The feasibility of a Child and Family Hub within Victorian Community Health Services: a qualitative study

Suzy Honisett,[1] Teresa Hall,[1] Harriet Hiscock,[1-3] Sharon Goldfeld[1-3]

Abstract

Objectives: Explore the feasibility of an integrated Child and Family Hub within Victorian Community Health Services (CHS) to identify and respond to family adversities as preventable determinants of child mental health problems.

Methods: Thirteen Victorian CHS staff and government policy makers (PMs), recruited via snowball sampling, participated in semi-structured interviews exploring: 1) barriers and facilitators for implementing a hub; 2) feasibility of a proposed integrated hub; and 3) resources needed to scale and sustain a hub. Transcripts were analysed employing framework analysis.

Results: 1) Barriers included inadequate and activity-based funding, inability to fund community paediatricians and inadequate workforce competencies. Facilitators included CHS engagement with vulnerable communities and readiness to act. 2) The proposed hub model was identified as feasible to implement. Local co-design, co-location, and virtual delivery would support hub implementation. 3) To sustainably scale a hub, clear policy leadership and workforce and funding model reviews are needed.

Conclusions: A hub was perceived as feasible when based in CHS; however, local and system-wide issues need consideration to support its sustainable scaling.

Implications for public health: Findings will inform the scaling of hub models of care across Victoria and other states to potentially optimise broader child and family health outcomes.

Key words: child mental health; childhood adversity; health policy; integrated health service; integrated care; scalability.

Family adversity is a broad term that refers to a wide range of circumstances or events that pose a serious threat to a child's physical and/or psychological wellbeing.[1] These adversities may fall within adverse childhood experiences (ACEs) or broadly as social determinants. ACEs include childhood maltreatment (e.g. physical, verbal, or sexual abuse) and household dysfunction (e.g. parental mental illness, family substance abuse).[2] These intersect with broader social determinants focusing on where children and families live, work and play, and include broader community dysfunction (e.g. witnessing physical violence, discrimination) and peer dysfunction (e.g. stealing, bullying) as well as socioeconomic deprivation.[3]

In Australia, just over half of children aged 10–11 years have been exposed to two or more adversities.[4] However, these adversities are not distributed equally. Children from Indigenous and culturally and linguistically diverse backgrounds, when combined with low socioeconomic positions, are four to eight times more likely to be exposed to two or more adverse experiences compared to their Anglo-European counterparts.[4]

Family adversity has well-established negative impacts on mental health, increasing the risk of anxiety, internalising disorders, depression, self-harm, and suicidality in childhood and across the life course.[5-7] There are increasing mental health impacts with a higher number of ACEs.[8]

Prior to the COVID-19 pandemic, 14% of Australian children and adolescents lived with a mental health disorder.[9] COVID-19-related social restrictions, particularly in Victoria, have further impacted the mental health of children and their families[10-12] with the mental health burden likely to be further exacerbated by employment stress.[13] To mitigate the impacts of family adversity and the likely exponential rise in child and family mental health issues there is an opportunity to consider evidence-based and equitable approaches.

Although there has been a proliferation of mental health treatment services over the previous decade, mostly they have been insufficient to prevent mental health disorders.[14] Broader health service delivery models in Australia do not appear to incorporate early identification and response to family adversities, yet prevention and early intervention approaches are required to address family adversity. This will improve the mental health trajectory of children[15] and decrease the cost burden to the Australian government of not acting earlier – estimated to be $15.2 billion a year.[16] A promising approach is integrated primary care, with

1. Centre of Research Excellence in Childhood Adversity and Mental Health, Centre for Community Child Health, Murdoch Children's Research Institute, Victoria
2. Royal Children's Hospital, Victoria
3. Department of Paediatrics, The University of Melbourne, Victoria
Correspondence to: Professor Sharon Goldfeld, Centre for Research Excellence in Childhood Adversity and Mental Health, Centre for Community Child Health, Murdoch Children's Research Institute, Parkville, Victoria; e-mail: Sharon.goldfeld@mcri.edu.au
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research suggesting improved mental health outcomes for children and youth.[17,18]

A key platform of primary care, community health services (CHS), were established in Victoria with a policy remit to improve integration across primary health and social care, addressing the social determinants of health to support Victoria's most vulnerable populations.[19,20] There are 82 CHS in operation across Victoria with funding contributions from the Victorian Department of Health to employ a range of allied health and nursing staff. Twelve CHS receive additional government funding to provide child health teams to work with children who have mild to moderate developmental difficulties and behavioural issues.[20] CHS are, therefore, potentially well placed to provide an existing platform for an integrated hub model of care that focuses on early identification and response to family adversity.

