key barriers: The unwelcoming culture of GP clinics, lack of information on services available, parents not priotitising child development and well child healthcare

Key Facilitators: positive and sustained relationships with GPs, convenience in the delivery of services integrated with early childhood education services.

Examining the extent to which participation in the CUBS program led to early identification of child health and development challenges, family engagement with health and other services, and high levels of parent satisfaction with the supports available to them

This section of the report identifies and discusses two issues: the developmental support needs of the participating children; and service satisfaction and sources of information.

THE DEVELOPMENTAL SUPPORT NEEDS OF THE PARTICIPATING CHILDREN

The ASQ and ASQ-SE, completed for the 24 participating children revealed developmental support needs for children across all domains: communication, gross motor, fine motor, problem solving, personal social and social-emotional. Females scored higher than males on all domains. However, a larger sample size is needed to allow further analysis and to determine if this is a consistent trend. On all but the communication domain, more children were on track developmentally than were in the 'monitor' or 'refer' categories. Communication difficulties were particularly prevalent, with 67% of the children demonstrating challenges. The children collectively demonstrated particular strength in gross motors skills.

Figures 3 to 8 provide insights into the assessments for each domain.

Figure 3: Communication scores

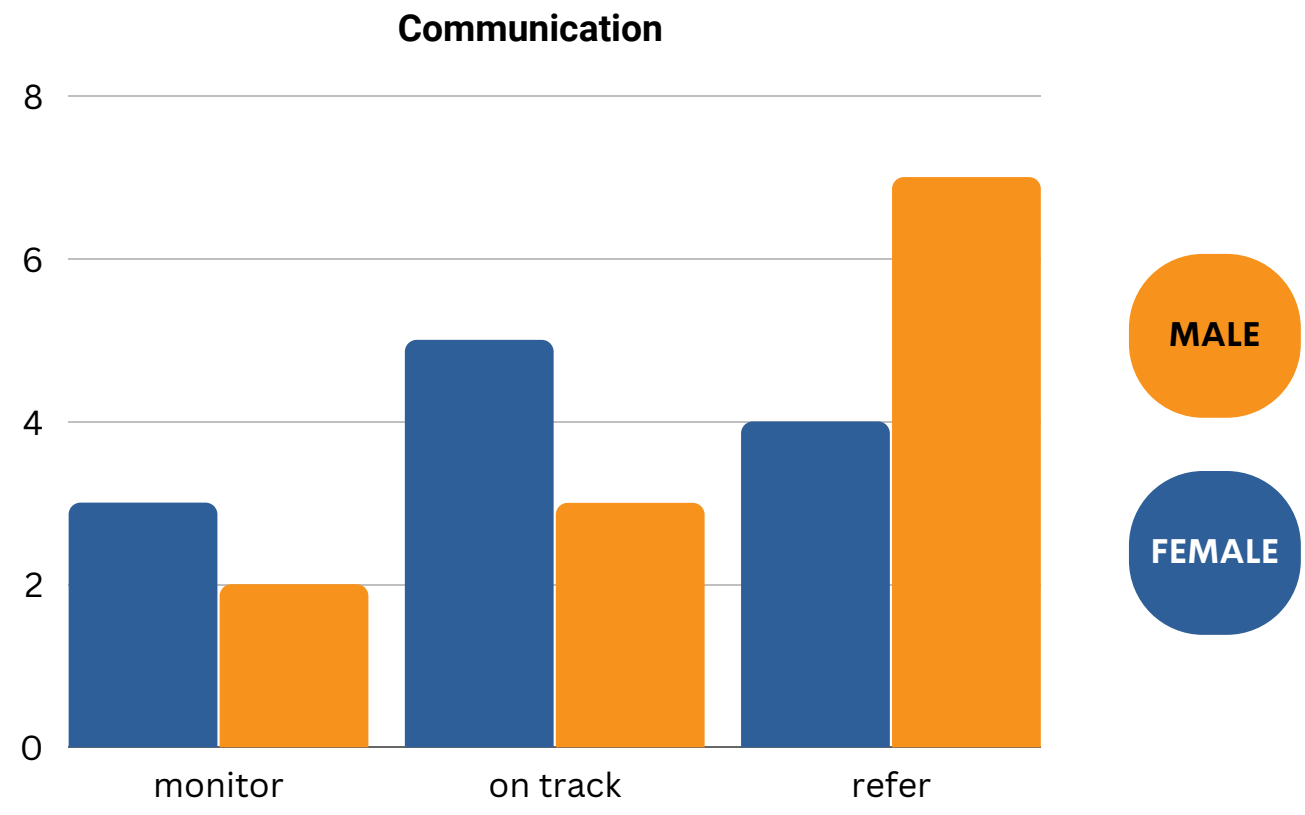


Figure 4: Gross motor scores

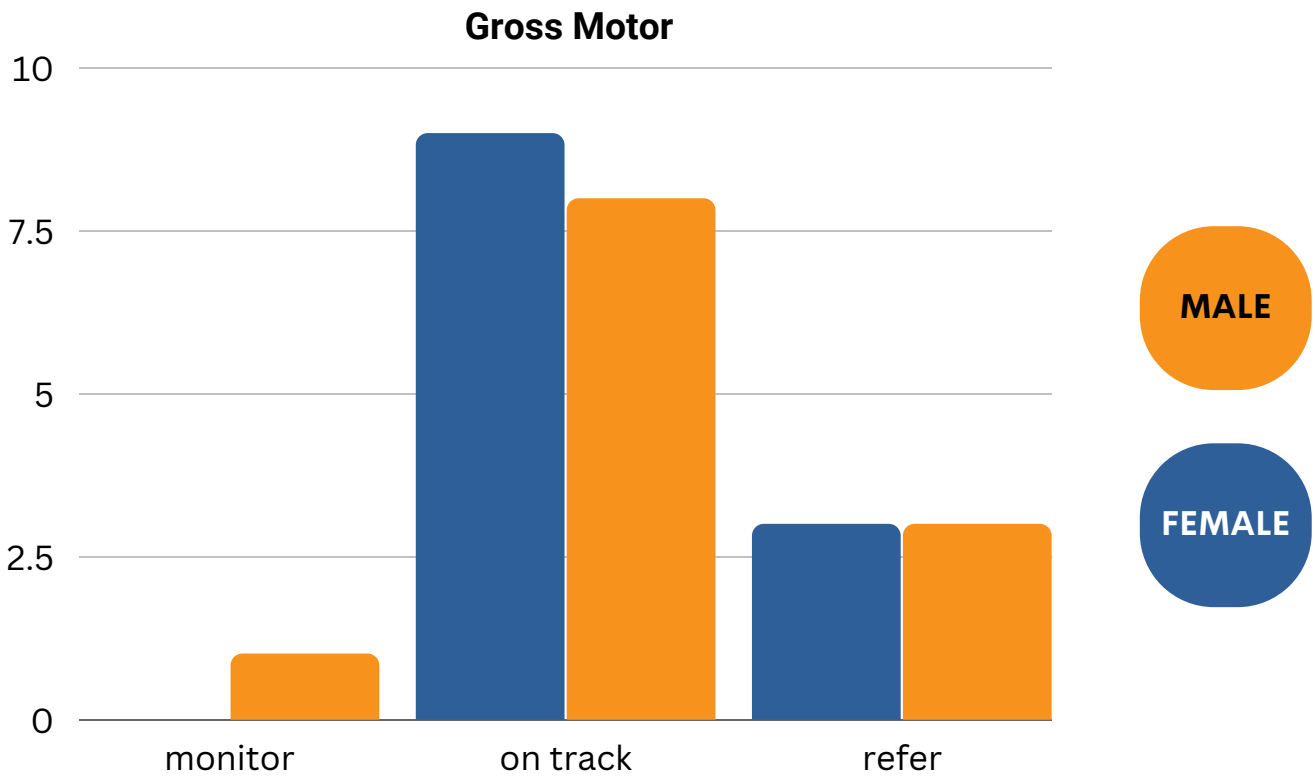


Figure 5: Fine motor scores

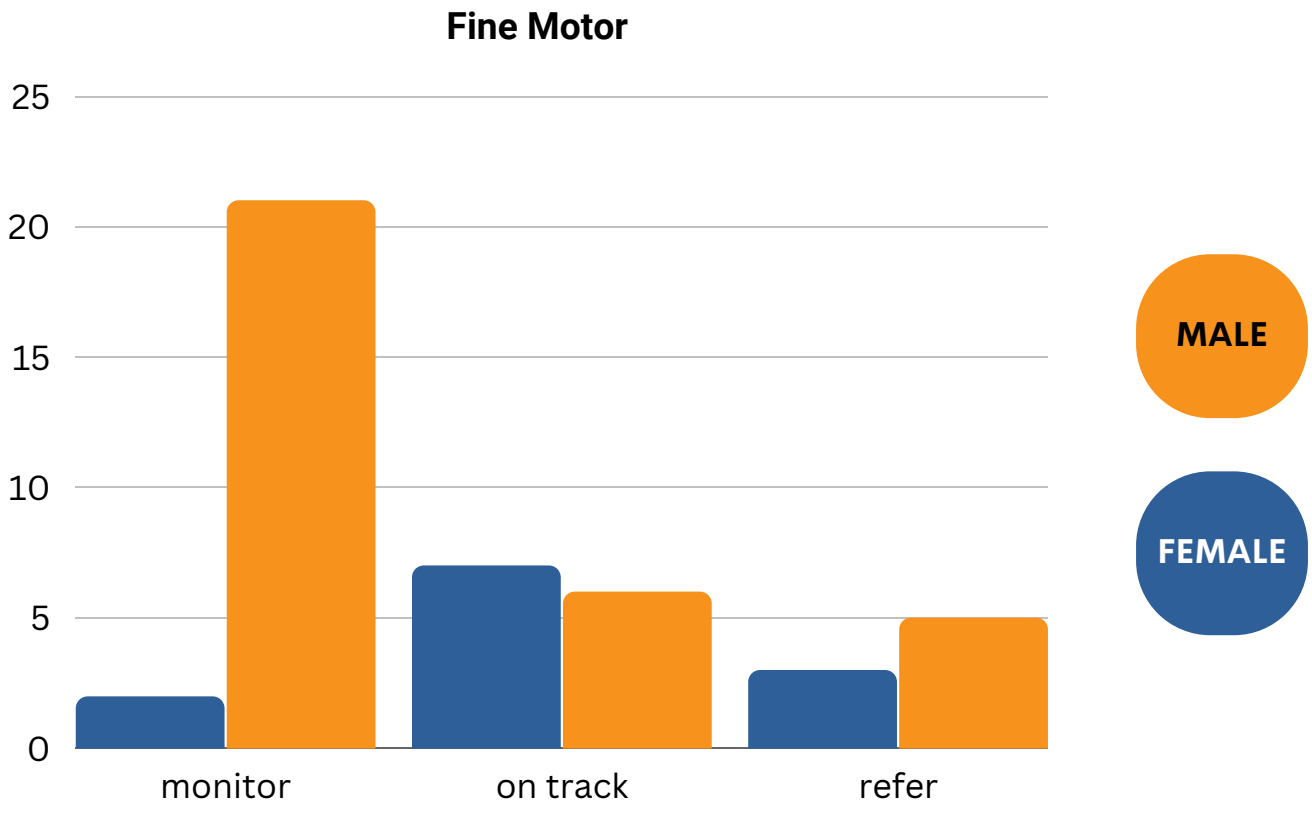


Figure 6: Problem solving scores

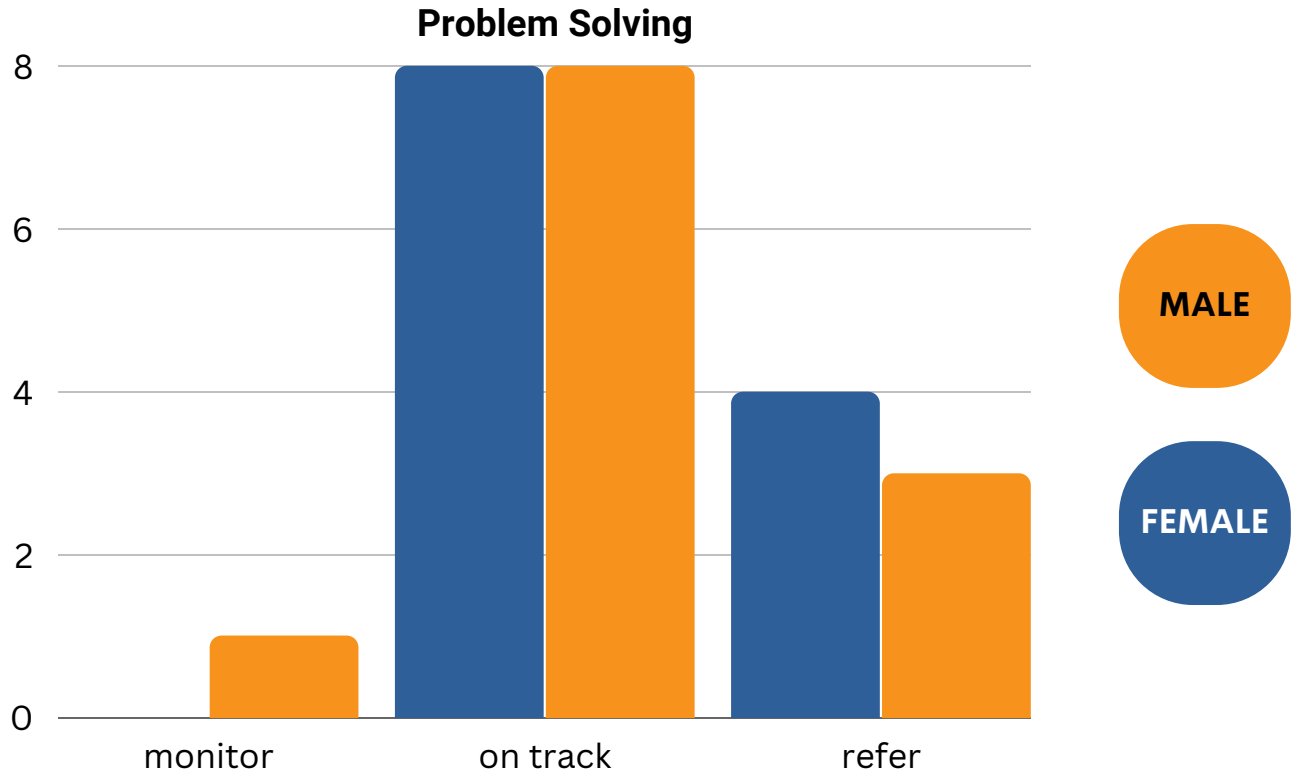


Figure 7: Personal-social scores

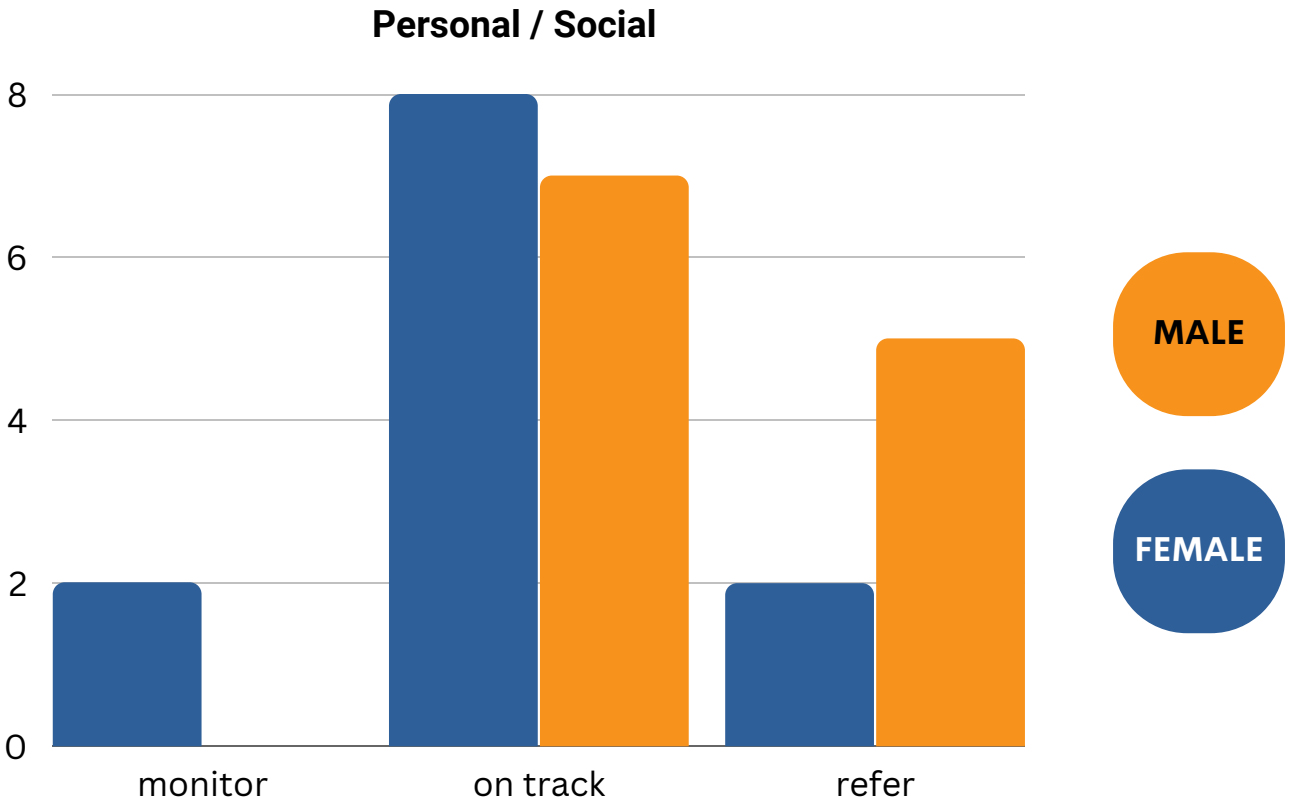
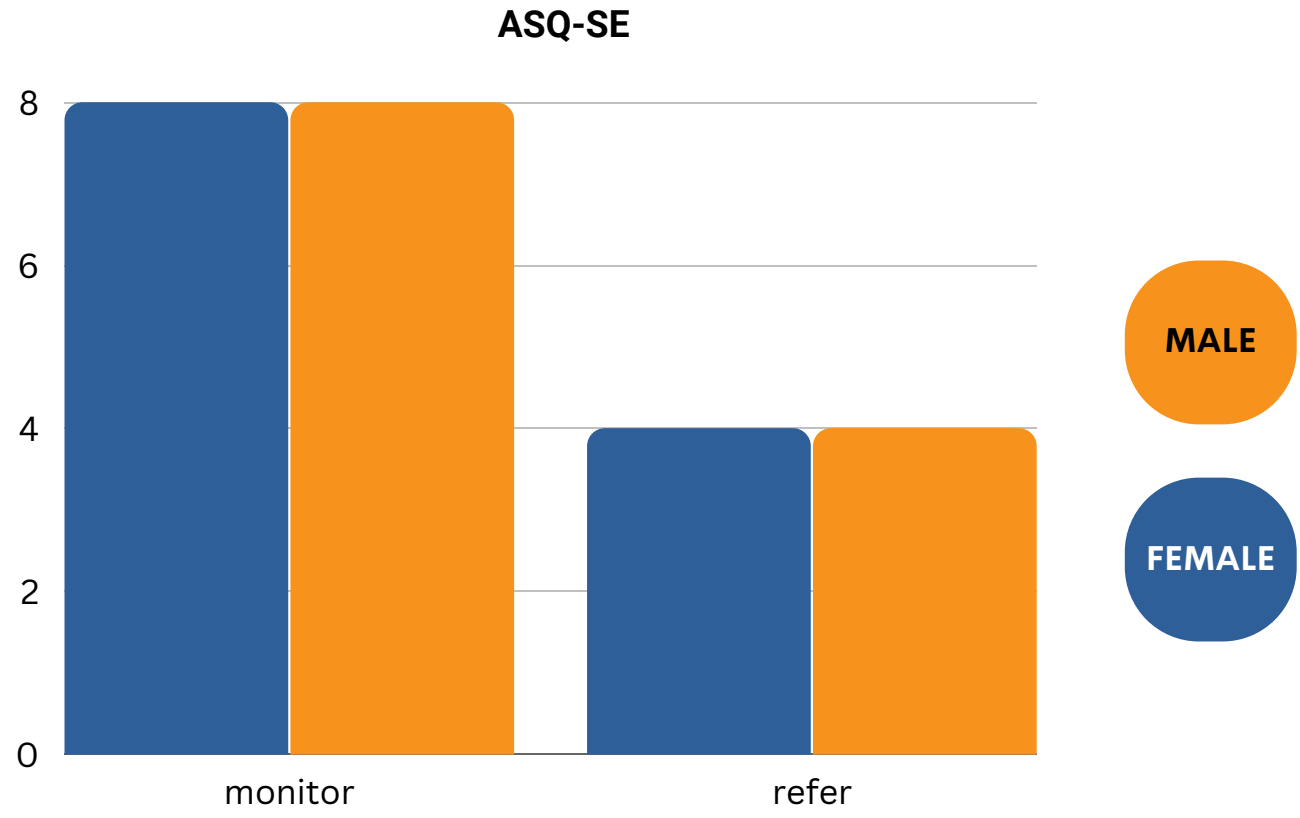


Figure 8: Social-emotional development scores



A total of 56 referrals were made for the 24 children, 25 for females and 31 for males. Only six children did not receive any referrals, including: one who had already been approved for NDIS support and was accessing services, and one who was attending a private speech therapist and paediatrician.

Most referrals were for speech and hearing services. Fourteen children were referred to more than one service, and two were referred to six allied health services. New NDIS applications were commenced for four children (two females and two males). Four children (three males and one female) who received referrals for speech therapy through allied health were also referred to the CUBS speech therapist for follow-up support. Eight families were referred to the CUBS health linker for assistance with enacting referrals. Table 8 below provides a summary of the services to which referrals were made

