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Centre for Community Child Health

Evaluation of the By Five Paediatric Project in the Wimmera Southern Mallee

Final Report

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

The Royal Children's Hospital Melbourne

Evaluation of the By Five Paediatric Project in the Wimmera Southern Mallee
Version 2.0 FINAL

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This report was prepared by the Centre for Community Child Health on behalf of By Five, an innovative partnership between the Wimmera Southern Mallee community, the Wimmera Development Association and the WSM Regional Partnership.

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The Centre for Community Child Health acknowledges the Traditional Owners of the land on which we work and pay our respect to Elders past, present and emerging.

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Glossary

ADHD	Attention deficit hyperactivity disorder
ADS	Attention deficit syndrome
ASD	Autism Spectrum Disorder
CCCH	Centre for Community Child Health
CPD	Continuous Professional Development
CYP	Children and Young People
GP	General Practitioner
MCH	Maternal Child Health
Paediatric Project	By Five Paediatric Project
RCH	Royal Children's Hospital
SC4C@WSM	The Paediatric Project was formerly known as the Strengthening Care for Children in the Wimmera Southern Mallee
WSM	Wimmera Southern Mallee
Parent	In this report, 'parent' signifies a biological parent, step parent, carer or guardian

Executive summary

About the By Five Paediatric Project

The By Five Paediatric Project (Paediatric Project) establishes partnerships between Royal Children's Hospital paediatricians, local professionals and families to improve the health and wellbeing of children in the Wimmera Southern Mallee (WSM) of rural and remote Victoria. It has been operating since March 2021 and offers three core supports:

1. **Health literacy** activities delivered in community settings through partnerships with local professionals, tailored to the specific health needs of community members.
2. **Professional capacity building** involves the sharing of expertise among local professionals through regular case-based sessions and the cultivation of alliances and professional relationships. Local professionals can also seek guidance from the paediatrician on specific concerns related to a child without involving the child's family in a professional consultation.
3. **Co-consultations** where local professionals, families and a By Five paediatrician work together to respond to child health and developmental concerns.

About the Evaluation

The Centre for Community Child Health (CCCH) was commissioned to evaluate the Paediatric Project in 2020. Evaluation activities were undertaken over two waves in 2021 and 2022 with a final evaluation report due in March 2023. The evaluation looked at how well the model of care is working, how it can be improved, and its early impacts.

Formative evaluation findings

Participation of local professionals

Interviews and focus groups with local professionals found that the multidisciplinary approach of the project and the range of professionals involved were highly regarded by participants. As shown below, local professionals participated in a variety of activities:

- Case-based multidisciplinary sessions continued to attract high levels of participation from Maternal and Child Health (MCH) and Allied Health professionals in 2022. Social Care and Education professionals also attended.
- MCH, Allied Health, GPs, Social Care and Education professionals participated in co-consultations in 2022. Compared to 2021, there was greater participation from Allied Health professionals and General Practitioners (GPs), and a lower participation from Education and Social Care professionals.
- There was a high level of participation from Education and Social Care professionals in professional consultations (discussions with a paediatrician without a family present). A smaller number of GP, MCH, and Allied Health professionals participated. MCH participation decreased in 2022, while Social Care participation increased.

Participation of local families

Since the Paediatric Project began in 2021, 187 children have directly benefited from 314 co-consultations with paediatricians and local professionals. Families and professionals agreed that if co-consultations were not available, families would either not have access to the specialist services they need or would be waiting more than six months to receive care. Early intervention provided through the Paediatric Project has the potential to significantly impact a child's health and developmental trajectory.

In 2022, a total of 99 children, ranging in age from 4 months to 18 years, participated in 135 co-consultations, indicating an increase compared to the previous year's count of 88 children. The most common issues children presented with in 2022 included challenging behaviours, developmental delay (including language delay), autism spectrum disorder (ASD) traits, attention deficit hyperactivity disorder (ADHD) traits and constipation. These were similar issues to those presented in 2021 and are typical concerns for Australian children (Hiscock et al., 2017).

Co-consultations included Aboriginal and Torres Strait Islander (ATSI) children, refugee children, children from culturally and linguistically diverse backgrounds (CALD), as well as children in Out of Home Care (OOHC) and known to Child Protection agencies. The number of children experiencing adversity who access the Paediatric Program is not available due to limited demographic data.

What is working well

Professional capacity building

Professionals reported that the case-based sessions provided valuable professional development and networking opportunities. Participants enjoyed hearing different perspectives and learning about how other professionals approach the care they provide to children and their families. Presenting a case-based session was seen as a valuable opportunity to reflect on a case and talk openly amongst professionals without the family present. Overall, the case-based sessions helped local professionals to feel supported and connected.

Co-consultations

Families and professionals reported a range of benefits of co-consultations including:

- Families have access to timely paediatric care.
- The supported telehealth model reduces travel and costs and stress for families. It also meant consultations were conducted in familiar surroundings which enabled children to participate in the co-consultation more easily.
- Co-consultations addressed parents' concerns and parents reported feeling heard, supported and reassured. Parents left co-consultations with a plan and a clear understanding of next steps.
- Parents valued the support of their local professional in the co-consultations. Local professionals reported that the co-consultations gave them more insight into the child's health and/or developmental concern and meant they could provide support to the family post-co-consultation.

Suggestions for improvement

Professional capacity building

Suggestions for improvement included greater representation of professionals at the case-based sessions and a roster system set up to ensure a diverse range of cases and topics are covered. Providing the topic and case in advance was seen as important so professionals can decide if the session will be relevant for their practice. Another suggestion was to provide opportunities for professionals to learn more practical skills (e.g., observing autism assessments).

Co-consultations

Barriers to co-consultations included the limitations of support offered by the Paediatric Project, internet issues and some services not having capacity to be involved such as Early Childhood Education and Care (ECEC) services and GPs. Suggested improvements for co-consultations included bringing paediatricians to WSM more regularly and having a By Five paediatrician based locally who can see families face-to-face.

Summative evaluation findings

Outcomes for children and families

Families felt that without the Paediatric Project, they would not have had access to a paediatrician or would have faced long waiting lists. Families described a number of changes for their family since attending the co-consultation including feeling reassured, reduced stress (for both parent and child), and increased skills and confidence to manage their child's health condition. In addition, families reported that appointments offered convenience by reducing travel time and costs.

Families reported improvements in their child's health after receiving prompt medical advice, new treatment plans, medication, and referrals to local professionals and specialists. Child health outcomes reported by families included improved skin health, increased confidence, improved ability to learn, improved behaviour, improved hearing, babies becoming more settled or gaining weight, increased control of bowel, and reduced constipation.

Outcomes for professionals

Local professionals reported that the Paediatric Project resulted in a range of improvements to their practice, such as:

- Improved knowledge and understanding of other WSM services.
- Enhanced relationships and collaboration between professionals.
- Increased confidence in assessing and managing child health conditions.
- More effective and transparent communication between professionals regarding the care of families.

Additionally, local professionals reported that the project had increased families' trust in local care by promoting the expertise of local staff.

Implications of findings

Learnings for implementing innovative models of care

The successful implementation of the Paediatric Project was attributed to various factors, including:

- Identifying the need for change by examining data carefully and taking appropriate actions.
- Establishing a shared vision within the community to build a solid foundation for change.
- Providing strong governance and financial support to sustain the project over time.
- Testing and refining project strategies and making ongoing local adaptations to meet the evolving needs of the community.

A number of key principles can be drawn from the Paediatric Project when developing and implementing innovative care models:

- **Respond to the needs of the local community**: Providing effective services to the local community involves understanding their unique challenges and tailoring services accordingly.
- **Foster child-centred thinking**: Encourage innovative solutions that prioritize child well-being by challenging conventional norms and practices.
- **Leverage local assets**: Instead of solely relying on external resources, tap into local expertise, resources, and support networks.
- **Focus on capacity building**: Specialists can play a role in building the capabilities of primary care providers.
- **Embrace a multidisciplinary care model**: Adopt a collaborative approach where specialists and primary care providers work together. This helps build capacity and minimises unnecessary referrals.

Future considerations for the Paediatric Project

The Paediatric Project is an excellent example of how innovative models of care can benefit rural and remote children and build the capacity of local professionals. In the future, it would be beneficial to explore the possibility of face-to-face consultations in addition to telehealth co-consultations. Maintaining the multidisciplinary approach and fine-tuning the support provided to diverse professionals is also crucial. Furthermore, prioritising capacity building for newer professionals within the project is recommended. Continued focus on documenting the Paediatric Project's learning, benefits, and impacts will contribute to its ongoing success.

Introduction

About the By Five Paediatric Project

Children in the Wimmera Southern Mallee (WSM) experience poorer health and development outcomes than their urban counterparts on a range of measures (Australian Early Development Census, 2018). Access barriers to affordable, local, and timely health services in rural and remote areas contribute to poorer outcomes (Arefadib & Moore, 2017) and these gaps – which are growing – continue into adulthood and contribute to multigenerational cycles of disadvantage (Clark et al., 2020; Goldfield et al., 2003; Shonkoff et al., 2009).

The By Five Paediatric Project (formerly known as Strengthening Care for Children in WSM or SC4C@WSM) aims to address child health inequity in the WSM, a unique area covering 20% of Victoria's land and encompassing Horsham Rural City, the Hindmarsh, Northern Grampians, West Wimmera and Yarriambiack Shires and part of Buloke Shire.The By Five Paediatric Project establishes partnerships between Royal Children's Hospital (RCH) paediatricians, local professionals and families to improve the health and wellbeing of children in the Wimmera Southern Mallee. The project has been operational since March 2021 and offers three core supports (Figure 1).

Figure 1: Core supports of By Five Paediatric Project

Health literacy activities delivered in community settings through collaborations with local professionals, tailored to the specific health needs of the community.

Professional capacity building involves the sharing of expertise among local professionals through regular case-based sessions and discussions as well as the cultivation of alliances and professional relationships. Local professionals can also seek guidance from the paediatrician on specific concerns related to a child without involving the child's family in a professional consultation.

Co-consultations bring together local professionals, families and a By Five paediatrician to respond to individual child health and developmental concerns via supported telehealth.