A number of state and federal policy imperatives are supporting the need to implement and evaluate integrated hub models of care for child and family mental health in Australia. These include the 2021 Royal Commission into Victoria's Mental Health System[21] and the 2021 National Children's Mental Health and Wellbeing Strategy.[22]

Although there is substantial evidence more broadly on facilitators and barriers to integrated primary care, including funding models,[23] funding amounts[24,25] and lack of workforce capabilities,[24,25] there is a dearth of research specifically evaluating hub models of integrated care focusing on families experiencing adversity, noting the particular importance of child mental health.

This study is a component of research within the National Health and Medical Research Council Centre of Excellence in Childhood Adversity and Mental Health (CRE). The broad aims of the CRE are to develop and evaluate an integrated Child and Family Hub model positioned within CHS and funded through existing CHS funding from the Victorian Department of Health to improve children's mental health by early detection and response to family adversity. Local co-design undertaken over a 10-week period with local families and service providers in Wyndham Vale, Victoria, has informed the development of the hub model of integrated care, as seen in Figures 1 and 2. This model is also based on best evidence of overcoming common integration impediments, such as fragmentation of services,[26] poor access to evidence-based services,[27] lack of developmentally trained workforce for children and their families,[28] and engaging multi-disciplinary care.[29] The study outlined in this paper was conducted to address the gap in evidence relating to the feasibility and potential scalability across Victorian CHS of an integrated health and social hub model of care for children and families experiencing adversity. This research could then inform statewide knowledge translation activities that can support the sustainable scaling of the proposed Child and Family Hub model, particularly across Victorian CHS.

To explore the feasibility of the proposed Child and Family Hub within Victorian CHS, we interviewed CHS Chief Executive Officers (CEOs) and senior managers, and government policy decision makers (PM), to investigate their perspectives. Specifically, the objectives of this study were to explore:

- barriers and facilitators for implementing a hub in Victorian CHS to identify and respond to family adversity
- feasibility of a proposed integrated hub model of care
- resources required to scale and sustain a hub across CHS in Victoria.

Methods

Methodological approach

This study is a formative research piece using qualitative methods to inform the scalability and sustainability of a new service delivery model – a Child and Family Hub for families experiencing adversity.

Participants

Individual interviews were undertaken with participants from two stakeholder groups – CHS CEOs and senior managers, and government policy decision makers (PM). These two stakeholder groups were identified as important in influencing whether a Child and Family Hub model of care could be implemented within CHS, and the potential to scale and sustain this hub model for other CHS. All participants were aged >18 years and had sufficient English language to participate. Investigators SG and HH, both with experience working with the health and government sectors, initially nominated two potential participants working within CHS and government policy (e.g. Department of Health). Snowball sampling was subsequently used to identify and recruit further interviewees by asking participants to nominate relevant colleagues to invite to the study.

Data collection

Fifteen potential participants were emailed the Participant Information Statement and invited to take part in the study. Thirteen completed interviews and two policy makers were uncontactable after initially accepting the invitation. Interviews were stopped after the involvement of thirteen participants due to theoretical saturation[30] of key concepts with little new information also being generated within existing key concepts. SH conducted all interviews between November 2020 and March 2021. SH has a PhD in health sciences and is an experienced public health policy researcher. Each interview took 30–60 minutes. Interviews were conducted using the Zoom web video-conferencing platform, and audio-recorded and then transcribed verbatim by an external professional company.

The interviews explored stakeholder perspectives and experiences relating to the objectives outlined above. Interviews were semi-structured using an interview guide (see Supplementary Information) corresponding to the research objectives and tailored to stakeholder type. Interview guides were developed with input from research staff and piloted with two CHS staff. The first section of the interview asked participants about barriers and facilitators for CHS in Victoria to implement an integrated hub to support children and families experiencing adversity. The second section presented the proposed draft Child and Family Hub model, as outlined in Figures 1 and 2, and asked participants to reflect on whether this model would be feasible within the current context of the Victorian community health sector. The third section asked participants to discuss what would be required from the Victorian Government to scale and sustain a hub model across Victoria.