Table 8: Summary of referrals

Child Gender	Occupational therapy	Speech therapy	Behavioural psychology	Dental	Hearing	Paediatrician	Total
Female	4	6	2	4	5	4	25
Male	5	9	1	3	9	4	31
Total	9	15	3	7	14	8	56

The qualitative interview and survey data provides some insight into the extent to which parents acted on the referrals.

Theme 2.1: Following up on referrals

About a third of parents interviewed said the CFHN had made referrals during the CUBS check-up and that they had followed up and attended, or were on waiting lists for services from dental, speech, hearing or paediatric allied health professionals.

At interview and in the survey, respondents cited a range of factors as potential barriers to following up on referrals made during the CUBS check-up. These included Covid-19 restrictions, cost of services, limited access to transport and technology, family circumstances that made it difficult to follow up and attend appointments, and limited understanding of why referrals were necessary. One parent indicated that she had used an alternative service to the one that the CFHN referred her to. Another said she did not follow up because she did not think the referral was necessary.

In the survey data, 20 out of 25 respondents indicated that their GP was a source of child development information. This finding appears to be in conflict with the finding in Phase 1 where parents indicated that they did not seek out this kind of information from their GP. It is possible that parents see GPs as a source of information, but do not necessarily seek it out. It may also be that engagement with the CUBS program led to an increase in family engagement with GPs. The regularity of GP visits ranged from monthly (n=10), twice yearly (n=6), fortnightly (n= 2), weekly (n=1) and yearly (n=1).

Despite the barriers acknowledged by parents, the survey data suggest that when referrals were made during CUBS check-ups, most parents made efforts to follow up. Data also suggest that most families had a connection to a GP, however the regularity of attendance varied.

SERVICE SATISFACTION AND SOURCES OF INFORMATION

Theme 2.2: “Screening helps you pick up on things that you wouldn’t normally pick up on”

Many parents regarded CUBS screening as beneficial, a shared responsibility with parents, to
“pick up on things you wouldn’t normally pick up on” (V).
One parent commented,
“I find it’s a lot better for the community to be able to have their kids [screened] and make sure that the kids are developing the way that they’re supposed to” (M). Another stated,
“I feel it takes a lot of pressure off [parents] just having another opinion on your child’s development and where to go to and how to get help and all those things. It makes it so much easier” (Q).