The By Five Paediatric Project approach uses evidence provided by the UK Connecting Care for Children program and the Northwest Melbourne Strengthening Primary Care pilot (Hiscock et al., 2020), both of which brought specialist paediatricians into General Practitioner (GP) consulting rooms, combining co-consultation with professional development and support. The clinical benefits delivered to children, families and providers have seen both projects replicated across larger urban areas. In the Wimmera Southern Mallee, the aim was to adapt the approach for rural and remote primary health settings based on co-design, partnerships and tele-practice (see **Appendix 1** for a detailed account of the change process involved in adapting Strengthening Care for Children to the local setting, and the key lessons).

A key strategy for the By Five Paediatric Project is to leverage **supported telehealth** for specialist paediatric consultations. Supported telehealth involves the family physically attending an appointment with a local professional who observes an online consultation with the paediatrician. In the Paediatric Project, supported telehealth is taken a step further, where the local professional or care team is involved in the patient's care and they facilitate and actively contribute to the appointment (i.e., co-consultation model). Policy and funding for supported telehealth has been in place since 2012, and whilst uptake was initially slow, there has been a marked increase coinciding with the COVID-19 pandemic and continuing into 2023.

About the evaluation

The Centre for Community Child Health (CCCH) at the Murdoch Children's Research Institute (MCRI) and The Royal Children's Hospital were commissioned to evaluate the By Five Paediatric project. Design of the evaluation commenced in 2020, with implementation and reporting occurring from October 2021 to March 2023. The evaluation objectives were to:

- identify what is working well and what could be better in the By Five Paediatric Project
- generate a better understanding of the changes occurring as a result of the By Five Paediatric Project
- provide funders, recipients and other key stakeholders with findings about the relevance and value of the By Five Paediatric Project, and
- support By Five's advocacy and communication about service delivery models in regional, rural and remote areas.

The evaluation looked at all aspects of the Paediatric Project, including co-consultations, professional capacity building, and community health literacy.

Evaluation approaches

The evaluation had three main components:

- **Real-time learning,** led by the implementation team as part of quality assurance activities. This component seeks to enable rapid implementation team reflection, learning and adaptation.
- **Formative evaluation**, which sought to track By Five Paediatric Project progress and generate learning and for continuous improvement and adaptation. It adopted a participatory approach by involving project stakeholders and participants in evaluation activities, to improve the accuracy and relevance of the information collected and promote engagement with evaluation findings and their use (Guijt, 2014).
- **Summative evaluation**, grounded in pragmatic mixed methods, in which the principles of theoretical flexibility, methodological comprehensiveness and operational practicality (Crane et al., 2019) guide decision making methods. Both expected and unexpected outcomes were captured, and the initiative's logic model and outcome domains (see Appendix 2) guided the evaluation of expected outcomes.

Key evaluation questions

The By Five Paediatric Project logic model articulates the expected short-term, medium-term and long-term outcomes, as well as the assumed central pathway of cause and effect (the 'golden thread'). The logic model guided the formative and outcomes evaluation design. See **Appendix 2** for detail.

Key evaluation questions guiding the evaluation were:

1. What are we learning about the By Five Paediatric Project? (Real-time learning)
2. How well is the model working and how can it be improved? (Formative evaluation)
3. What was the model's impact? (Summative evaluation)

Evaluation methods

Data collection and recruitment

A mixture of qualitative and quantitative data was collected from parents and professionals during the evaluation. Data sources for wave 1 and wave 2 of the evaluation included:

- **Engagement register**: The implementation team provided de-identified and aggregated participant data from health literacy sessions, case-based learning sessions, and co-consultations.
- **Post-session feedback surveys:** Participants were invited to complete two anonymous feedback surveys: 1) feedback on health literacy sessions (e.g., satisfaction, areas for improvement); and 2) co-consultation feedback surveys (for local professionals and families). The implementation team administered these surveys and provided the evaluation with deidentified and aggregated survey data.
- **Family experience & outcome interviews:** The focus of the interviews was to understand how families came to be involved in the co-consultations, their experience of the co-consultations, and outcomes achieved through the co-consultations. Parents were recruited through an invitation from an implementation team member (email and/or phone). Details of consenting families were provided to the evaluation team to participate in a semi-structured interview (30-45 minutes in duration).
- **Local professional survey:** The survey sought feedback on how well the activities were delivered, how they could be improved, and changes in professional confidence, knowledge and skills. The survey was distributed by the implementation team via email to all local professionals who have participated in case-based learning and co-consultation activities.
- **Local professional interviews/ focus groups**: The focus of the interviews/focus groups was to explore local professionals' experience of participating in case-based learning and co-consultation activities. Local professionals were recruited via an email invitation from an implementation team member, using a purposeful sampling approach which sought out a multidisciplinary range of informants who could provide rich information about the evaluation questions from the perspective of the different professional groups targeted by the project. Details of consenting local professionals were provided to the evaluation team to participate in a semi-structured interview or focus group (45-60 minutes in duration).
- **Focus groups/interviews** with the implementation team and steering committee to understand their perspective of the By Five Paediatric Project.

A breakdown of participant numbers for each activity and wave of data collection is provided in **Appendix 3**.

Ethics

The evaluation methods and data collection activities were approved by the Royal Children's Hospital Melbourne Human Research Ethics Committee and were carried out in line with the National Statement on Ethical Conduct in Human Research (2007) – including all updates.

Information and consent processes

Information and consent forms were provided to participants to explain how their feedback would be used and how their privacy would be protected. The participants were informed that they did not have to participate in an interview or focus group, and they could withdraw from it at any time. Due to all focus groups and interviews being conducted remotely, verbal consent was sought from all participants in this research. This involved a researcher verbally reiterating the key messages in the information and consent form and providing an opportunity for participants to ask questions. A researcher would then ask for their verbal consent to participate in an interview or focus group. Their yes/no answer and personal details (name, phone number and email address) were recorded, and the form was signed by the researcher on the participants' behalf.

Data analysis

Quantitative data (e.g., survey data, engagement register etc.) was analysed using descriptive statistical analysis in Microsoft Excel. Qualitative data (e.g. interview/focus group data) was analysed thematically using an iterative approach of data immersion, coding, creating categories and identifying the themes that provide a coherent and relevant explanation and interpretation of the data.

Limitations of the data

It is important to note that the quantitative and qualitative data collected in this project represent the opinions of a small percentage of parents and professionals involved in the By Five Paediatric Project and should not be considered representative of all participants. The recruitment procedure relied on parents and professionals volunteering to take part, making the sample biased towards parents and professionals that might have more positive experiences of the project. Furthermore, there is a possibility of bias by the evaluators who work closely with the implementation team. Data collection, analysis and reporting was designed to neutralise any potential evaluation bias.

About this report

This final evaluation report of the By Five Paediatric Project summarises the evaluation data collected in 2021 and 2022 to look at the impact and key learnings of the By Five Paediatric Project. The report:

- Considers how well the model is working, how it has evolved over time and how it can be improved.
- Identifies the benefits and outcomes of the model for children, families and local professionals.
- Documents project learnings that could be applied to other health care models and innovations, particularly in regional, rural and remote settings.

Evaluation Findings

Formative evaluation findings

This section describes how the Paediatric Project was implemented in 2021 and 2022. It examines key activities, participation levels, and feedback from participants, as well as how activities were adapted throughout the project.

Community health literacy

Activities in 2021

Health literacy sessions addressed community health literacy by developing educational activities with local expertise based on community-selected priorities. During 2021, seven health literacy sessions were run. Due to lockdowns and restrictions related to COVID-19, they were primarily delivered online via webinar, several of which have been uploaded to the By Five YouTube channel. Among the topics covered in these sessions were tuning into kids and teens, trauma informed education, sleep, parenting during lockdowns, and thriving children.

Parents and professionals who attended the 2021 health literacy sessions reported a range of benefits such as learning new information on a health topic and learning new strategies to help manage a health concern. Hearing personal anecdotes, receiving reassurance/validation and the ability to ask questions were also mentioned as key benefits (Source: Health literacy feedback surveys n=89). Local professional attendance at sessions and community input into topics were key components of the success of the health literacy sessions, according to the implementation team.

Activities in 2022

Community health literacy sessions were reviewed in 2022 to determine whether they were reaching a diverse range of families. The implementation team conducted a feedback survey with parents via local playgroups (n=33) where parents rated seminars/webinars lowest in terms of where they get their health information. Local professionals and social media were rated highest. The low rating of seminars in the By Five Facebook survey and an aspiration within the implementation team to take a more innovative approach to this aspect of the project to broaden their reach, led to the discontinuation of this format in 2022.

In 2022, the Paediatric Project looked at how to address community health literacy gaps that would appeal to community groups that might not otherwise participate in traditional educative approaches such as migrants, refugees, families involved in child, youth, and family services, or families experiencing adversity. The Paediatric Project looked at building local capacity by leveraging local professionals' community connections and expertise to deliver health literacy sessions in the community. For example, a speech pathologist familiar to the Karen refugee population was joined by a By Five paediatric fellow at a 'Mother Tongue Stories' playgroup to discuss the development of language in children who speak English as a second language.