Data analysis

Interview transcripts were imported into NVivo Release 1.4.1 for analysis.[31] SH and TH employed inductive and deductive framework analysis to analyse the qualitative data arising from the interviews.[32] Framework analysis is suitable for this applied study because the technique is not aligned with

any specific epistemological stance and places the research questions at the forefront of the analysis.[32] Both researchers have a background in public health, one being an experienced qualitative researcher. The first author developed a draft coding frame with deductive themes based on the research questions (e.g. barriers to implementing a hub model of care). The inductive content analysis involved close coding to identify content items emerging from the data, and then cross-referencing between all transcripts to develop common content categories, i.e. provisional inferences drawn from statements and observations. SH and TH independently coded two transcripts and then met to review and discuss the emergent codes to reach a consensus on the coding framework. They subsequently recoded two transcripts and met again to review and discuss codes and reach a consensus. The first author then applied the revised coding framework to the thirteen transcripts.

Ethics

Before each interview commenced, participants provided verbal informed consent to take part in the interview. Ethical approval was granted by The Royal Children's Hospital Human Ethics Research Committee (HREC #62129).

Results

Study participants

Approximately half of the participants were from CHS (54%), of which the majority (71%) were the CEO within that organisation, while two (29%) were senior managers. One CEO from a rural CHS was interviewed.

The roles of government PMs are outlined in Table 1.

The results section is structured around the three research objectives. Key themes that emerged from each research question

Table 1. Participants involved in interviews.

	n	% of total interview participants
Community Health Services	7	54
Rural	1	8
Metro	6	46
Government policy makers	6	46
Department of Health	3	23
Department of Families, Fairness and Housing	2	15
Department of Education	1	8

Figure 1. Proposed Child and Family Hub model-core components.

Aim of Child and Family Hub: To create a sustainable service approach, co-designed with end-users, to improve children's mental health by early detection and response to family adversity. The core components of the Child and Family Hub model of care are outlined in Figure 1 and described below.

Family friendly entry into the Hub: a 'no wrong door' approach in which caregivers are safely engaged in a conversation about adversity and provided with any necessary support and/or referrals regardless of how they enter the Hub.

Wellbeing coordination: a Wellbeing Coordinator will support caregivers to identify the holistic needs of their child and/or family and assist them to navigate relevant services and supports in the community, social and health sectors.

Partnerships with families and communities: intentional creation and strengthening of connections between the Hub and community groups and individuals.

Multidisciplinary case discussions: monthly professional development with intersectoral Hub practitioners to embed training learnings into practice and facilitate between-practitioner referrals (i.e., 'warm referrals').

Workforce development: workforce capacity building and training of Hub practitioners to better identify and respond to adversity i.e., how to engage families in a safe and respectful conversation to identify adversities and connect families to relevant support.

Mapped referral pathways into and out of the Hub: systematic mapping of available health, community and social sector supports and services in the local area, linked to training of Hub practitioners to use this information with families.

Figure 2. Child and Family Hub workforce.

Inside the Hub are the practitioners who will be co-located on site. Additional supports and services are shown on the periphery of the Hub with two-way arrows indicating referral into and out of the Hub.

are presented below. Participant quotes are labelled as: community health service stakeholder (CHS) and government policy decision maker (PM).

Research objective 1: What are the facilitators and barriers for implementing a hub in Victorian CHS to support children and families experiencing adversity

Five key themes emerged from these discussions relating to facilitators: the policy remit of CHS; CHS focus on the broader determinants of health; community engagement and understanding of local needs; relationships with other services and organisations; and values of CHS. Three themes emerged relating to barriers: differing values of local organisations; funding; and workforce challenges.

CHS and policy maker participants described several ways in which CHS were an appropriate and well-positioned platform for supporting children and families experiencing adversity as well as key challenges for work in this area.