Parents interviewed expressed their satisfaction with CUBS as a valuable and credible source of information about the extent to which their children were meeting developmental milestones,
“making sure that she meets milestones that other kids are meeting” (H).
Parents also mentioned the role of CUBS in preparing children for school, exemplified in the following comments:
“It’s good for parents to know if there’s something wrong prior to starting kindergarten” (Z);
“if you can get to them early, if you can get the problems early … it makes them easier to rectify before they start school which helps learning outcomes” (C);
“they will be more confident at school and not be as shy as if they didn’t have the program” (G).

Parents valued the convenience and familiarity of having CUBS screening available at pre-school, exemplified by one parent’s feedback,
“It was good because it was at the pre-school … I didn’t have to take my child anywhere else and it was a familiar environment for her” (H).
Another expressed the value she perceived in being present during the assessment:
"For myself as a parent, to be present and see for myself how the nurse and my child interact is something hands on … and you can make your own opinion in regards to what is being done … and how your child understands the questions … and whether the child understands how to proceed in completing an activity. So it’s remarkable … I think it is a good initiative." (EE)

For yet another, being able to see the scoresheet during the assessment enabled her to feel engaged in the process:
“on the day I could see everything visually … Just seeing the score sheet visually myself was good enough for me” (DD).

Another parent used the information she accessed during the assessment to plan and implement activities at home:
"So what I’ve learnt from the assessment is that I made a schedule for him for playtime, reading time, writing time and family activity time … so what the program has shown me is this will help and make a big difference. I suppose if I didn’t attend the assessment and see for myself, I could only just assume." (EE)

These data provide evidence of parents’ positive engagement with CUBS. For many parents attending the check-up was a confidence-building experience that gave them ideas and empowered them to actively participate in their children’s health and development.

While most parents valued the familiarity and convenience of having CUBS assessments occur in pre-school settings, one presented a counter view:
“my daughter seemed to be quite distracted throughout … because the room was right next to the other room where she normally goes to play with her friends, so she wanted to play with her friends” (H).