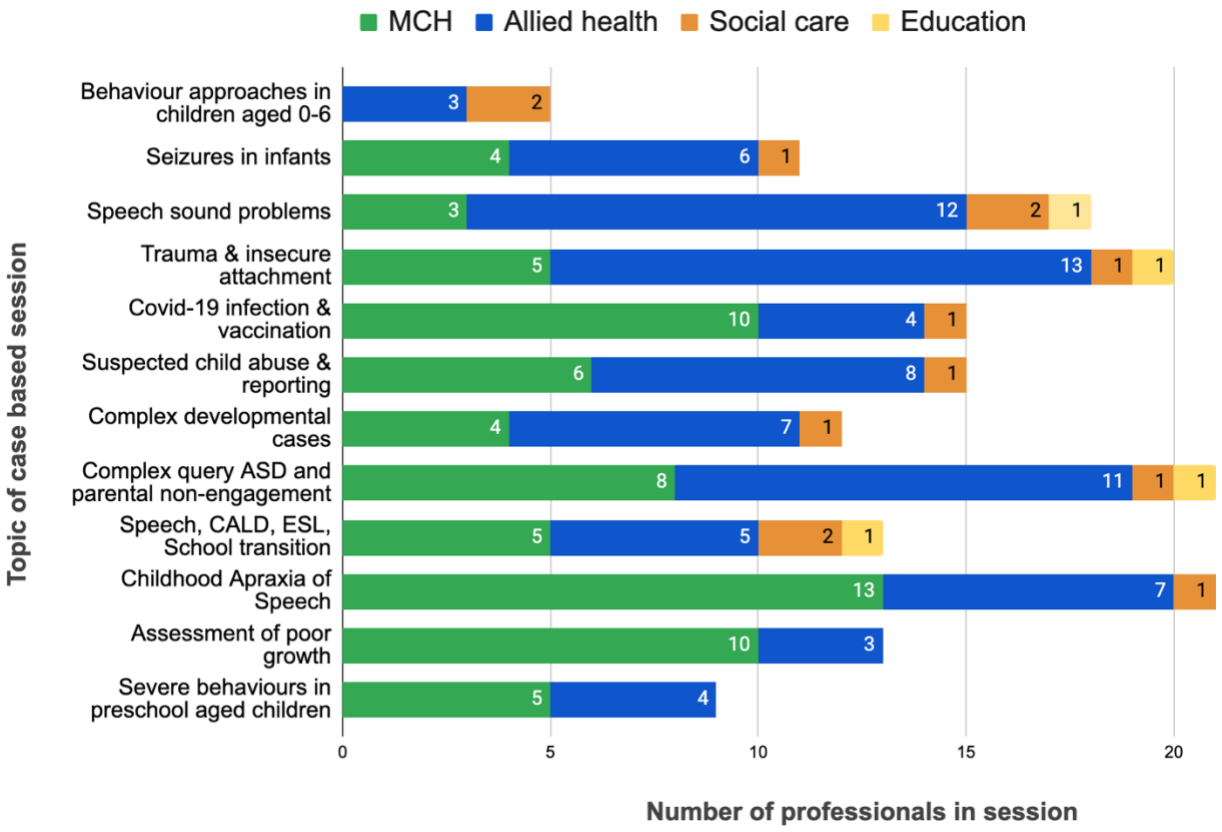
Professional capacity building

Online case-based learning discussions allow professionals to explore a broad range of child health issues and learn from peers in a supportive community of practice. They facilitate the development of professional alliances and relationships, and they assist professionals to translate evidence into practice. Wave one of the evaluation found that professionals appreciated being able to share perspectives, ideas, and resources with their colleagues and other professionals. The ability to connect with others was seen as particularly beneficial, given the isolating nature of working in a remote setting.

During 2021, 36 single discipline case-based sessions were held (16 MCH, 13 Allied Health, 7 Education). 319 professionals attended the sessions. The single discipline sessions were changed to multidisciplinary sessions in 2022 after participants expressed a desire to collaborate more with professionals from a variety of backgrounds.

In 2022, twelve multidisciplinary case-based sessions were held on a range of child health and development topics (Figure 2). The majority of participants were Allied Health and MCH professionals, although Social Care professionals and Educators also participated in most sessions. In total, 173 professionals attended 12 multidisciplinary sessions, with an average of 14 attendees per session.

Figure 2: Overview of case-based sessions held in 2022



Satisfaction with case-based sessions in 2021 and 2022

Case-based sessions were highly rated by professionals in the 2021 and 2022 evaluation surveys. Overall satisfaction with case-based sessions increased slightly in 2022 (Figure 3). Local professionals reported similar levels of satisfaction with the frequency of the sessions, the value they experienced through participating and the format and facilitation of the case-based sessions.

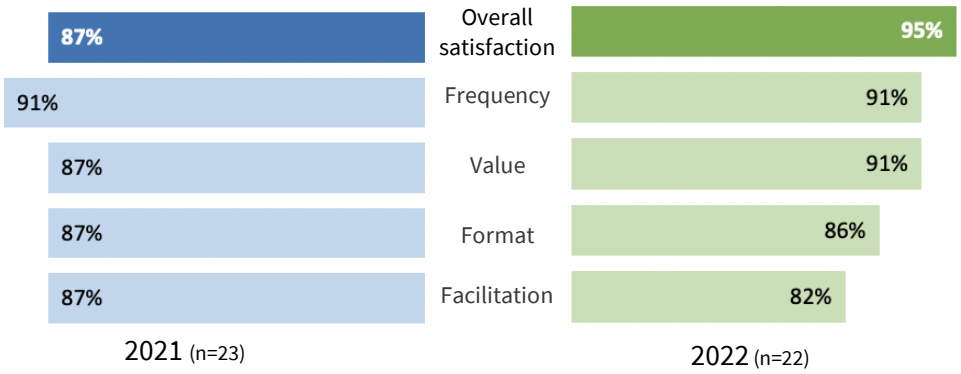


Figure 3.Percentage of respondents who 'agreed' or 'strongly agreed' they were satisfied with aspects of the case-based sessions

Post-session feedback from 41 participants shows that nearly all respondents were *very satisfied* with the multidisciplinary case-based sessions, with only a few respondents reporting they were *somewhat satisfied* (5%) or *dissatisfied* (2%) with them.

Case-based sessions: what works well

Multidisciplinary case-based sessions were reported to provide different perspectives, facilitate collaborative discussions and provide helpful resources and information to participants. Participants also reported that discussing unfamiliar topics and complex cases was beneficial. Professionals reported that the case-based sessions provided valuable professional development and networking opportunities. Participants enjoyed learning about how other professionals approach the care they provide to children and their families. Presenting at case-based sessions was seen as a valuable opportunity to reflect on a case and talk openly amongst professionals without the family present. Overall, the case-based sessions helped local professionals to feel supported and connected.

Case-based sessions: barriers and suggested improvements

Barriers to attending case-based sessions, include competing demands such as high clinical case load, and forgetting to attend. In some cases, professionals did not find the case scenarios relevant to their profession, for example, issues in the case-based sessions were noted as more relevant to MCH than other professions. It was reported that the multidisciplinary case-based sessions had covered most topics that benefit from multidisciplinary discussion.

Suggestions for improvement included greater representation of professionals at the case-based sessions and a roster system set up to ensure a diverse range of cases and topics are covered.

Participants provided ideas to improve the sessions, and many have been implemented, such as providing case information before the session, reminding participants of meetings, and sharing slides afterwards. There was also a desire to share the outcomes of referrals, to know which professionals were attending and to ensure there was time for others to contribute to the discussion. National Disability Insurance Scheme (NDIS) involvement and recommencing regional MCH meetings was also mentioned. Providing the topic and case in advance was seen as important so professionals can decide if the session will be relevant for their practice. Another suggestion was to provide opportunities for professionals to get more practical skills (e.g., observing autism assessments).

Co-consultations

A key strategy of the Paediatric Project was to leverage and enhance the concept of supported telehealth for specialist paediatric consultations between the family, paediatricians and local professionals involved in the child's care. Co-consultations allow local professionals to assist families with a variety of complex health conditions locally with the support of a paediatrician. There are two types of consultations:

- **Co-consultations** involve the parent and child, one local health professional supporting the family, as well as the paediatrician. Where appropriate, other professionals may also be involved, such as GPs, Education, Social Care, or Allied Health professionals. They require a referral/request and are scheduled for 40 minutes.
- **Professional consultations** provide an opportunity for one or more local professionals to talk with the paediatrician about an issue without the family being present. They do not require a referral and are scheduled for 40 minutes.

During 2021, referrals were able to be accepted from any professional including Education and Social Care professionals. This led to a significant increase in referrals, many of which did not necessarily require paediatric specialist intervention and could have been more appropriately dealt with in the local primary care setting. In 2022, co-consultations required a referral from a primary healthcare provider such as a GP, MCH, or Allied Health professional.

Participation of families

In 2022, 135 co-consultations were conducted with 99 children ranging in age from 4 months to 18 years. There were more families seen in 2022 than in 2021, when 88 children were seen in 179 co-consultations. The average age of the children decreased from 5.5 in 2021 to 5.1 years in 2022. Co-consultations involved families from all five local government areas of the WSM.

The most common issues children presented with in 2022 included challenging behaviours, developmental delay (including language delay), autism spectrum disorder (ASD) traits, attention deficit hyperactivity disorder (ADHD) traits and constipation. These were similar issues to those presented in 2021 and are typical concerns for Australian children (Hiscock et al., 2017).

Families participated in fewer co-consultations in 2022 than in 2021, which meant more families could participate in the program. In 2022, the majority of families (75%) participated in one co-consultation compared to less than half (47%) in 2021. In 2022, 25% of families participated in two or more co-consultations compared to over half (53%) in 2021.

Co-consultations have included Aboriginal and Torres Strait Islander (ATSI) children, refugee children, and children from culturally and linguistically diverse backgrounds (CALD), as well as children in Out of Home Care (OOHC) and known to Child Protection agencies. The exact number of children experiencing adversity who access the Paediatric Program is not available due to limited demographic data.

Participation of local professionals

In 2022, 188 professionals participated in **co-consultations** which was a small increase from 2021 where 179 took part. MCH, Allied Health, GPs, Social Care and Education professionals participated in co-consultations in 2022. Compared to 2021, there was a greater participation from Allied Health professionals and GPs, and a lower participation from Education and MCH professionals. MCH, GPs and Allied Health professionals were the lead professional in most co-consultations with Allied Health and Education professionals often playing a complementary role.

In 2022, 38 professionals participated in **professional consultations** (discussions with a paediatrician without a family present). The majority of participants were from the Education and Social Care fields with fewer GP, MCH, and allied health professionals participating. 2022 saw a decrease in MCH participation compared to 2021, but an increase in Social Care participation.