Facilitators

- The policy remit of community health services:

PMs explained that government guidelines and funding requirements specified the remit of CHS to include supporting the health and wellbeing of families with complex needs, such as adversity, across health and social care domains. As one policy maker from the health sector explained:

> *Community health services in Victoria are fairly unique. They are funded to deliver a broad range of programmes, both health and social care. So, I think that is where the opportunity really lies with community health.* (PM2 health)

Another policy maker highlighted the health department's focus on equity as a key enabler for hubs.

> *And as always, we have a strong focus on equity. So, really thinking about families that are most vulnerable and disadvantaged with the poorest outcomes.* (PM1 health)

- Community health service focus on the broader determinants of health:

The perspective of interviewees was that focussing on upstream social determinants of health, such as those related to family adversity, was in the remit of CHS, as expressed below:

> *So, often what we see with community health is that someone might turn up because they've got an alcohol and drug issue, but then in the course of getting treatment and care for that we'll identify that there's also a housing situation. They're very focused on the social determinants of health as well and can really try and start to address all of those different needs, which is really important in terms of health and wellbeing.* (PM2 health)

This view was echoed by CHS, who felt it imperative to consider and intervene across the social, economic and environmental influences on health to make a difference in the lives of families. The inclusion of a range of services within community health, including financial counsellors, psychologists, paediatricians, GPs, and other allied health professionals, as outlined in the proposed hub, was identified by interviewees as an opportunity to provide this broader upstream perspective on health and care.

> *…as a community health service in Victoria, our primary role is we sit at the primary health part of the continuum and broadly, very much the foundation of community health was that it was based upon those United Nations, Alma Ata universal declarations around that health and wellbeing are intimately related and that therefore, in order to deal with health and wellbeing, one needs to deal with a range of social economic, political factors and they influence people's lives.* (CHS2)

- Community engagement and understanding local needs:

Many CHS spoke about the importance of their community engagement work to connect and build trust with diverse community groups and how this enhanced their ability to quickly respond to complex issues as they arose for families. As an example of their existing engagement, CHS spoke about their ability to quickly expand COVID-19 testing to 'hard to reach' populations due to their existing trust and relationships with these populations. These relationships also allow CHS to better understand the emerging needs of their local community, which provided an opportunity for them to identify issues and respond early.

> *So particularly in terms of delivering these hubs successfully in communities that are experiencing disadvantage and are culturally and linguistically diverse, that's where community health really provides a definite advantage because as evidenced through COVID-19 in 2020, community health was able to quickly scale up and reach out into vulnerable communities to grow testing engagement […]. It's that building of trust or relationships and in a cultural framework that will engage that community.* (CHS5)

The view that CHS are well-engaged with local communities, which bodes well for responding to complex needs, such as family adversity, was echoed by PMs.

> *I think that community health understanding of their local community needs, whether it be from a data perspective, but also engagement, emerging needs, to see things that are changing, local networks and referral pathways, I think would be a strong enabler.* (PM1 health)

One CHS CEO described a novel method for engaging families experiencing adversity to promote a feeling of safety and a soft entry to the service system:

> *The playgroup model has worked for us because we don't have a great deal of funding in this space, so the playgroup space has been a positive, engaging, play-based space, really inclusive, really incredibly accepting and space where families can come, and often it's the first referral point to a vulnerable family is you need to come to the playgroup. Because essentially the antenna goes up to the [health services] worker and says, "Geeze, there's a lot going on in this family and I don't quite know where to start. It would be really great if this family connected with a place like a playgroup."* (CHS 6)

- Relationships and partnerships developed with other services and organisations:

A common opportunity for responding to family adversity identified by CHS was the existing relationships and partnerships they had developed within and across organisations to provide comprehensive care to their populations. In addition, CHS develop partnerships with external organisations that provide services not directly available at CHS that would complement CHS' responses to families experiencing adversity.