Theme 2.3: "It gives you that paperwork"

Many parents perceived the CUBS program as a credible source of child development information that could be used to inform follow-up conversations with their GP, allied health specialists and ECE staff. One parent stated:
"The reports that I have gotten from the CUBS program, I take on to my GP and the paediatrician, and it shows the concerns that I have or the concerns that I have missed. It helps the paediatrician understand what's going on at the day care." (AA)

Another concurred:
"It gives you that paperwork to take with you to your GP or your speech therapist or whoever, and you can go, 'look, there's something wrong, I need something done'. It's not just you going, 'there's something wrong that I'm not seeing', it's in black and white, 'this is their development, this is where they're falling behind, I need something done'." (Q)

While many parents – including 14 survey respondents – indicated their GP as their main source of child development information, accessibility and isolation were raised as barriers to health screening generally:
"We went to the GP and had a health screening there, because there's no … easy access to maternal health nurses in this suburb, it's quite isolated" (C).
Survey respondents also indicated that they accessed child development information from family and friends, the internet, early educators, pharmacy, and phone help lines. Parent feedback suggested that due to its credibility, the information gained from CUBS could be used to complement and extend the support they were accessing from other health services.

A small number of parents said they had experienced delays in receiving information after the assessment and suggested they would like more written information provided at the time of the check-up, such as
"leaflets and contact information" (EE).

Theme 2.4: "CUBS in the community"

At interview and in the survey, a number of parents expressed concern for families whose children were not attending ECE, exemplified in the passionate plea by one parent:

"Accept everyone … there are parents out there who are struggling and they need help with their babies getting to pre-school … can you encourage more parents to do this?" (U).

Another suggested,

"there needs to be a better hub … to target the children who are not in early education" (Q).

Others suggested a drop-in service offered at a shopfront or local church. One parent suggested a mobile CUBS service "that goes to your home" (H).

Many parents referred to the "the community hub" as a suitable venue to extend CUBS access to families outside of ECE. It should be noted that the CUBS program was offered in community locations in line with this suggestion from parents, however uptake from families was low, suggesting the need for more widespread advertisement of the program, but also the importance of support to engage in programs of this nature from trusted professionals such as early childhood educators. It is also highly probable that fear surrounding the COVID-19 pandemic interfered with family engagement in community sites.

Theme 2.5: "The CUBS team are really helpful"

At interview and in the survey, parents provided positive feedback on the CUBS team: the CFHN, speech therapist and health linker.

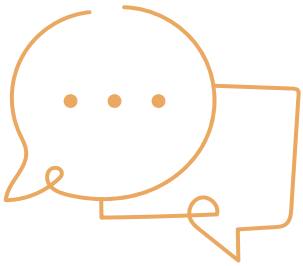
Parents expressed the positive rapport they felt with the CFHN and the value they placed on the service she provided, through comments such as:
"She [nurse] was very caring and nice and answered all my questions" (H);
"It was really, really good relationship, cause if she [nurse] didn't have an answer at the time she would find out and then contact me later to give me the information" (G);
"on the day she was lovely … she told me what I needed to know, she explained what we were doing, why we were doing it" (K);
"The nurse explained everything to me before conducting the assessment and I understood everything she explained. It was really good communication" (EE).

The following parent feedback reflected the nurse's approach to the check-up and her care and patience towards children:
"She was lovely. She took her time with my kids, my youngest son is very shy and easily distracted, so something that could've taken 20 minutes probably took 45 to an hour, but she had the time and the patience with him, and she let him go at his own pace … she was very accommodating." (AA)

Two parents described their relationship with the CFHN beyond the assessment: "She [nurse] still rings every once in a while to see how we are going … how the appointments are going" (D); "The health care nurse, she is very good and she's always there every time we come here she says hi and she helps us and she said if there is any questions just call her" (E).
These data suggest that the CUBS pilot facilitated the development of positive nurse-parent relationships; the nurse became an influential, trusted and reliable source of information, advice and support within family networks.

Many parents identified their children's speech development as an area of concern that was addressed by the CUBS program, exemplified through parent feedback such as
"They got my son and daughter into speech therapy which is what they needed. … I didn't know how to go about that" (D).

Another parent shared her experience:
The nurse noticed that she actually needs a bit of speech therapy … she's got a little bit of a lisp and isn't quite finishing sentences, so that is just something I just thought was normal and just plod along with, but … they picked up on that early and yeh, and we can get anything sorted. (F)



The work of the part-time speech therapist who joined the CUBS team in 2021, whilst impacted by Covid-19 restrictions, was valued by parents and ECE staff. One parent described the intervention received by her child,
"the speech therapist that came out, [name] she really helped [child] with his speech as far as saying his and hers it was him and her, he or she, I instead of me, there's been so many different things" (L).

Similarly, an ECE professional outlined the support provided by the speech therapist, including: individual assessments of children flagged by ECE staff and CFHN; explicit assistance in setting communication

goals across the pre-school; sharing of resources and activities that ECE staff could implement in class; and information workshops with families conducted initially by the speech therapist and continued by ECE staff.

Parents who had received assistance from The Hive health linker highlighted support received to make and pay for initial appointments, and navigate the National Disability Insurance Scheme (NDIS). One parent said:
"We were very lucky that the organisation, The Hive, have offered to pay for the initial assessment at the paediatrician and then another assessment and a follow-up appointment, but after that, we have to pay for all the appointments … I've had help with the NDIS, I've had help with the paediatrician, I've had help with getting their hearing checked and it's put me in touch with a couple of other organisations." (AA)

The efficiency demonstrated by the health linker was a highlight identified by parents who had been waiting a long time to access allied health appointments: "[The CFHN] has been very helpful … I had been waiting over a year before I put my name down for [child] and hadn't got anywhere. But when [CFHN] got in contact with me she found somewhere for me to start speech" (T); "She got me a paediatrician appointment" (U).
Assistance to navigate the NDIS and payment for services from private health providers were also much valued support

provided by the health linker, exemplified in the detailed feedback provided by participant AA:

"They have one person. She is very, very versatile in the NDIS programme and paediatricians. So, she managed to find a paediatrician that had availability within weeks of me contacting her. She organised all the appointments, they paid for it, they organised everything, they ask all the hard questions to the receptionist and they actually have certain paediatricians that they work with. And she also found speech and OT that had shorter waiting lists and my children are on multiple waitlists at multiple places. She is also helping write reports for if I need extra help and anything like that. " (AA)

These data emphasise the scope of the CUBS program as a “wrap-around” service consisting of both screening and practical intervention to address identified needs and support families in an ongoing way. Many parents described the CUBS assessment as an enabling process that increased their understanding and gave them the confidence to actively support their children’s health and development. Supportive relationships between parents and CUBS team members were key factors in parents’ perceptions of the program’s effectiveness.

Summary of Phase 2 findings

In summary, data collected in Phase 2 revealed that parents valued screening services as sources of knowledge about the extent to which their children are meeting milestones. Most parents indicated irregular contact with a GP to seek advice on their children’s health and development. However, they regarded CUBS as a key source of credible information about child health and development, which could inform more meaningful communication with their GP and other healthcare providers. The accessibility of CUBS offered in familiar environments enabled parents to participate in the assessment, thereby facilitating their increased understanding of their children’s developmental needs, and confidence in supporting them. Parents expressed their concern for families not accessing CUBS and suggested ways to expand its reach. Relationships with and practical assistance provided by the CUBS team empowered many parents to become an active voice in their children’s health and development.

SECTION 6: PHASE 3 FINDINGS

Exploring the impact of the CUBS screening program on school readiness and cross-sector partnerships to support children in the first year of school

This phase of the research drew on family interview and survey data, interviews with professional stakeholders, and a case study approach which looked at the experiences of five families whose child had diverse support needs in their transition to school.

INTEGRATED AND CROSS-SECTOR WAYS OF WORKING

Theme 3.1: "There is very intentional work going on"

Analysis of interview data revealed that close coordination across the work of professionals representing the community sector, health and education was a deliberate strategy in the establishment of the CUBS program, described by one community service provider as "very intentional work" (S2). One education professional stated:
"when they [parents] signed that consent form it meant that information could be freely shared between the nurse and educators" (E3).
Another described the coordination between the CUBS program, pre-school and school, as a
"close hand over … we know at least the CUBS will have happened for them before they come in the door" (E1).

The coherence in professionals' coordination was evident in feedback from families, as illustrated by one parent who stated,
"The Hive, the school and the community house all work together" (I). Another shared her awareness that "the day care here works as part of a broader collective with different organisations" and emphasised the relational aspect of CUBS:
"everyone who works, the school, the day care, everyone who works over at the hub, it's all really relational … they build really good relationships" (C).

Theme 3.2: "Sometimes you just need someone to break it down and go, this big word means this"

The coordination across the work of professional groups enabled practical assistance to be provided to families. As an example, one parent mentioned that ECE professionals had helped her to understand her child's CUBS report:
"it's easy for them to decipher it and then communicate it back to you in a way that's more relatable … they sit down with you and explain everything, which is good" (Q).
Another stated, "it's good to have all the information linked through to each other so it's easier to explain as well" (GG).

Analysis of interview data from parents and carers suggested that coordination and coherence across the work of professionals gave families confidence in the CUBS program, expressed by one parent:
"if there are any major concerns then I guess the nurse would be able to pick up on that and give you a referral to go over to the GP and then go the right direction to get that assessed" (J).