Table 1: Co-consultation attendance in 2021 and 2022

	Co-consultations		**Professional consultations**	
Professionals attending	2021 (n=179)	2022 (n=135)	**2021** (n=35)	**2022** (n=22)
GPs	19 (10%)	42 (22%)	1 (3%)	1 (3%)
MCH	79 (44%)	57 (30%)	11 (30%)	1 (3%)
Allied Health	9 (5%)	48 (26%)	3 (8%)	2 (5%)
Education	65 (36%)	33 (18%)	18 (48%)	19 (50%)
Social care	8 (5%)	8 (4%)	4 (11%)	15 (39%)
Total professionals	**179**	**188**	**37**	**38**

Satisfaction with co-consultations

Figure 4 outlines data from the 2021 and 2022 evaluation surveys of professionals. Overall satisfaction with professional consultations and co-consultations was high in 2021 and 2022. The value professionals experienced from participating in consultations slightly increased for professional consultations and slightly decreased for co-consultations in 2022 compared to 2021. Satisfaction with the frequency of consultations slightly increased in 2022 for both professional and co-consultations.

Figure 4: Percentage of respondents who agreed or strongly agreed they were satisfied co-consultations (2021 professional n=9; 2022 professional n=6; 2021 co-consultation n=10; 2022 co-consultation n=5)

Feedback from post-co-consultation surveys (n=22 professionals and 13 parents), found that:

- Both parents and professionals reported a high level of satisfaction with co-consultations.
- All parents reported that they were able to tell their story; professionals paid close attention to what they were saying and helped them feel confident to act on what was discussed.
- All professionals reported that the paediatrician helped them understand their role and their knowledge and expertise was respected.

Co-consultations: barriers and suggested improvements

It was noted that some barriers to co-consultations were the Paediatric Project's internet issues, and some services not having the capacity to participate, such as ECEC services and GPs.

Professionals suggested a number of improvements for co-consultations, such as bringing paediatricians to WSM more regularly, and having a By Five paediatrician based locally who can see families face-to-face or upskilling experienced local practitioners could bridge the gap in the interim such as Allied Health professionals.

Parents expressed high levels of satisfaction with the co-consultations. Only a few parents suggested improvements including offering e-scripts to families, allowing parents to communicate with the paediatricians directly, offering face-to-face appointments when a physical examination is required, and making sure co-consultation rooms are child-friendly.

Benefits of Co-consultations

Through co-consultations, parents had timely access to paediatric care, concerns were addressed, a plan was developed and next steps were explained. Co-consultations via telehealth offered several advantages, including convenient access to paediatricians, consultations in familiar surroundings, reduced travel costs, and reduced stress for families.

Families have access to timely paediatric care

Paediatric care can now be accessed quickly and conveniently with no cost to families. As a result, families who previously could not access care can now do so. Before the program, families would have to wait a year or more to see a paediatrician. Several parents expressed gratitude for being able to access paediatric support in a timely manner. It was noted that parents had previously encountered challenges obtaining specialist care in rural towns and they had been able to have a co-consultation more quickly than other local health services such as GPs. Parents explained they thought they would have been on a waitlist for months to years to see a paediatrician if it wasn't for the Paediatric Project.

> *"Without the project this wouldn't have happened. In a rural setting, to go on the waiting list for a paediatrician up here at the moment you're looking at two years. It can make a difference between [children] being able to fulfil their life and not being able to."* (Parent)

Professionals reported that the Paediatric Project allows them to discuss concerns and formulate a plan with the By Five paediatrician before long-term support is available from local services. Early intervention can have a significant effect on a child's health and development trajectory, as illustrated in the example below.

> *"I have been working with a little girl that we noted at 3.5 years of age that something was not quite right. We want her in 4-year-old kinder next year, and within a couple of weeks, she had an appointment with the By Five Paediatrician and she is now on the NDIS and enrolled in 4-year-old kinder. If we had to wait, we just wouldn't have had the same results."* (MCH professional)

Supported telehealth access to paediatricians reduces travel and costs and stress

All local professionals interviewed agreed that the Paediatric Project has eliminated the burden of families having to travel large distances to receive appropriate care. Parent interview data revealed that almost all families would have experienced disruptions to their work or child's schooling if they were required to attend the paediatric appointment at the RCH. Nearly half of parents interviewed reported reduced travel time as being one of best things about the co-consultation or a significant change for the family.

Reduced travel time meant that families weren't required to take time off work or spend money on fuel and accommodation in Melbourne. A number of families also noted the financial costs involved in travelling to Melbourne and back, with some families reporting that they would need to book accommodation to stay overnight due to the long distance between their hometown and Melbourne. One parent advised that if the co-consultation had been in Melbourne they would not have attended – a finding reiterated by MCH interviewees.

Parents also reported that having the co-consultation locally reduced stress for parents and children who find it difficult to travel long distances.

> *"It financially cripples me, and the kids' education and socialisation through kinder and day care and everything is just all thrown into disarray. Accommodation wise it's really hard. With three little kids I am not going to ask them do a 6-7 hour drive each way in the one day." (Parent)*

For another family, whose child has chronic constipation, travelling long distances to health appointments can exacerbate their child's health condition. This family must make frequent toilet stops, lengthening the travel time and increasing the burden on the family. Having the co-consultation locally reduces the stress for both the parents and child.

> *"Horsham is an hour and 15 minutes away, so we have to stop for half an hour about twenty minutes before town for her bowel. With appointments, if it's in the afternoon, we have to stay overnight in a hotel because it's too much for her. She won't eat otherwise."* (Parent)

Co-consultations addressed parents' concerns

Nearly all parents interviewed felt that the co-consultation/s addressed their concerns and that they felt heard and respected. Parents reported that the paediatricians listened to, and validated, their concerns, answered any questions they had, and engaged with their child/ren during the consultation/s. They described the paediatricians as patient, likeable, professional, and respectful.

Case Study: Feeling heard and finding new ways to settle baby

Unsettled babies are distressing for parents. A key factor in this family's success was the way their concerns were addressed and how they were supported to work through different solutions.

Jackie's little girl Jane was an unsettled baby, she was born premature and had difficulties sleeping and would often cry for hours on end. When Jackie's MCH Nurse Linda suggested that Jackie be referred to the Paediatric Program for advice, Jackie agreed.

When Jackie was asked what she thought was the best thing about the co-consultations she explained that it was "feeling heard".

Jackie said the paediatrician really listened to her, validated her concerns and provided lots of reassurance about her situation. She felt as though everything the family raised was attended to and explored - nothing was dismissed or pushed aside.

Jackie also appreciated that the paediatrician was up to date with the latest research. The paediatrician suggested that dairy and soy might be causing Jane to feel unsettled where previously she had been told "it's not". When the paediatrician recommended that Jackie try rice formula to feed Jane rather than milk formula, she really started to notice a difference in Jane. Jane is now more settled and Jackie said the family are able to cope better with life.

Parents left co-consultations with a plan and a clear understanding of next steps

Most parents agreed they left with a plan and clear understanding of their next steps including strategies to address their child's health condition, medication and treatment advice, and recommendations/referrals to see other specialists or to obtain medical tests or further assessments.

> "[The paediatrician] suggested starting my child on allergy formula. They also suggested a food elimination diet and creams to target the child's rash." (Parent)

> *"I left with advice about what tests to ask for, so it made a big difference. [The tests will] help fast track how my next appointment with the local paediatrician will go… to help ease my mind on some things before we see the local paediatrician."* (Parent)

Case Study: Clear plan to manage symptoms and access further support

This family found it helpful to learn how to manage their child's constipation, as well as how to seek specialist support for their child's sensory needs.

Sam's daughter Rosie has had chronic constipation since birth and a weak ligament in her leg that limits her ability to walk. She also experiences sensory processing difficulties that contributes to her diet and constipation.

During the co-consultation the paediatrician provided Sam and her husband with new information about Rosie's sensory issues and how these can relate to constipation. The paediatrician recommended Sam apply to the National Disability Insurance Scheme to receive specialist support for Rosie's sensory difficulties. They also offered advice about treatments that can help resolve constipation symptoms such as fibre supplements, probiotics, and laxatives.

Sam said it was a relief having the local physiotherapist attend the co-consultation because they had known Rosie for so long.

"It was a relief having the physiotherapist [attend]. It was good because I was so overwhelmed, she would jump in [with information] I hadn't brought up or had forgotten about. It wasn't just them talking to each other about my child, they were including us and my child was able to play and she even talked to the paediatrician on telehealth. It was comfortable and quite relaxing."

Since the co-consultation, Sam said the family now have a clear plan about how to manage Rosie's symptoms at home and which supports and services to access for further assistance.

Rosie is continuing to see her local GP for support. The family also have an appointment scheduled with a paediatrician in Horsham for further advice related to Rosie's bowels.

For Sam and her family, one of the best things about the co-consultation was that they didn't have to travel to Melbourne, which is costly and exacerbates Rosie's constipation symptoms.

Using telehealth enabled familiar surroundings

A number of parents highlighted the advantages of holding the consultations in an environment their children were familiar with e.g. at home, MCH office or kindergarten. These parents explained that taking their child into an unfamiliar environment can often be distressing or distracting for their child. Holding the appointment locally reduced the amount of stress and anxiety their child would have experienced if they had to attend the consultation at the RCH and enabled children to engage in the co-consultation more readily.

> *"With children like him… when we travel to Melbourne and you put… any child that's got ADHD into a new room you can't get efficient answers because they're jumping off the walls and there's all this new stuff to touch and it can be overwhelming, so for him to be comfortable in his own environment [he gave] his best responses because he wasn't feeling anxious or overwhelmed."* (Parent)

Increased accessibility also allows partners or other family members to attend appointments to support parents or care for children. In the example below, we see how other family members can contribute valuable insight to a co-consultation.

> *"They really like that they can bring their partner or significant others to the consultation. Or the grandparents. Last week we had a mother with unsettled twins, and she brought the two grandmothers to the co-consultation. They were able to provide their input and the paediatrician was able to ask about their history, whether they had unsettled babies. Their grandmothers couldn't believe how lucky they were and they really felt as though they were listened to. The paediatrician has the loveliest manner. Having consultations that are 40 minutes is really great too, everyone felt included."* (MCH professional)

Families experiencing complexities benefit greatly from local professional support

This project highlights the importance of local professionals supporting families with complex issues and/or experiencing adversity to access a paediatrician. Participating in the co-consultation gave local professionals more insight into the child's health and/or developmental concern and meant they could provide support to the family post-co-consultation. For example, professionals could check in with the family to make sure they understood the care plan and could follow through on the recommendations. The following account describes how a family might have missed valuable information in a paediatric appointment without support from a local professional.