> *We know it looks like a bowl of spaghetti, but actually it's a patchwork quilt where we dovetail with one another's services very effectively. We work together collaboratively.* (CHS2)

The above comment, echoed by other CHS, recognises the busy environment within the community health and social care systems, with many different funded organisations operating with differing objectives and funding outcomes. Several participants spoke about the role that CHS could play in coordinating these services to create a more streamlined, family-focused

approach to supporting family adversity in the community. As one CHS explained, CHS provided an important platform to identify and respond to family adversity as there was a readiness and competency that already existed:

> *In terms of the skill set that we've got […] we've got the relationships in the community, and to be able to work collectively together enhances the service experience and the impact that it has on the community.* (CHS5)

Alternatively, participants recognised the number of services operating at a local level responding to a variety of adversities could make it complex to navigate and this could impact service fragmentation. One health policy maker explained:

> *I do think about the broader system integration when we're thinking about the many, many different service providers across family services, Orange Door [family violence services], community health, maternal child health, enhanced maternal and child health. […] that sort of the complexity and possibly the fragmentation of a system can be a barrier, not only for community health, but for us [policy makers] generally.* (PM1 health)

One policy maker made the point that Aboriginal Controlled Health Organisations (ACCHOs) provided a range of services similar to CHS and, therefore, were an important organisation that CHS could be partnering with to increase engagement and support to Aboriginal community members to address issues of family adversity while ensuring culturally safe and self-determined care.

- Values of community health services:

The values of CHS were a strong theme expressed by participants, in responding to child mental health and family adversity, in particular the value of providing holistic and family-centred care. Many CHS felt that these were important principles to engage and best support children and their families:

> *So that's the beauty I think of what [our CHS] is providing at the moment is a whole holistic model of care where there's no wrong door and we'll refer you depending on what your individual needs or what your individual family needs are at that point in time. And we follow up with you as well. So that's part of our new model.* (CHS4)

Another important value expressed by CHS was providing a strengths-based approach, i.e. focusing on the strengths and resources of consumers.[33] This was seen as particularly important to reduce stigma and judgement of families who may be experiencing chaotic lives and assist in engaging positive relationships. One CHS stakeholder working in a regional area described how a strengths-based approach contrasted with engaging families around their experiences of adversity:

> *… what we found, particularly with really vulnerable groups, […..] is that engaging those families around what would be perceived deficits in their parenting or their family situation or their income is really difficult to be establishing really strong trusted relationships.* (CHS6)

Differences in values across services presented a key challenge for CHS to support family adversity. As one social service policy maker explained:

> *… acknowledging that there's a whole bunch of people working in family services, family violence services, ACCHOs, who have all different levels of skills, expertise and qualifications, and how do we get them all on the same page in terms of the way they engage with families respectfully in a child-centred way cognisant of risk and how do we have a shared approach. (PM3 social services)*

Barriers

- Funding models:

Funding was raised as a key challenge to responding to family adversity, with many sub-themes emerging, such as too many sources of funding, a funding model focused on activity-based care and inflexibility with current funding models.

CHS and policy makers both expressed frustration with differing 'buckets' of funding and trying to bring these together for coordinated and cohesive support for clients:

> *… and that's one of the challenges that we're really looking at, is how we overcome those silos in the funding, and maximise the supports that are available to clients, particularly these priority clients.* (CHS3)

> *I mean it's problematic in that they have a lot of separate funding streams and they're not blended in any way and that kind of limits their flexibility and it's a kind of tends to be a fairly sort of high compliance burden associated with that as well because you have different reporting systems and everything that sits under each funding stream. And […] it does limit their capacity sometimes to be able to do more creative, innovative type stuff because of the way that our funding is set up.* (PM2 health)

Other CHS discussed difficulties with the funding model focused on the level of activity provided e.g. hours of service for an allied health professional, rather than a funding model based on outcomes of care provided and whether the client was satisfied.

> *So, at the moment the model is counting a series of widgets [hours of service], which doesn't help anybody. […]. There's no feedback from the client point of view, did they get what they need? Was there value in what they received in terms of the service? […] And while they continue to track that, there's no real feedback mechanism on how people are in terms of their wellbeing.* (CHS4)

The current activity-based funding model was seen to be particularly problematic for rural CHS:

> *Don't fund us for activity based, we don't deliver…. It has to be reflective that rural care costs more, it has to have a policy direction of equitable outcomes for all people who live in Victoria or Australia.* (CHS1)

In addition, CHS discussed how the current funding model did not allow flexibility to employ localised responses or care from paediatricians or social prescribing professionals.