Theme 3.3: "A very place-based approach especially the delivery"

Analysis of interview data from professionals representing community, health and education sectors within the Mt Druitt area revealed a shared commitment focused on early intervention that is "family friendly" (S2) to address barriers experienced by families who were "getting missed" (S1). Professionals described CUBS as cross-disciplinary support that enabled families to "reach out without having that pressure of [a] top-down approach" (S1).

One community service provider elaborated on the CUBS place-based approach to service delivery:
"We're not targeting the families for whom they get an appointment and they go. We're actually trying to get families where children are being missed. Those who have got a real difficulty with the service system. Very traumatised lives, so getting those things done is really difficult. Interacting with the system is re-traumatising them because they're having to tell their story. We've changed the way we do things, to make things friendlier. The way we interact with the people we work with. We've culturally changed what we do. "(S2)

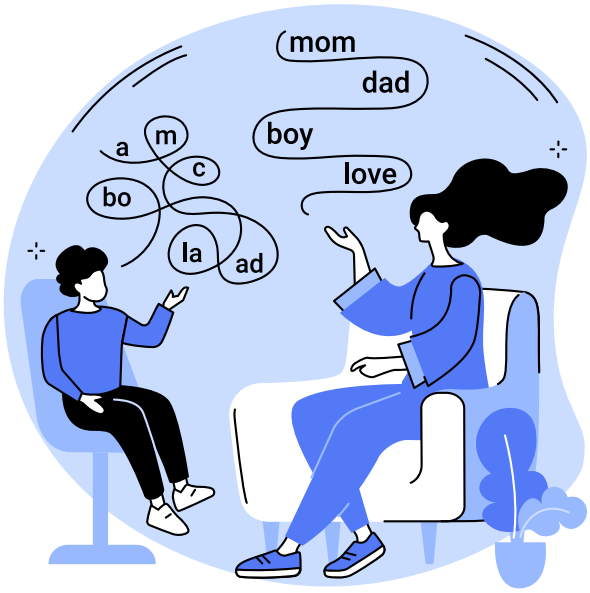
The relational aspect of CUBS, which emerged through analysis of data from parent interviews, was also a feature emphasised by professionals:
"we use a relationship-based model. We build trust and develop and build connection and relationship with the families over two terms." (S1).
"In a very corporatised social services system, this [CUBS] is very family friendly. Everything we do is soft." (S2)

The delivery of cross-disciplinary support in a non-judgemental way was a feature of CUBS highlighted by professionals.

One education professional stated:
"The nurse was someone that was here three days a week, so they [parents] sometimes saw her around … a familiar face. I think that needs to be considered because sometimes these families [suffer] from trauma … it's really hard for them to go into the unknown and meet a new person and … to take their child and almost feel that there is that sense of judgement … so having a familiar space and a familiar person helps take away that [sense of judgement] for them." (E3)

Another professional mentioned a non-judgemental approach to referral:
"another feather in the cap of CUBS is the fact that we refer them on to non-judgemental professionals that are supportive of the family. It's not a tick-box model" (S1).

The responsiveness of the CUBS cross-disciplinary approach was exemplified by the comments below relating to identified speech and language delays:
"We have big issues with speech and language development … a lot of children come to school with quite significant delayed speech and language development, which really impacts on their learning and … in many ways, they go undetected… It's almost normalised in some areas where all the children seem to be having similar issues." (E1)



These concerns were echoed by health professionals:
“they still have speech sound errors that should have resolved by the age that I see them … that’s quite common across all the different pre-schools that I’ve been in … parents were normalising the delay” (H3);
“several of the children who would come in who are non-verbal” (H2).
The CUBS model of cross-disciplinary collaboration provided a structure within which to respond to these needs,
“she [speech therapist] was really responsive to what the pre-school needed and what the educators needed and … of course what the children needed” (E3).

Theme 3.4: “A mindset of supporting other organisations to do their work”

The effectiveness of the CUBS pilot was underpinned by a culture of collaboration, described by one community service provider as “a mindset of supporting other organisations to do their work” (S2).
The CUBS model enabled cross-disciplinary information sharing which was valued by professionals and had benefits for children:
“sometimes [CFHN] picked up things that we hadn’t picked up on and vice versa. We were able to let her know our concerns before the check-up so that she could look further into those concerns as well” (E4).
Feedback revealed benefits for both professional practice and professional learning.
“A really valuable part of this programme is working together with the educators and identifying children that they have concerns with and giving them strategies to support that child in the classroom or support multiple children in the classroom.” (H3)

Theme 3.5: “A game-changer and win-win for families”

Professionals alluded to the potential of CUBS to influence system change in the delivery of child and family health in the pre-school years. One professional described CUBS as “a massive game-changer and … win-win for families” (S1).
This professional continued:
“Because you can talk about going to Community Health all you want, but there’s so many but there’s so many barriers that families have to go through in terms of transport, cost, multiple children to take along. So these things really get missed” (S1).

Another referred to the collaborative CUBS model as “[allowing us] to be able to try and make systems change” and elaborated:
"I think it’s broadened Community Health’s perspective as well, to be honest. I love the fact that Community Health see the value in coming to the service instead of the families coming to them. Because we know it’s not working. Not for every family. So, big picture, I’m seeing a big win with that in terms of Community Health changing their thoughts and processes around what that looks like." (S2)

Analysis of data collected from professionals engaged in service provision to families in the Mt Druitt area revealed that

“a really valuable part of this [CUBS] program [has been] working together” (H3) to offer coordinated family friendly and place-based early intervention that was responsive to needs and delivered in a non-judgemental manner. CUBS “changed the experience for them [parents] so that it was a softer experience” (S2);

it helped them

“to navigate the system” (S1),

“empowering them to look for the solutions themselves or pointing them in the right direction [so] that they can continue to seek support or continue to use the strategies” (H3).

Analysis and interpretation of professionals’ perceptions of the effectiveness of the CUBS model resonated with the experience of family representatives presented in Section 5. Professionals highlighted the effectiveness and benefits of cross-disciplinary collaboration and the potential of the CUBS pilot to influence system change.

THE VIEWS OF EDUCATION PROFESSIONALS ON THE IMPACT OF CUBS

Theme 3.6: “A solid foundation for the child”

The Educators who were interviewed unanimously held the view that prior-to-school health and development screening had positive impacts for children’s readiness for, and transition to school, as well as for families and receiving schools. One educator described how screening in pre-school helped schools to prepare for addressing an individual child’s needs, thus easing the transition for both child and parents:
"Sometimes we have children that start school, but we have worries about the child, that they might have a disability or there’s a health issue and parents are not aware or it comes as a shock to them. I think if it’s happening in preschools, it would help with us being prepared for those students … [and] would really make that [transition] much easier, for the child and for the parent. "(E2).

Another concurred,
“when they come into school, it [prior-to-school screening] really helps us to know where they’re at, or what they need. It helps us give the support to the student … [and makes] that transition a lot smoother for that child” (E6).

In relation to the CUBS program specifically, one educator described information sharing between families, health and education professionals, and The Hive as an enabler of streamlined service provision to families in preparation for their children starting school. Another stated:
“I can’t overemphasise how much value it [CUBS] is to get these kids as well-prepared, and the teachers prepared for the kids before they start. Yes, it’s an amazing project” (E5).
Another described the CUBS report as providing the kindergarten teacher and carers with
“insight on how [child] was doing in Preschool … [and] a picture of where their child is and areas needing improvement or attention” (E7)

Educators' views about the positive impacts of prior-to-school health and development screening and CUBS in particular were echoed by health professionals: one referred to screening as
"providing that solid foundation for the child so that when they are entering school for the first time, we've got all their needs identified in being able to support their learning" (H3).

The positive impacts of prior-to-school health and development screening on children's readiness for, and transition to school extend also to parents and teachers. CUBS allows for information sharing with parents and schools prior to school entry, thereby enabling streamlined and focused preparation to address children's identified learning and support needs from the point of school entry.

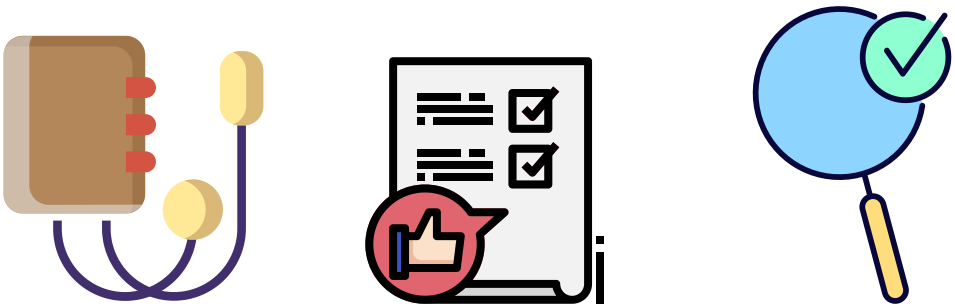
The timing of CUBS assessments was an issue raised in interviews with educators. It was suggested that assessments conducted during terms 1 and 2 would allow for referrals to be enacted and support to be in place prior to children's transition to school.
"If there's some way that the children would be able to access speech or OT or things as a part of that program, I think that would really help the children be a lot more prepared for school." (E4)
This view was also evident in feedback from some parents and carers, illustrated by the comment:
"if it's done early enough, during pre-school, and earlier in the year, when you've got a whole year to work on things that need to be worked on" (CC).
However, during the CUBS pilot, assessment timetables were disrupted by Covid-19, negatively impacting on follow-up support and information exchange.