> *"If we've been able to get a family to go to paediatrician in Ballarat in the past, the parent doesn't understand the diagnosis or recommendations/outcome. Being able to debrief with the family following the co-consult, to make sure they understand the terminology, know how to do genetic testing. Supporting them to do blood tests. Organising cognitive assessments. Immediately after the co-consult have a debrief. Help parent with paperwork, make sure she understands what she means. More of a counselling role around this support."* (Allied Health professional)

Parents valued the support of their local professional in the co-consultations

Many parents found it helpful to have their local professional involved in the co-consultation, describing it as more comfortable.

> *"I would probably say it made it more familiar. It's always a bit uncomfortable seeing a new doctor, that doesn't know much about the background besides what's on paper. So, it made it more familiar and comfortable having her there."* (Parent)

Parents felt it was valuable to have their local professionals participate because they were able to share their observations of their children and better understand the paediatricians' advice. Others reported their local professional affirmed what they were saying or supported them in explaining their child's health condition in clinical terms and the types of strategies they had previously tried, as well as providing the paediatrician with information the parent may have forgotten or not understood clearly. A number of parents also reported that local professionals sometimes had information about their child they were not aware of that they could share with the paediatrician. For example, teachers had information about a child's behaviour at school, or the local professional had consulted with the child's kindergarten and gathered notes about his interactions at kindergarten for the paediatrician.

> *"… being able to have the Maternal Health nurse there for the appointment… I really liked that because she could explain things if I didn't understand what was going on and she took notes for me, and it just helped having her in on the plan for moving forward as well…. she helped if there was anything that I had forgotten to mention, that I had spoken to her about in the past, she brought that up and also, she had some questions that she asked in regard to my daughter that I might not have thought about so just another brain there I guess to make sure that we covered everything, and everything was well understood."* (Parent)

> *"Just the fact that [my local professional] knew [my child's] background and history from the start from when she was born, it was good having her there because she knew everything that had gone on and could help me explain that to [the paediatrician] and offer suggestions of what we wanted to get out of the consult as well."* (Parent)

Support children have received since the co-consultation

- follow up phone calls and appointments from their local professional or RCH paediatrician
- further assessments by a physiotherapist or GP, and
- appointments with a speech therapist, dietician or psychologist.
- referrals to Allied Health professionals, specialists and other community supports
- increased support in the classroom
- reports from the paediatrician to apply for more support through the NDIS

Summative evaluation findings

Outcomes for families

Families described a number of changes since attending the co-consultation including feeling reassured, reduced stress (for both parent and child), and increased skills and confidence to manage their child's health condition. Families also reported improvements in their child's health after receiving prompt medical advice, new treatment plans, medication, and referrals to local professionals and specialists. Child health outcomes reported by families included improved skin health, increased confidence, improved ability to learn, improved behaviour, improved hearing and babies becoming more settled or gaining weight, increased control of bowel, and reduced constipation.

Improvements to child health as a result of the co-consultation

Parents of children with skin conditions (eczema, birthmarks) described **improvements to their child's skin** once being advised of appropriate medication and treatment plans or receiving referrals to dermatology clinics.

> *"We had the immediate resolution of the ulcerated part of her back, the medication worked within a couple of days and I have a really clear treatment plan because [the paediatrician] was really clear "if this happens again, this is what you do." (Parent)*

Some parents reported that their child had **gained weight** or become **more settled** as a result of the advice and information they received from the paediatrician during their co-consultation. One family reported a significant outcome for their 16-month-old child who was delayed in their ability to walk and roll, and consistently snored while sleeping. The paediatrician referred the child to an Ear Nose and Throat (ENT) specialist who diagnosed adenoids and arranged surgery to remove them. As a result, the child is now more active, less afraid of walking and has started to walk around furniture.

> *"She is all of a sudden more active… after having surgery because it was picked up so quickly, she has become more steady on her feet, she has started to walk around furniture, she is not far off walking now, whereas before it was almost like she was terrified… it's a huge outcome."* (Parent)

Parents of children with ADHD described marked improvements in their child's behaviour once they began taking medication, particularly in their **ability to learn** and **regulate emotions**. One family reported their child is now able to maintain a routine and focus on their reading and vocabulary. As a result, they have **increased confidence** and happiness, as well as **improved behaviour** at school. Similarly, another family reported their child is a lot calmer and more accepted within their classroom and amongst peers as a result of taking medication.

> *"That calmness has allowed him to regulate his emotions a little bit better because he could not regulate them at all… he's a lot more accepted amongst his peers and within his classroom which is really great."* (Parent)

Case Study: Increasing confidence and capability for learning

Co-consultations between the paediatrician, family, and school addressed concerns about the child's behaviour and lead to a formal ADHD diagnosis. As part of this process, the paediatrician invited the child to share their learning experiences at school.

Kelly had had concerns about her son Sam's behaviour since he was 2.5 years old. She suspected he might have ADHD but had been unsuccessful obtaining a diagnosis. When Sam's school recently approached her with similar concerns, she agreed she would be happy for them to organise a referral to the Paediatric Program.

Kelly explained that the family's first co-consultation involved Sam's school principal, teachers, an Education Psychologist as well as the paediatrician from the RCH. Together they discussed their concerns and observations and then at the second co-consultation the paediatrician spoke with Sam directly about his perspectives on his learning experience at school.

Kelly said the paediatrician also provided her with some mental health assessment forms to complete with Sam, and at the families third co-consultation, the local GP attended and a formal diagnosis of ADHD was given.

Since participating in the co-consultations, the school and Kelly have developed strategies to manage Sam's behaviour and to help improve Sam's routine at home. The school has also reinstated Sam's morning tutor and Kelly receives weekly contact from Sam's teachers about his progress and achievements. A mental health care plan was also completed for Sam and he has started taking medication, with the GP checking in about how he is responding. Kelly said she has noticed a significant change in Sam's confidence that she felt would not have happened without the co-consultations.

"he is happier … and his confidence is through the roof"

She explained that now Sam is taking medication he is able to focus on reading and vocabulary and can more easily keep to a routine.

Snapshot: Family perspective on how significant the change was that their child or family experienced after the co-consultation (n=22)

Thirteen (59%) parents reported a **'very significant change'** to their child or family.

Five (23%) parents noted a **'somewhat significant change'** to their child or family.

Four (18%) parents noted **'no significant change'** to their child or family.

Parents felt heard, supported and reassured

Several parents expressed that the best part of the co-consultation was feeling heard, particularly those who had not had good experiences trying to address their child's health concern in the past. Several parents appreciated that their child's challenges were acknowledged directly by the paediatrician without judgment.

> *"The best thing was feeling heard… in the hospital, they referred to [our child] as an angry baby. When we saw [the paediatrician they said] yeah, this is really hard."* (Parent)

Parents described either feeling less stressed, reassured or a sense of relief as a result of receiving information and advice from the paediatrician. Some parents felt they gained clarity from the paediatrician about their child's health condition. Others reported that being able to talk to a professional and hear that what they were doing was right, or that the problem wasn't them, reassured them of their parenting abilities.

> *"[I felt] immediate relief there's not something terribly wrong with my baby."* (Parent)

> *"The stress was just next level, so to have that conversation, our stress levels decreased and it's not on our mind every waking moment."* (Parent)

Case Study: Providing reassurance and an effective treatment plan

This mother tried several strategies to treat her baby's skin condition. She felt stressed by conflicting advice. A co-consultation with a paediatrician and a MCH nurse provided reassurance and effective treatment.

Sally's newborn daughter Molly had a skin condition that caused redness and blistering all over her body. Sally had tried various cortisone creams, changed Molly's diet and clothes, and even switched laundry powders, but nothing was working. The MCH Nurse referred her to the Paediatric Project.

When Sally attended the co-consultation, the paediatrician recommended that she use a stronger cortisone cream on Molly's skin and gave her information about how to apply it. Within one week of using the cream, Molly's symptoms had resolved.

Sally appreciated that her local MCH nurse was there to describe the previous strategies and medications she had tried.

"I was finding it difficult to describe [to the paediatrician] what I had done. [The MCH nurse] was able to describe much better than me, in a more clinical way"

After trying previously unsuccessful strategies, Sally felt stressed and wanted to know whether cortisone cream was safe for her baby's skin. The paediatrician and MCH nurse reassured her that it was okay to use a stronger cortisone on Molly's skin.

For Sally, the best thing about the co-consultation was having access to a paediatrician without having to take time away from work to travel four hours to Melbourne.

An increase in parental knowledge and ability to manage their child's health condition

Many parents highlighted the clear guidance, information and education they received from the paediatrician about their child's health condition. In many cases, parents reported that paediatricians gave them the tools, information, and knowledge that they needed to manage their child's health condition.

> *"I feel really prepared that in the event this happened again I know what it is, I know how to deal with it, I have the medication on hand and I guess the other helpful part is [the paediatrician] shared… really credible information so I didn't Google it and go, "Oh goodness" … It's really credible way to educate a parent, I found."* (Parent)

> *"We feel like we now have the skills to self-manage our child's constipation."* (Parent)

Preference for and trust in local care

The majority of parents interviewed reported that they felt an increased sense of trust and confidence in local care since being involved in the co-consultation/s and agreed that they were now more inclined to choose local care. Some parents felt that their concerns about their child's health were being taken more seriously by their local professional/s now that they had been validated by the paediatrician. Local educators who were interviewed also held this viewpoint, noting it has subsequently improved the communication and relationship between parents and the school.

> *"One of our parents is a single dad with four kids. I think he might have thought it was harder to talk to the school because he might have felt he was being judged, but now that he feels that we're actually facilitating help it's really opened up the dialogue."* (Education professional)

Other parents felt more confident knowing that their local professional was consulting with the paediatrician about their child's health.