> *Essentially, the business model doesn't necessarily work for a paediatrician in community health.* (CHS6)

> *if you could open up some of the parameters [of funding], we can provide more personalised care because we can get more wellbeing coordinators [social prescribing professionals] on board. That's been the issue is how do we fund wellbeing coordinators when they are not always seen as... Their work is not seen as a clinician.* (CHS4)

There were also CHS and policy makers who stated that more funding was required to support the work of CHS, as shown in the comment below:

> *That is a constant challenge, that services are already at capacity, so how do they do more, and they are already prioritising within their guidelines. So really there is additional funding required and a re-prioritisation in a location to enable access.* (CHS3)

CHS stakeholders also identified the importance of funding being sustained as a long-term investment for children's health and wellbeing, allowing CHS to employ staff on longer contracts and support workforce development and progression. This point is captured below:

> *So, I think it's really just the understanding that if this (workforce development) is a critical enabler for this work, it needs to be properly set up and properly funded and recognised, and not just assumed that somebody can do it off the side of their desks.* (CHS7)

- Workforce challenges:

Workforce was a theme identified by both stakeholder groups and likely to create challenges for CHS supporting children and their families experiencing adversity. There was a recognition that separate government departments – health and social services – have expansive workforces that are tasked with identification and response to family adversity. This provides a challenge to creating a shared approach, understanding and language across both sectors of the workforce. As an example, one policy maker described how the importance of using evidence-based practice differed between workforces:

> *… how do we make sure that regardless of where people are in the system and the particular service provider at any point in time that that approach to service delivery and use of evidence-base to service delivery is really consistent and thought about broadly rather than in a solo sort of way. It's really important.* (PM1 health)

One rural CHS identified their most pressing workforce issues were recruitment and retainment of suitable staff.

> *… all providers are finding it difficult to get that specialised expertise recruited and retained within the area. So, we've got some money for a psychologist and we've advertised three times and really haven't even interviewed because no one's applied.* (CHS1)

The other key workforce challenge discussed by stakeholders was the recruitment of community paediatricians needed to provide specialist care and support the professional development of other staff. Community paediatricians were difficult to recruit due to low numbers available to work in the community sector or due to a lack of funding for sustained remuneration. The below comment from a CHS expresses the unaffordability of employing a paediatrician with the current funding model.

> *The reason that we have a paediatrician is it comes from our data and demand of some really vulnerable families with adversity who needed to get to paediatricians and essentially, we just needed to provide it on our site… The concept was co-payment, but of course that's ridiculous. That just became a barrier. If you book someone in, even if you said a $30 co-payment, it was the reason that people didn't come. We scrapped that really quickly... Essentially, the business model doesn't necessarily work for a paediatrician in community health. The department [of health] have supported us with that stuff, but it's fragile.* (CHS6)

Research objective 2: Is it feasible for the proposed Child and Family Hub model to be implemented in Victorian CHS?

CHS and policy maker participants were presented with the proposed Child and Family Hub model diagram (Figure 1) and asked to consider whether this could be feasibly implemented within CHS across Victoria. Every CHS agreed that this model was appropriately designed and feasible. One CHS stakeholder described how this model could provide a framework for action:

> *What you described is probably what we are attempting and have been attempting to do for 40 years, without probably some of the structure that you've talked to. So, I think having the piece of work that you're leading will enable there to be a really clear blueprint for community health centres across the state.* (CHS6)

Although there was broad support for the hub model, there was also recognition that issues affecting the model's feasibility included local co-design, local leadership, co-location and virtual delivery of some components of the model, not only for rural areas but for all CHS.

Co-design

Stakeholders recognised the value of local co-design as important, as seen from policy and CHS stakeholders below:

> *I think it's really got to be built from the ground up with the people, that idea of how can the sum be greater than the parts?* (PM4 education)

> *Listening to the person who you're trying to help… co-design with them and help them develop what's going to be supportive. It will continue to fail if they're not going to engage with you.* (CHS1)

Local leadership

There was discussion from stakeholders on the difficulties of bringing together a broad range of local services, as outlined by one stakeholder below, and the importance of strong local leadership and organisational structures to support and coordinate a hub model.