Theme 3.7: The importance of information exchange

Feedback from parents and educators suggested that to enable the positive impacts of CUBS on children's transition to school to be realised, processes need to be put in place to facilitate the smooth and timely flow of information (CUBS reporting) from health to parents and ECE settings, and between ECE settings and receiving schools. When the CUBS pilot was initiated, the consent form signed by parents to allow their children to be screened was linked to the transition to school statement to allow

"any flags or any concerns that were picked up from the CUBS program that [were] then able to go to school with them … that continuity of where the child is medically, emotionally, socially. All those developmental aspects" (S1).

However, Covid-19 restrictions disrupted the CUBS screening timetable, as well as ECE and school transition programs. These disruptions negatively impacted information sharing processes. Some parents reported delays in receiving information following the assessment.



For many children, check-ups were conducted late in the year, after transition to school statements had been prepared by ECE professionals. When CUBS reports were received by the ECE setting, they were forwarded on to receiving schools if these were known. One receiving school educator said,

"I did receive a transition to school statement from the pre-school … but I didn't know anything about the health and development screening" (E6).

Another emphasised the benefits of information sharing:

"I think any information we can get before the children start school helps us with putting them in the right class, with the right teacher and with the right support" (E2).

Streamlined exchange of information would help to avoid duplication, as explained by another educator:

"If we were made aware of it [CUBS] so that we know and we don't double-dip. When they start school, if they've already got an allied health professional involved, we don't try and double-dip and ask the parents again because that can be a bit much for them as well. "(E5)

Educators emphasised the importance of consistent processes in the future to ensure that CUBS reports follow the children to the school they enrol in, which may or may not be linked to the ECE setting in which the assessment occurs. Findings relating to the impacts of health screening, particularly CUBS, on children's transition to school and the importance of information exchange are further exemplified in the transition to school case studies that follow.

TRANSITION TO SCHOOL CASE STUDIES

The following five case studies were informed by interviews with parents and educators. They illustrate the transition to school experiences of five individual children and their families. Pseudonyms are used in place of children's names.

Case study 1: Kiah

Kiah received a CUBS assessment in December, 2021 at age 5. She commenced school in 2022. Her parent reported that her transition was smooth and she was enjoying school,
"that's all she talks about. She enjoys playing with her friends. She likes the teacher, school in general, she's very excited". Her parent reported having had no direct contact with Kiah's teacher.

In a previous interview Kiah's parent reported that the CUBS check-up had been enlightening and had given him helpful information: made him aware of what to look out for, showed him what his child was capable of doing, and what he needed to spend more time on with her. He also said that Kiah's motor skills were less developed than his other children's and that was something he would work on with her. The parent reported that after the check-up he spent time with his daughter having her
"copy what I write … and also we're playing a lot of games now, to try and enhance those skills and just throwing balls to each other, all kinds of little games just to help [develop her motor skills]".
In the transition to school interview he said,
"she's a lot more energetic now, she likes to actually do stuff and be the leader … It [the check-up] made me realise that I need to do more stuff than when she was little".

Kiah's kindergarten teacher said that she was settling in at school well and noted her confidence, strong fine motor skills and listening skills. Kiah could already write her name when she entered kindergarten.

It's made that transition to school a lot easier now, because rather than focusing on developing those fine motor skills, developing those listening skills, the ability to answer questions, sit still, listen to a story, we can get straight into the learning, rather than teaching all those skills that are required beforehand.

(Kindergarten teacher)
The kindergarten teacher said she had no concerns about Kiah's transition and that the child did not need any extra support.

Kiah's parent indicated that he had received "a report from the preschool, a kind of disclosure that they were allowed to pass that on to the primary school" and that the report aligned with his understanding of Kiah's readiness for school. It was his understanding that the pre-school had forwarded it to the school. Kiah's kindergarten teacher confirmed that she had received a transition to school statement but was unaware of the CUBS screening.

Kiah's pre-school teacher confirmed that Kiah had strong family support while she was attending pre-school. She indicated that Kiah had experienced successful orientation visits to her school in term 4. However, the pre-school teacher was not able to confirm whether or not Kiah's CUBS report had been forwarded to her school and explained that: transition to school statements had been prepared early in term 4, CUBS assessments had been impacted by Covid-19 and had occurred later in the term, and CUBS reports had been received by the pre-school during the school holidays.
"Once they move on to that next school, we didn't really know where a lot of them had ended up because we'd already sent transition to school statements."

Kiah's principal expressed support for the notion of health screening in pre-schools generally, had heard about CUBS but had little knowledge of the program. She emphasised the importance of sharing CUBS reports with receiving schools:
"I would just say that just to make sure that each child that does it, that there's a connection to the school they're going to".

This case study illustrates how the CUBS assessment influenced one parent to actively engage in his daughter's development of fine motor skills, which were highlighted as a strength during the child's transition to school. The case study also reveals gaps in the information exchange between the pre-school, the parent and receiving primary school.

Case study 2: Levi

Levi received a CUBS assessment in December 2021 aged 5. He commenced school in 2022. His carer said he was very excited and loved going to school. She said that making friends, playing, and doing homework and classwork were highlights of Levi's transition to school. She also said that what he had learnt in pre-school – how to count and pronounce words – had influenced his successful transition to school.

Levi's carer said she thought CUBS was a very good program that has benefits for children and provided parents and carers with "peace of mind" about their children's levels of development. She said that she thought the CUBS report had been sent to the receiving school but that she had not received it.

Levi's pre-school teacher said, "he was really happy to go to kindy". She pointed out she had recommended he remain at pre-school for another year to further develop his social and emotional, and communication skills. She also mentioned that she had been liaising with The Hive health linker and receiving school in the preparation of an NDIS application in response to his CUBS assessment.

Levi's kindergarten teacher said he had transitioned well into kindergarten and made no mention of the NDIS application in progress. She suggested that their one-on-one meetings during Basic Skills Tests had given Levi a sense of security, the opportunity to talk about
"his school break and see that I also spoke to his carer which made him feel even safer and comfortable in coming to class a few days later".
The kindergarten teacher said she was aware of the CUBS check-up and had received the report which had given her and Levi's carer insights into how he "was doing in pre-school". She recalled no recommendations or "red flags" from the CUBS assessment and stated that orientation visits late in 2021 had allowed her "to see [Levi] in person and have my own observations in preparation for his Kindy start for the coming school year".
The kindergarten teacher said she had not suggested any additional support to assist Levi in his transition to school.
"He is doing very well in class and flourishing in his new environment and developing all the skills essential to succeed in kindy."

This case study reveals there had been a delay in sending the CUBS report to the carer and that the kindergarten teacher's perceptions about Levi's CUBS assessment and recommendations were at odds with those of the pre-school teacher. These aspects suggest there had been communication gaps throughout Levi's transition to school process.

Case study 3: Caiden

Caiden received a CUBS assessment in May 2021 at age 5, and commenced school in 2022. His parent said he experienced no separation anxiety starting school: “see you later, goodbye, leave me alone, Mum, I’m ready to go into the gate”.
Caiden’s parent said the CUBS assessment in May 2021 had identified that he had a lisp, and a referral for speech therapy was made. The parent had hoped that Caiden would be receiving weekly speech therapy by the time he started school, however he was still on a waiting list for a public speech therapist, a delay she attributed to Covid-19. She said she received transition to school information from the pre-school and gave it to the receiving school principal in week 1.

Caiden’s pre-school teacher said that his transition was as smooth as it could be during Covid-19 and she was aware of CUBS recommendations related to his speech. The transition program implemented by the pre-school focused on Closing the Gap initiatives and health screening. As children who attend the pre-school transitioned to all schools in Mount Druitt, the pre-school teacher said it was challenging to work with particular schools, but noted that transition to school statements were prepared for every child. These focused primarily on: "What we saw with the children at the service, but we did encourage the parents to use the referrals and the information that they had received from the CUBS program and [provide] that to the school when they did their enrolments ... I don't know if [Caiden’s] mum did, but we did encourage that." (Pre-school teacher)

In relation to CUBS, the pre-school teacher also pointed out that "we had our check-ups just before lockdown, so there was no follow-up or anything as such with our children because of that". "I know they did make referrals for our families, but a lot of the families are just sitting on waitlists now."