> *"I always think [the GP] is amazing but you don't know what you don't know and… now I feel more confident in saying this medication's not working because I know that [the GP] will consult with [the paediatrician] and review it. I trust [the GP] anyway but it's so much better to know we've got [the paediatrician] on the team."* (Parent)

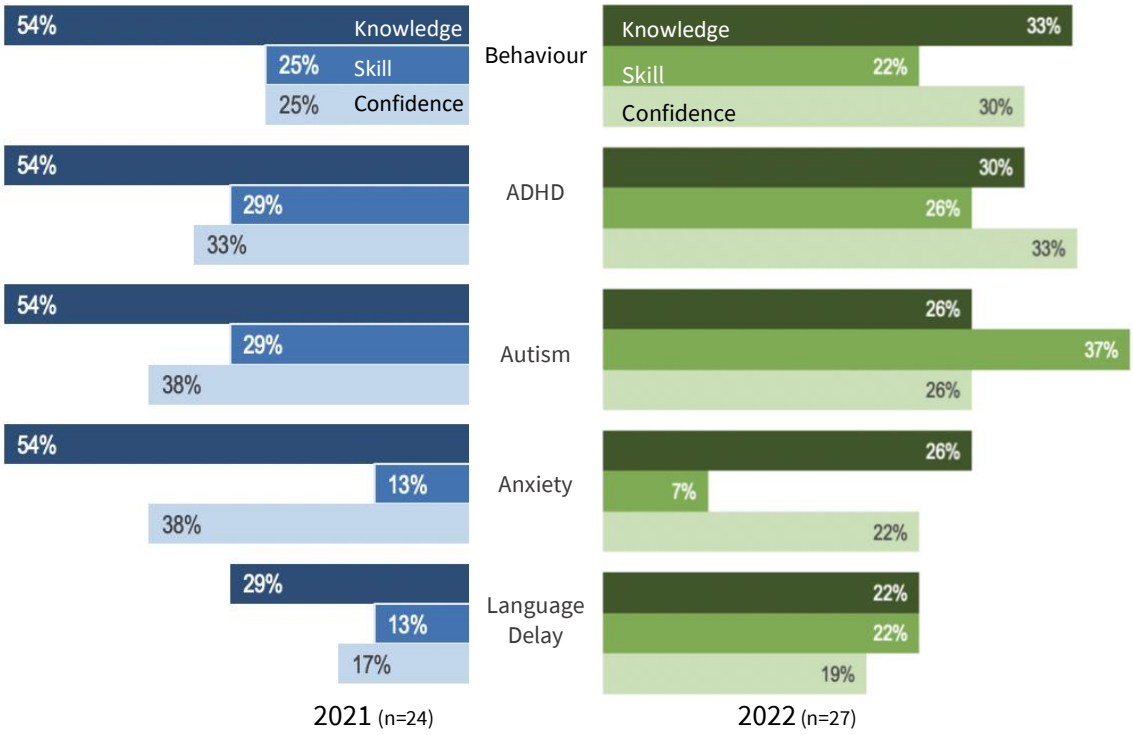
MCH interviewees also felt that families' confidence in them had increased, knowing that the MCH knowledge base is being upskilled.

> *"I have been able to share information that we've learnt from the education sessions, and knowing that that's current research-based information… they [families] realise that it's up to date information"* (MCH professional)

Outcomes for professionals

Professionals reported an increase in their knowledge, skills and confidence of assessing various child health conditions. The top 5 reported conditions are shown in Figure 5. The graph below shows that a higher proportion of respondents reported increases in knowledge in 2021, however respondents are still reporting increased knowledge skills and confidence to assess and manage the child health conditions in 2022.

Figure 5: Professional reported increase in knowledge, skills and confidence in assessing child health conditions



Changes in collaboration between local professionals

Greater awareness of other services and professionals

Through the Paediatric Project, local professionals report learning more about other child health and family services available e.g., what they do, and how to connect with them. In some cases, this has enabled professionals to support families to connect with other local professionals (e.g., dieticians, psychologists).

> *"I have a couple of complex kids who needed a cognitive assessment done. Now I know the local psychologist and how the child might be able to get an assessment with them, and potentially some different pathways the child can take to access that service. I think part of it has come out of a mix of case studies and a co-consult."* (Allied Health professional)

> *"[By Five paediatrician] often says let's get a dietician involved here, so I've now got a good connection with our local dietician. I actually did a co-consult with a local dietician because the mum had been booked into see the dietician a couple of times and didn't attend and I have a good rapport with the parent, so I set it up and went with the parent. So, it was really good to meet her and it was good that I was there to hear what the mum had been told. You just get the option to meet other professionals."* (MCH professional)

Building relationships with other professionals

Professionals reported they established relationships with other professionals after hearing them speak and seeing them online at case-based sessions and co-consultations. These forums allowed them to connect and hear different ideas and perspectives. Professionals in the same discipline in different locations had formed relationships and reported they could draw on each other's knowledge and skills for support. A number of local professionals have developed relationships with professionals from different services and gained a deeper understanding of how they work with families. There had been more sharing of information through email and in-person. The example below describes how a co-consultation with multiple services helps to get local professionals on the same page.

> *"I think having the consults and having everyone work together has made a massive difference. [The kindergarten, other services and the family are all] on the same page instead of working individually. It's also good for the families because everyone [on the child's care team] is involved, rather than [individual] discussions happening everywhere, and people getting confused [about the child's care plan]."* (Social Care professional)

Changes in local professionals' knowledge, skills or confidence

Interview and focus group participants provided a number of examples of how the Paediatric Project increased local professionals' confidence in assessing and managing child health conditions by providing another avenue of consultation and support. Participants reported that case studies and co-consultations often validated what they were already doing and increased their confidence.

> *"I think it's provided our clinicians with somewhere else to go to seek developmental support from the paediatricians and the case conferences are an opportunity to bounce these complex cases around."* (Allied Health professional)

> *"Just in terms of knowing a bit more about how to access consultations. As part of those consultations, it's been a good reminder that we do know what we are doing, and we do have those skills locally. We have actually got them on the ground."* (Allied Health professional)

The case-based discussions were a valuable opportunity to learn from other local professionals. One focus group reported they were encouraged to implement more reflective practice within their own teams as a result of this project. Case-based discussions provided opportunities to connect and reflect between local professionals whose practices can be isolating, particularly in a regional, rural or remote setting.

> *"Sometimes it can be a lonely world. We work quite individually, sometimes it's nice to have conversations and debrief. Someone else might have had a similar experience and you learn something from them that you can try."* (Social Care professional)

> *"Helps you to feel less alone, helps feel validated, confident, helps you see and appreciate and utilise the expertise of your colleagues."* (Social Care professional)

Changes in how local professionals work with families

Taking shared responsibility for the care of families

Local professionals reported they are communicating more effectively and transparently around the care of families including collaboration in case studies and co-consultations and information sharing following co-consultations to ensure local professionals understand a family's plan moving forward.

> *"It's the ability to be in a consult together and coming up with a shared care plan. It really adds to the value for the family. They are in the one spot; the team is all there and they are hearing the same message."* (Allied Health professional)

> *"With the By Five project, it takes about two weeks to get an appointment, then we have a plan and it's all fed back to GP and other health professionals, then everyone is on the same page."* (MCH Nurse)

Engaging the family more collaboratively

Some professional participants reported a shift towards working more collaboratively with families and trying to understand where families are coming from. Below a local professional explains how the Paediatric Project has encouraged this shift.

> *"I think having the paediatrician validate that we do have the knowledge on the ground and that it is important to work collaboratively with the families, I imagine that's from the project."* (Allied Health professional)

Taking a holistic approach

Following a case-based discussion that helped distinguish developmental delay from trauma, one professional reported they are taking a more holistic approach to working with families.

> *"[We discussed how] disability addresses the child or individual person whereas trauma looks at the relationship with the family between Mum and child. If we put a disability lens then we are just focusing on the child and not the whole picture."* (Social Care professional)

Additionally, case-based sessions with a psychologist and paediatrician provided local professionals with an invaluable opportunity to examine both the physical and psychological needs of the child. In some cases, this involved the development of new strategies to try with the family.

Discussion

This section examines the effectiveness of the model and potential areas for improvement. It discusses the current impact of the model and important insights for other innovative care models, as well as future considerations for the project.

How well is the model working and how can it be improved?

Since the Paediatric Project began in 2021, 187 children have directly benefited from 314 co-consultations with paediatricians and local professionals. The support and capacity building provided to local professionals through case-based sessions and professional consultations has also benefited families indirectly.

The Paediatric Project is receiving active engagement from families and professionals across the five local government areas of the WSM. Nevertheless, there are still families that remain unreached because they are not connected to services. Over the last two years, the Paediatric Project has gained awareness and acceptance among the community. As a result, some families have been requesting referrals from their local professionals to the Paediatric Project, and there has been a rise in local professionals becoming involved in the project.

Co-consultations between families, local health professionals and paediatricians utilising telehealth offer several advantages such as convenient access to timely paediatric care, reduced travel costs and stress, and consultations in familiar surroundings. Parents had their concerns addressed, left with a plan and clear understanding of next steps, and felt heard and respected during the consultations. Local professionals also provided valuable insight and support during the co-consultations, especially for families with complex issues and those experiencing adversity.

The case-based discussions, professional consultations and co-consultations provided valuable opportunities for learning, reflection, and a shift towards a more holistic approach to working with families. Professionals reported increased confidence in their practices and more effective communication with families. The project has encouraged professionals to take a more collaborative and reflective approach in their work, particularly in regional, rural and remote settings where practices can be isolated.

Local professionals highly regard the Paediatric Project's multidisciplinary approach that involves various professionals. Feedback suggests that further involvement of certain professional groups would be advantageous, including:

- Child and Family services to enhance coordination of care for vulnerable families
- GPs due to their expertise and capacity to provide ongoing family care
- Schools and early childhood education professionals, as they interact frequently with children and their families.

What do we know about the model's impact so far?

By reducing barriers like travel, cost, and wait times, the Paediatric Project has made paediatric care easier to access for families living in WSM. Families can now access a paediatrician through telehealth co-consultations in a timely manner with support from a local professional and with minimal disruption to family life. Parents have experienced a range of benefits from co-consultations, such as reduced stress, improved skills and increased confidence in managing their child's health. A number of improvements have also been shown in children's health outcomes, including improvements in skin health, behaviour, hearing, learning abilities, weight gain, and constipation.