Caiden's kindergarten teacher said he had settled in extremely well, was compliant and very keen to learn. The teacher said she had noticed "a speech issue … that could have some work" and had flagged this with the school executive as something to raise with Caiden's parents once he had settled in. She was unaware of the CUBS screening Caiden had received in 2021: "I didn't know at all, and I even went and looked up his file to see if there [was] anything on there, and nothing".

Whilst Caiden's parent and pre-school teacher were aware of a CUBS referral for speech therapy, this information had not been explicitly passed on to the receiving school.

Case study 4: Holly

Holly received a CUBS assessment in December 2021 at age 5, and commenced school in 2022. Her carer (grandparent) said, "she's certainly settling in really well, yes, she loves it". Holly's grandmother said she had spoken to her teacher "twice in the last couple of weeks. She said she's doing pretty good. When she concentrates enough, she does her work really fast, but she's just got to get that concentration in".
Holly's grandparent linked her concentration to a scheduled appointment with a paediatrician to follow up on Holly's behaviour:
"she's just on the go all the time. He's under the impression that she's probably got ADHD".
The grandmother also mentioned a scheduled meeting at the school:
"they have a case plan that we go through".
The family's link with the paediatrician had been established prior to the CUBS assessment, according to the grandparent, who said that no other information for follow-up had been identified during the assessment.

Holly's kindergarten teacher said she had settled in well:
"She was shy at first but after the initial two weeks of schooling she became comfortable with the new environment and members of the class and took off from there. She is very keen in learning and an active participant in all our class activities." (Kindergarten teacher)

The kindergarten teacher said that her daily contact with "Nan and Mum made [Holly] feel safe". The kindergarten teacher said she had received a copy of the CUBS report and had spoken to her parent and grandparent about it, "especially her hearing test … the carers inform me about the check-ups and hearing doctor recommendations to support [Holly] in class".

"Knowing [Holly] has some hearing loss, we were able to coordinate with another school in the area and they lent us the soundwave speaker to test if that will work best [for Holly] so she can hear well [in] class." (Kindergarten teacher)

Holly's pre-school teacher said she was "doing really well in regard to her social and emotional and academic development".
She also mentioned ongoing support provided to the family in regard to Holly's hearing loss, which she indicated had been identified prior to the CUBS assessment.

Holly's grandparent, kindergarten teacher and pre-school teacher all referred to the family's links with allied health professionals that had been established prior to the CUBS assessment in pre-school. However, there were discrepancies in the information provided. The educators' emphasis on hearing support was not mentioned by the grandparent, and her emphasis on behaviour support was not mentioned by the educators. Their accounts provided no explicit links to the CUBS assessment, although the kindergarten teacher alluded to a "hearing test" in the report.

Case study 5: Kyle

Kyle received a CUBS assessment in November 2021 at age 5, and commenced school in 2022. His parent said his transition had been successful:
"he's changed, he's grown up so much in these couple of weeks … he comes home and he goes, 'I learnt the letter s today'".
Kyle's parent said that being present during the CUBS assessment had enabled her to see what he was able to do and confirmed that he was ready for school, perceptions being realised
"now he's come home and he's talking to me about what he's learnt".
The parent's recollection of the CUBS assessment was that the nurse "was pretty happy with [Kyle], from what I could gather so there was no concerns that needed to be addressed or anything".
She recalled passing on information to the school, "a tick sheet … with any concerns with autism and stuff like that … I'm pretty sure everything was fine anyway".

Kyle's kindergarten teacher said he already knew her before his preschool class's orientation visit, because his older brother had been in her class in 2021.
"Having that connection made Kyle feel safe and secure and resulted to him settling in well in class."
The teacher said the CUBS check-up had given her and Kyle's carers an insight into his progress in pre-school. She said that the report was provided to her at the beginning of term 1, 2022 and contained "no red flags at all".

Kyle's pre-school teacher said she knew that he had had a successful transition to kindergarten and was "doing really well in his new classroom there and performing quite well academically as well".
She recalled receiving the CUBS assessment report during the school holidays, printing it and providing copies to Kyle's parents and kindergarten teacher at the beginning of the school year.

Together, the five case studies illustrate the individuality of the transition to school experience and reveal some inconsistencies and gaps in communication processes between ECE settings, parents and primary schools. These will be elaborated on further in the discussion of challenges associated with participation in the CUBS program.

THE BENEFITS AND CHALLENGES OF THE CUBS PROGRAM

Analysis of interview data presented in Section 5 and earlier in this section highlighted descriptions of both benefits and challenges associated with participation in the CUBS program. The following discussion elaborates further on the benefits and challenges described by parents and health and education professionals.

BENEFITS ASSOCIATED WITH PARTICIPATION IN THE CUBS PROGRAM

Theme 3.8: Holistic support in convenient locations

Parent feedback analysed and presented in Section 5 suggested that CUBS provided parents with holistic support, including: information about their children's health and development, referrals to specialist services, assistance in accessing and paying for appointments with healthcare providers, and increased knowledge and confidence to support their children. In addition to parent feedback cited in Section 5, the following comments also alluded to these benefits:

"it was all positive because it is all to do with the health of the child" (J), "she [nurse] explained to me what my child's development should be at" (H), "she [nurse] really went out of her way to try and help us out with therapies" (Q), "she [health linker] got me a paediatrician appointment" (U), "I've got information on how to maintain their teeth and healthy eating, stuff like that, stuff that I think I wouldn't have got before" (M).

Parent feedback suggested that the accessibility and convenience of CUBS, offered in familiar ECE and community settings, was also a benefit for parents as it enabled them to easily attend assessments:

"It's been really handy because you go there while you're at school" (S), "actually being at the school … makes it a lot easier for the parents" (W), "we don't have a maternal health nurse here in this suburb … so if you have it at the pre-school here it's easier [to] access" (C), "it was good because it was at the pre-school because I didn't have to take my child anywhere else and it was a familiar environment for her" (H).

Educators also described benefits for parent engagement, arising from CUBS being offered in ECE settings, exemplified by the following comments:

"One of the big benefits especially in the community that we're in is that a lot of families have not actually had any health checks before they came to pre-school, and having the prior-to-school check-ups in the pre-school, that made the access a lot easier." (H3)

"Being at the service, I think, really helped a lot of our parents engage. I know they're reluctant to engage in things offsite where they don't know people, so being here at the service was a huge help. And [name] the nurse was very flexible as well. If a parent had made an appointment and didn't show up, she would come on a different day or a different time to try and work in and around that family as well. "(E4)

This comment by an education professional highlighted the flexibility of CUBS and the efforts made by the CFHN to support families and place children's health at the centre of the program.

Education and health professionals also described offering CUBS in ECE and community settings as "dovetailing" with their work:
"I can talk to the teachers and [they] are very open and … refer children that they're concerned about … that relationship between the staff at the early childhood centres and the staff here at [The Hive] and myself is really important." (H2)

This comment illuminates a benefit for the work of education and health professionals; smooth cross-disciplinary collaboration, an important feature of the CUBS model, is enabled and strengthened by locating the program in ECE and community settings. "That's what makes this [CUBS] a unique program." (H2)

CHALLENGES ASSOCIATED WITH PARTICIPATION IN THE CUBS PROGRAM

Theme 3.9: Covid-19

Many of the challenges described by parents and health and education professionals resulted from the global pandemic. As outlined in Section 1 of this report, the implementation of the CUBS pilot was interrupted by government mandates to protect the community by restricting children's attendance at ECE and health professionals' access to ECE and community settings. The work of the speech therapist and health linker was modified to allow for the provision of tele-health support to families.However, families' access to technology was, for some, a further restriction.

Covid resulted in disruptions to the assessment schedule resulting in many children being assessed in terms 3 and 4, with reports received late term 4 and during the school holidays:
"It did make it tricky being in term four. That was no fault of anyone, expect for Covid hitting. Because a lot of them weren't getting seen until those last few weeks of the school … those children had already gone to school by the time we'd got their reports. "(E3)
"Unfortunately for us, we had our check-ups just before lockdown, so there was no follow-up or anything as such with our children because of that." (E4).

For some children and educators these delays meant that CUBS reports were received after transition to school statements had been prepared and sent to

receiving schools. As a result, some educators were unaware that some newly arrived kindergarten students had received health screening in pre-school. In these cases, disruptions and delays caused by Covid-19 limited the extent to which CUBS assessments could inform transition to school planning.

Parents also described the Covid-19 related challenges of attending appointments with specialists:
“And with Covid and everything, we did have an appointment lined up for an OT, but because it was out of area, so that was a bit off the cards” (Q)

Theme 3.10: Meeting existing demand – Conducting CUBS assessments and delivering reports in a timely and consistent manner

Parent feedback suggested that some experienced delays between participating in CUBS assessments and receiving follow-up information. Feedback from health and education professionals linked these delays to the capacity of the program to address demand; screening as many children as possible sometimes resulted in backlogs of assessments to be entered in the system and delays in issuing reports to parents.