The Paediatric Project has led to a range of improvements for local professionals, including enhanced understanding of WSM services, improved relationships and collaboration among professionals, increased confidence in assessing and managing child health conditions, and more effective communication regarding family care. Families' trust in local care has also increased due to the project's emphasis on the expertise of local staff.

Learnings for implementing innovative models of care

A key lesson learned from the project is that a significant amount of groundwork must be laid within the community before implementing a suitable intervention locally. The successful implementation of the Paediatric Project was attributed to various factors, including:

- Identifying the need for change by examining data carefully and taking appropriate actions.
- Establishing a shared vision within the community to build a solid foundation for change.
- Providing strong governance and financial support to sustain the project over time.
- Testing and refining project strategies and making ongoing local adaptations to meet the evolving needs of the community.

A number of key principles can be drawn from the Paediatric Project when developing and implementing innovative care models:

- **Respond to the needs of the local community:** Providing effective services to the local community involves understanding their unique challenges and tailoring services accordingly.
- **Foster child-centred thinking:** Encourage innovative solutions that prioritize child well-being by challenging conventional norms and practices.
- **Leverage local assets**: Instead of solely relying on external resources, tap into local expertise, resources, and support networks.
- **Focus on capacity building**: Specialists can play a role in building the capabilities of primary care providers.
- **Embrace a multidisciplinary care model**: Adopt a collaborative approach where specialists and primary care providers work together. This helps build capacity and minimises unnecessary referrals.

What does this mean for the future of the Paediatric Project?

Advocating for sustainability of the model

Early intervention provided through the Paediatric Project has the potential to significantly impact a child's health and developmental trajectory.

A recent report by the Strengthening Medicare Taskforce (2022) has set out recommendations on how to ensure that Australia's primary care system is able to deal with the challenges of the future. Encouraging multidisciplinary team-based care is one of the focus areas. In this regard, the Paediatric Project is an excellent example of how innovative models of care can benefit regional, rural and remote children and build the capacity of local workforces and could be argued as a solution to this recommendation.

As an innovative model of care, it is important to continue to document the learning, benefits and impacts of the project to support ongoing advocacy efforts. In order to capture engagement data and regular feedback from parents and professionals efficiently following the evaluation, the implementation team may wish to enhance data collection processes and embed processes for reviewing and acting on data.

Considerations for ongoing adaptation/evolution

Telehealth co-consultations involving the paediatrician and the local care team offer several advantages including increased convenience and the ability to leverage the local health professional's knowledge of the child and family's circumstances for better outcomes. However, there is an appetite to offer some face-to-face consultations with a paediatrician or GP as part of the Paediatric Project. This could be an area of future investigation for the project.

Whilst all local professionals reported benefits from participating in the Paediatric Project, the capacity building elements of the project were seen as particularly important for newer professionals with less experience. The further promotion of the Paediatric Project is important to ensure local professionals understand the benefits of their involvement, the relevance to newer staff and long-term perspective of the project.

There is a high value placed on the multidisciplinary approach of the paediatric project. Different supports provided within the project were refined during 2022 to encourage the participation of a wide range of professionals. In order to maintain the active participation of local professionals, future project modifications should focus on sustaining their involvement through the process of seeking their ideas and suggestions, and subsequently adapting activities based on their feedback.

As an innovative model of care, it is important to continue to document the learning, benefits and impacts of the project. In order to capture engagement data and regular feedback from parents and professionals efficiently following the evaluation, the implementation team may wish to consider enhancing data collection processes.

Appendix 1: Background to the Project

The problem of accessing community paediatric care

Over the past two decades, there has been a profound shift in paediatric presentations, from acute care to developmental and behavioural presentations (Hiscock et al., 2017). Our service system has failed to adapt. Children are an ever-smaller proportion of GP visits but are the largest group attending Victorian emergency departments. Royal Children's Hospital (RCH) wait lists for some clinics have doubled in three years, with some delays of up to two years for specialist care. Many of these referrals are best suited to clinical management by primary care providers within local systems and with integrated supports for families. This is detrimental not only to the health outcomes of the children being inappropriately referred, but also to the children with a genuine need for tertiary care consequently having to potentially wait longer for access. The financial, developmental and opportunity costs of travelling to access secondary and tertiary paediatric treatment are particularly profound for regional and rural children and families due to relative socio-economic disadvantage and the compounding effect of prolonged absences from education and employment.

The 2017 Royal Far West Invisible Children report (Arefadib & Moore, 2017) recommended innovative scalable service models for rural and remote communities to improve access to health services to support childhood development, prioritising models that integrate health and education and exploit technology and digital health with a focus on outcomes. Australia's National Action Plan for the Health of Children and Young People 2020-2030 (Department of Health, 2019) aims to ensure that all Australian children and young people have the same opportunities to fulfil their potential, and are healthy, safe, and thriving. Locally designed health care provided by a well-trained and supported primary care workforce is regarded as the best way to ensure population health (WHO & UNICEF, 2018).

Strengthening Care for Children: a promising model

The Strengthening Care for Children pilot in Northern Melbourne (Hiscock et al., 2020) assessed acceptability of an integrated GP–paediatrician model of care, aiming to reduce inappropriate referrals to paediatric specialists and improve primary care scope and quality. GPs reported increased confidence in their ability to care for children, and families reported increased confidence in and preference for GP care. Unnecessary prescribing of some medications decreased by 20% and there was a reduction in referrals to emergency departments as primary care developed expertise and confidence in appropriate management. These results challenge us to consider how these outcomes can be taken to scale, particularly in regional areas.

Setting the foundations for the By Five Paediatric project

The Wimmera Southern Mallee Regional Partnership is one of nine Regional Partnerships in Victoria, established by the Victorian Government in 2016. In 2016, through the Regional Partnership Assembly process, the WSM community identified that improving early years' outcomes in the region was a major priority. A subsequent roundtable meeting with Premier Dan Andrews lent support to trialling innovative ways of working to stimulate system change.

In 2017, The *Early Years Trial* commenced. Later known as By Five, its purpose was to explore ways to innovate the delivery of early years services across the WSM, through establishing partnerships between local government and early year's service providers. In late 2017, communities were invited to be involved in the trial. Expressions of interest were received from six local government areas spanning 17 towns.

In early 2018, the WSM was prioritised for a staged roll out of new state-wide early years initiatives based on the advocacy of the WSM Regional Partnership, which aligned closely with the By Five work. In mid 2018, the Centre for Community Child Health were contracted to help coordinate this work by first working to align the thinking of the six township-based steering groups with the Regional Partnership Steering Group and develop a shared vision for By Five, as well as understand more about each other's projects.

In June 2018, the Centre for Community Child Health conducted a comprehensive consultation phase covering 16 townships and around 300 local informants, in which the issues and priorities as experienced by local people were discussed and documented. Three priorities emerged and continued to guide project implementation:

1. Capacity and capability of parents and practitioners
2. Access and availability of services, particularly access to specialist health services
3. Workforce retention

Each township cluster had the opportunity to respond individually to their data and consultation findings. Several opportunities were identified and pursued, which brings us to the evidence to action phase.

The first steps of the By Five Paediatric Project

In mid-late 2019 a range of programs were implemented under the By Five 'umbrella', which was widely recognized in the Victorian Early Years space. At this stage, one small program relating to improving access to paediatric care commenced, laying down the foundation for the adoption and adaptation of Strengthening Care for Children in WSM. In late 2019, a partnership with the Regional Digital Fund to deliver a paediatric telehealth project was initiated.

Early in 2020, the adaptation of Strengthening Care for Children for the local WSM commenced. Maternal and child health services across five local government areas, clinicians, researchers and community came together to co-design a progressive approach to supporting child health, building

on the learnings from the existing initiative. By March 2020, the By Five Paediatric Program (formerly known as Strengthening Care for Children in the Wimmera Southern Mallee) was launched.

This work is documented in the figure below.

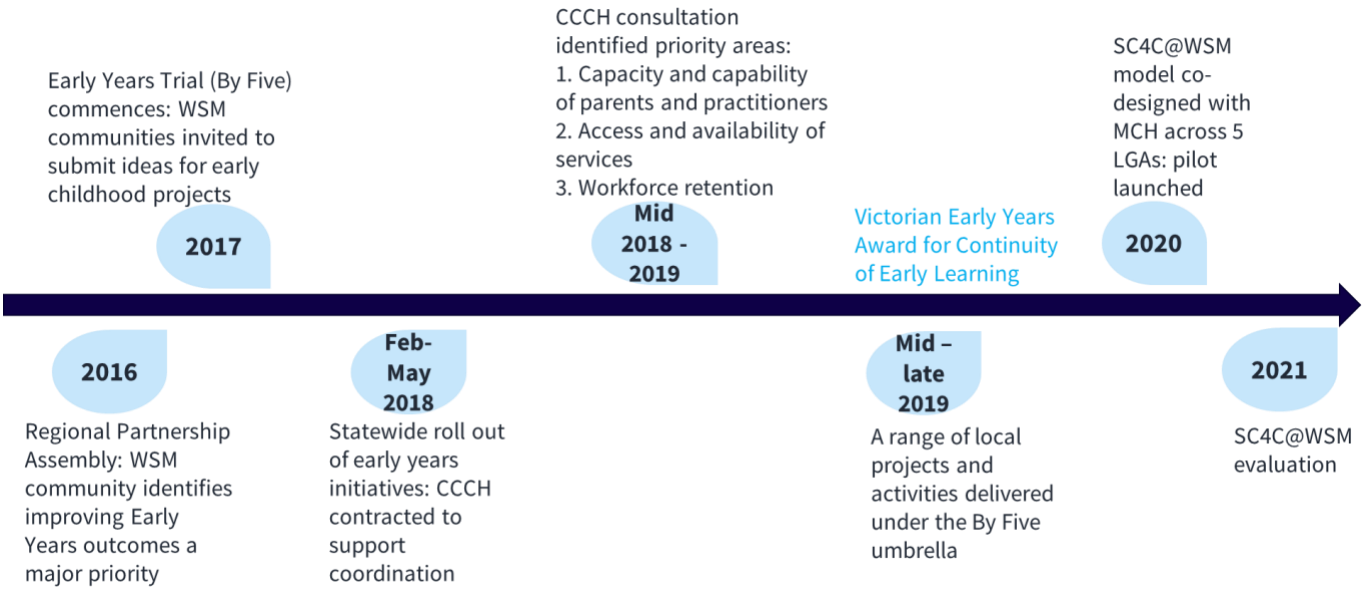
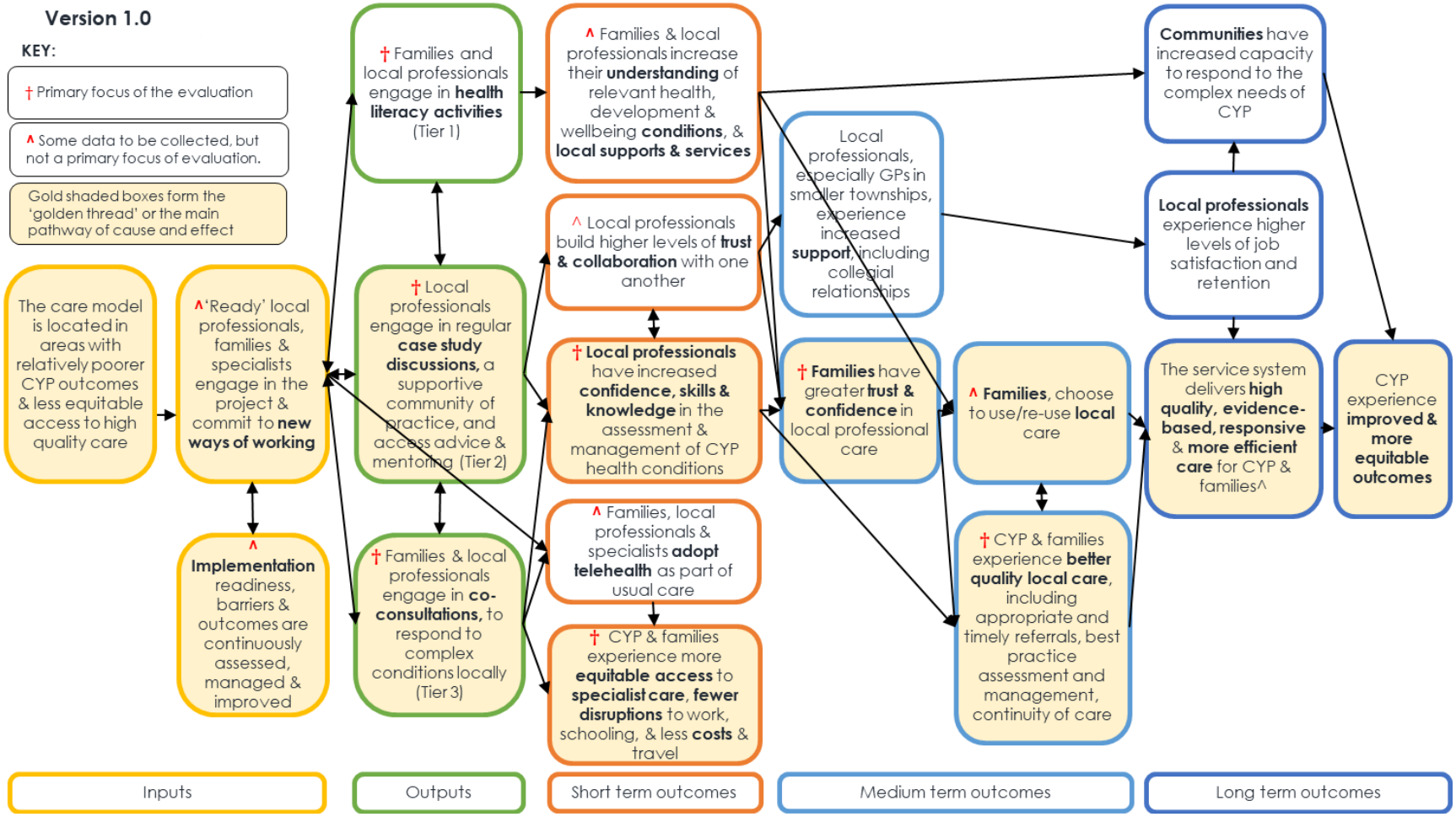


Figure 6: Timeline

Appendix 2: By Five Paediatric Project logic model



Appendix 3: Data Sources

Data Source	Wave 1 (2021)	Wave 2 (2022)
Engagement register Deidentified and aggregated participant and demographic data		
Feedback Surveys (n=51)		
Evaluation survey for local professionals Local professional feedback on how well the case based learning and co-consultations s were delivered, how they could be improved, and changes in professional confidence, knowledge and skills.	24 participants - 9 Education (school) - 8 MCH nurses - 4 Allied Health - 1 Social Care - 1 General Practitioner - 1 Family Support Participation in activities - 96% case-based sessions - 21% Health Literacy sessions - 38% 1:1 paediatrician - 52% co-consultations	27 participants - 13 Allied Health - 10 MCH nurses - 2 General Practitioner - 1 Education - 1 Social Care - 1 Family Support Participation in activities - 85% case-based sessions - 37% case-study presenters - 22% 1:1 paediatrician - 56% co-consultations
Post-session survey - Health Literacy Participant feedback on health literacy sessions (e.g., satisfaction, areas for improvement)	89 respondents - 18 parents/carers - 38 professionals - 21 both - 5 not allocated	Not applicable. Surveys were not used in 2022 due to a change in the format of health literacy education.
Post-session survey - Case-based sessions Participant feedback on case-based sessions	Limited data available	41 respondents - No breakdown by professional group available
Post-session survey - **Professional only** consultations with paediatrician	Limited data available	10 respondents - No breakdown by professional group available
Post-session survey - **Co-consultation** Participant feedback on co-consultation from local professionals and parents/carers ***Commenced late 2021**	5 respondents - 2 parents/carers - 3 professionals	25 respondents - 13 parents/carers - 12 professionals
Interviews and focus groups		
Family interviews	13 participants	9 participants

Data Source	Wave 1 (2021)	Wave 2 (2022)
Interviews with families about their experience of co-consultations including how they became involved, their experience and outcomes achieved through the co-consultations	- 12 parents - 1 carer	- 9 parents
Local Professionals Interviews and focus groups to explore their experience of participating in case-based learning and co-consultation activities	17 participants - 7 Allied Health - 5 Education - 4 Maternal Child Health - 1 General Practitioner	17 participants - 5 Allied Health - 1 Education - 5 Maternal Child Health - 6 Social Care
Implementation Team Focus group and interviews with implementation team	4 out of 4 members participated	4 out of 4 members participated
Steering Committee Focus group with steering committee members	3 out of 6 members participated	3 out of 7 members participated

Appendix 4: Participation data

Long co-consultations	2021		2022	
	Number	*%*	*Number*	*%*
Co-consultation sessions delivered *	179	-	135	
January	-		6	3%
February	6	3%	10	5%
March	14	8%	15	8%
April	14	8%	14	8%
May	13	7%	12	6%
June	18	10%	6	3%
July	10	5%	9	5%
August	15	8%	13	7%
September	30	16%	10	5%
October	19	10%	19	10%
November	29	16%	12	6%
December	18	10%	9	5%
	186		135	
Children seen	88		99	
Child average age	5.5 years		5.1 years	
Number of co-consultations per child			97	
1 co-consultation	41	47%	74	75%
2 co-consultations	28	32%	17	17%
3 co-consultations	10	11%	5	5%
4 or more co-consultations	9	10%	3	3%
Reason for visit (top 5)				
Behaviour	52		30	31%
Developmental delay (incl language)	7		25	26%
Autism Spectrum Disorder traits	-		21	22%
ADHD traits	14		16	16%
Constipation/Encopresis	11		15	15%
Sleep	5			
Diagnosis made (top 5)				
Developmental delay (incl language)	7		30	31%
ADHD assessment or management	21		21	22%
Behaviour	31		19	20%
Constipation/Encopresis	16		15	13%
Intellectual/learning disability	-		7	7%
Allergy	-		6	6%
Sleep	5			

Appendix 5: Participant feedback

2022 Case-based session feedback from post session surveys	Professionals (n=41)
Level of satisfaction with case-based sessions - *"Very satisfied"* - *"Somewhat satisfied"* - *"Not satisfied"*	 93% 5% 2%
Benefits - Helpful information/strategies and resources (11) - Collaborative discussion (16) - Multidisciplinary - different perspectives (19) - Complex case (5) - Prior notice of case (2) - Discussing unfamiliar topics (2)	
Improvements - Prior consideration of presentation slides/case (2) - Share slides after session (1) - Trouble with link not always working (1) - 48-hour reminder before meeting (1) - Breakout rooms (1) - Awareness of types of professionals attending (1) - Need for regional MCH meetings to recommence (1) - Share the outcome of referrals (1) - Need to be mindful of maintaining family's anonymity (1) - Contribution of others in meeting (2) - NDIS involvement (1)	

2022 Short Co-Consultation session feedback	Professionals (n=10)
Level of satisfaction with co-consultation - *"Very satisfied"* - *"Somewhat satisfied"* - *"Not satisfied"*	 100%
% professionals reporting that during the co-consultation, the paediatrician: - helped them feel better equipped to take the next steps regarding their question or issue	 90%

2022 Long Co-Consultation Feedback	Parents (n=13)	Professionals (n=12)
Level of satisfaction with co-consultation - *"Very satisfied"* - *"Somewhat satisfied"* - *"Not satisfied"*	 100% - -	 92% 8% -
% parents reporting that during the co-consultation, the paediatrician: - paid close attention to what they were saying - let them tell their story - helped them feel confident to act on what was discussed	 100% 100% 100%	
% professionals reporting that during the co-consultation, the paediatrician: - helped them understand their role - respected their knowledge and expertise		 100% 100%

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