"I find sometimes there's a little bit of lag in the time that the assessment’s done and then the time we actually get the summary. That’s just because we were booking appointments every day that she was here and every appointment available to her. I'm imagining, I can't speak for the nurse, [Name], but it's just so hard in trying to fit, we have 80 children." (E3)

Ones educator expressed the benefits in receiving the assessment summary “fairly quickly so that we can do something about it straight away. If that’s something that can happen where it's not so rushed … to be able to give families more time and opportunity to see them” (E3).
For this ECE professional, receiving assessment summaries at the end of a screening cycle may result in “70 summaries … to go through and try [to] support. But if it was more streamlined, that it was an assessment and then the week after we got the summary … then we could work with that family” (E3).

Theme 3.11: Making CUBS more widely available

Analysis of data collected from parent and carer interviews and presented in Section 5 indicated a concern shared by many parents that families whose children are not engaged in ECE or day care may not have access to CUBS. Other challenges identified were some parents' limited access to technology,
"if they don't have a phone or internet, that's going to be a struggle for a lot … because pretty much everything, appointments and all that, are mostly done online … or on the phone" (M);
and transport, "some parents without a car, they can't get to appointments in time" (U),
"public transport is pretty bad here" (H).

The view that CUBS should be more widely available was illustrated by the comment:
"I think there are 200 odd children under four in this suburb, according to the census data, so a lot of them don't come here [day care centre] … so it would be good, just broadly speaking if everybody in the suburb had access to it [CUBS] … just let people know that we are setting this up and if you have got a child starting school … it's time to come down and we will do a free health check." (C)

This challenge, along with time pressures on health professionals – amplified by Covid-19 – to meet existing demand and deliver reports in a timely manner, has implications for future health planning and resourcing.

Summary of Phase 3 findings

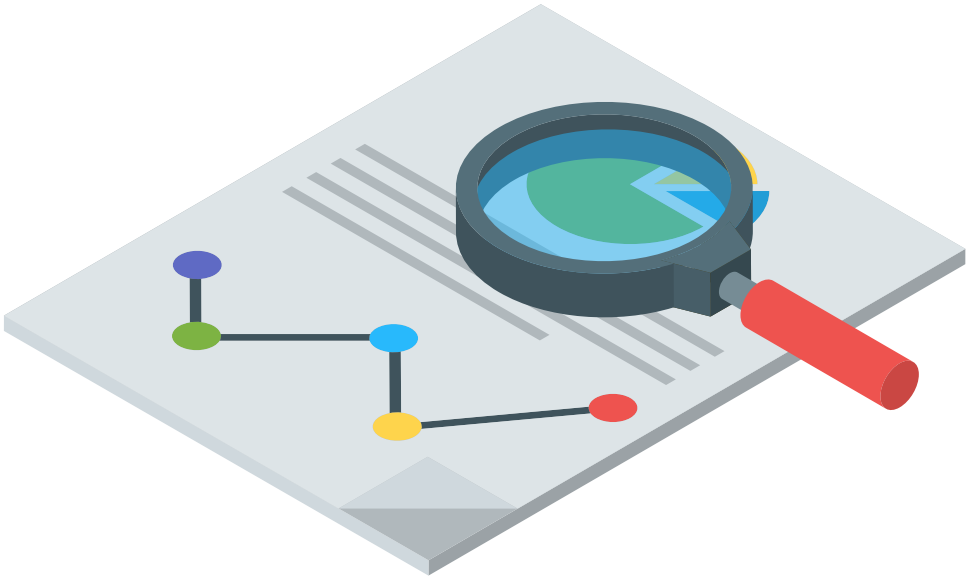
Analysis of data collected in interviews with parents, health and education professionals, and community service providers suggested that professionals supporting the CUBS pilot – allied health, ECE, The Hive health linker and community service providers – actively engaged in cross-disciplinary collaboration to deliver a holistic, coordinated program of place-based support to children and families. Unfortunately, the implementation of the pilot and work of health and education professionals was disrupted due to Covid-19. Other challenges included the production of timely reports, and streamlined and consistent information exchange between ECE, parents and schools. Despite the challenges and disruptions, parents and carers, health and education professionals identified the potential of CUBS to positively impact on children's readiness for, and transition to, school.

A key benefit of the CUBS model, described by parents and carers, health and education professionals, was the convenience of being offered in both ECE and community centres, familiar environments for children and families.

SECTION 7: CUMULATIVE LIST OF FINDINGS

1. Some parents' understandings of their children's health and development needs and the screening available were limited to immunisations and to a lesser extent weight checks.
2. Parents valued health care services that were relational, where they perceived that health professionals took a genuine interest in them and where they shared a language or cultural background with the provider.
3. Parents liked the idea of health and development screening being provided in pre-school.
4. Analysis of child health records for 24 children revealed health and developmental needs across the ASQ and ASQ-SE domains and 56 referrals to allied healthcare services.
5. Parents interviewed who received CUBS referrals to allied health services made efforts to follow up.
6. Parents who have engaged with CUBS highly valued the service as a key source of child development information which they would like to see expanded.
7. Parents' participation in CUBS and the follow-up report have the potential to inform more meaningful and regular contact between parents, GPs and allied health specialists about their children's health.
8. CUBS has facilitated increased understanding of children's health and development needs for many parents and provided them with ideas for supporting their children at home.
9. The CUBS team – the nurse, speech therapist and health linker – all provided practical interventions that were highly valued by parents and had noticeable benefits for families.
10. Professionals supporting the CUBS pilot – allied health, ECE, The Hive health linker and community service providers – actively engaged in cross-disciplinary collaboration to deliver a holistic, coordinated program of place-based support to children and families.
11. The implementation of the pilot and work of health and education professionals was disrupted due to Covid-19.

12. Despite disruptions, parents and carers, health and education professionals identified the potential of CUBS to positively impact on children's readiness for and transition to school.
13. A key benefit of the CUBS model described by parents and carers, health and education professionals was its convenience, being offered in ECE and community centres, familiar environments for children and families.
14. In addition to those posed by Covid-19, parents and carers, health and education professionals identified challenges relating to the capacity within the existing CUBS program to:
    a. conduct screening and deliver reports in a timely manner to ECE and parents
    b. manage streamlined and consistent information exchange between ECE, parents and schools
    c. make CUBS accessible to more families in the Mt Druitt community.



SECTION 8: CONCLUSIONS AND IMPLICATIONS FOR FUTURE PRACTICE

This report presents the findings of a research study exploing the child, family and service level impacts of the Check-ups Before School (CUBS) pilot project. The research evaluation generated rich, context-embedded data to illuminate the experiences of the participants in the CUBS program and the realities of the implementation of CUBS. The following conclusions represent a consolidation of the 14 findings generated from data analysis.

Conclusions

1. The complexities of the Mt Druitt community present numerous barriers preventing easy access to health and development screening for families with young children.
2. Offering CUBS in convenient locations, including pre-schools and community centres, has facilitated the development of relationships of trust between parents and education and health professionals.
3. The CUBS screening process and referrals to allied health services have the potential to lead to earlier identification of child health and development challenges.
4. Parents' and carers' growing familiarity with CUBS, and follow-up support provided by the CFHN, the health linker at The Hive Mt Druitt, and the part-time speech therapist engaged with the program, have led to increases in confidence in engaging with healthcare services, and satisfaction with services available to families.
5. Parents' and carers' participation in CUBS assessments has increased their understanding of their children's health and development needs and ways to support them.

BEYOND CUBS

The funding for the CUBS pilot program ceases in August 2022. At the local level, discussions involving The Hive and WSLHD community nursing team have explored options for embedding the model into mainstream service delivery. Simultaneously, The Hon. Sarah Mitchell, MLC, Minister for Education and Early Learning announced the Brighter Beginnings program and budget, including $111.2 million to bring health and development checks to NSW preschool settings. In a speech delivered at an event hosted by the Hive on 28 June 2022, the Minister said the CUBS pilot program had been crucial in informing the Brighter Beginnings model and her intention was to expand the model throughout the state. Since the announcement, members of the Brighter Beginnings team have engaged in ongoing consultation with The Hive to assist in designing the NSW model of place-based developmental assessments.

These policy developments signify the expansion of the CUBS model, strong evidence of its success within the Mt Druitt community. In light of the future expansion of the model, insights gained from this evaluation are offered for consideration as recommendations for future practice.

RECOMMENDATIONS FOR FUTURE PRACTICE

In the planning, resourcing and delivery of the expanded model of health and development checks to NSW pre-schools, it is recommended that:

- ECE settings administered by community providers be included in the roll-out
- Health and development screening cycles include time allocated for check-ups and administration (data entry and report generation) to allow for timely reporting to ECE professionals and parents, while not compromising the time it takes to employ a relational-based model and build trust with families
- The provision of administrative support to the CUBS nurse to support the timely provision of reports and, ideally, the employment of more than one nurse on the CUBS team to support timely assessments and scale-up of the program
- The delivery of assessment reports to families include face-to-face discussions and assistance for families in accessing follow-up services through NSW Health
- Assessment reports be formalised by including them in transition to school statements to ensure consistent, streamlined and explicit information exchange about individual children's health and development between ECE settings and primary schools.

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