> *You've talked about a lot of sectors there, bringing together legal, financial, paediatricians, mental health, maternal health, nurses, etc., they all come from different funding backgrounds, different organisational structures, different philosophies, and the challenge is bringing them together in a coordinated manner. And that's the difficulty…* (CHS7)

Co-location

Co-location was a topic that several stakeholders discussed. There was a recognition of the value of co-location in bringing services together; however, also a recognition that the availability of physical infrastructure could impede this:

> *I think space is sometimes a challenge in community health. We work our assets very hard, and a lot of our infrastructure is ageing. Why we co-locate with local government in some of their hubs is there are other providers or facility management in there that add some space dedicated to us.* (CHS3)

> *So, to house all these people, you'd need a big hub.* (CHS7)

Virtual delivery of hub components

Related to co-location, stakeholders also discussed the potential and value of being able to provide virtual delivery of some components of the model in both rural and metropolitan areas.

> *I think it's limited if we think about it being a physical hub. It's about how a hub can be a service network that doesn't necessarily require physical co-location.* (PM5 social services)

> *But some of this can be delivered as a virtual model as well. So, it doesn't mean that all models need to be on one site at one time. It's about that commitment to communication and collaboration, having shared vision and values. I think being smart about how you can set that up, and particularly now that we're much better at telehealth, other modalities.* (CHS3)

> *I guess that when you are thinking about [rural areas], you're always thinking about virtual care, aren't you, as part of the model?* (PM1 health)

CHS and PMs also highlighted the current policy window for implementing a hub model for family adversity and mental health; the sense that the timing was right for a model such as this:

> *What COVID has given apart from many challenges is also a large opportunity to change. We've had to change lots of things very quickly and now's a good time to bring something in that may be new or a different way of thinking, because I think you'll find a lot of organisations, particularly in community health are open to that because they're looking for, okay, we've got to do something different here now. So, it's been the burning*

platform for change... And I think there's a window of opportunity, and it's now if we're going to try something different or work differently together. (CHS4)

Research objective 3: What is required to scale and sustain a hub across Victorian Community Health Services?

This research question explored the view of both CHS and PMs on what would be required to support and promote the scaling and sustainment of the Child and Family Hub model across Victorian CHS. Four key themes emerged: clear leadership from government; a review of the current funding models and amounts; consistent information management and workforce capabilities across sectors; and political will of the Victorian government to further drive action on the issue.

Clear leadership from government

Both stakeholder groups expressed the importance of clear leadership from government in the form of setting a consistent framework or approach to a hub model and support for implementation. In addition, stakeholder groups reported the importance of consistent policy direction to improve health and wellbeing outcomes for families experiencing adversity, guiding the implementation of this policy, and providing consistent outcome measures. There was also recognition that due to the variability across the 82 CHS in Victoria, there would need to be flexibility within policy implementation for CHS to develop their own localised responses.

My expectation would be that the department [health] centrally would have a clear role in setting the expectations, with these are the kind of core expectations and the things that are less flexible in local implementation. (PM1 health)

Several policy makers discussed their view that the policy direction would be developed centrally within the health department and the regional health offices' role would be to support operationalising this policy by providing more day-to-day support and guidance to CHS.

A strong theme within this area was the role for and importance of policy direction and leadership from Victoria's Department of Health (DH) and The Department of Families, Fairness and Housing (DFFH) to foster a joined-up-government response to families experiencing adversity. The below comment is from a PM within the DFFH expressing their opinion on the need for a coordinated approach across government departments.

… we seem to fail again and again and again about making the bridge [between...] health and human services divide, and both sides will say, we need to do more about that, we need to have much more joined up ways of working together that coordinate and really wrap around families without making them navigate a difficult service system at the best of times. And that there's a lot that each sector and focus needs to learn off each other. (PM5 social services)

There was recognition that both departments were focused on better outcomes for families experiencing adversity and this work had continued in parallel to this point. However, 'bridging the gap' between departments would allow DFFH to focus on lighter touch earlier intervention, rather than waiting until families are at crisis point before entering the social service system. One strategy identified to 'bridge the gap' between the work of departments was to co-locate local social care staff funded by DFFH within a community health setting.

There was also recognition from a PM within the Department of Education and Training (DET) that greater support and guidance were required for this department related to the health outcomes of children in early education and school settings to support prevention.

The danger of having a couple of hundred nurses in our department, is that we're not a health department and you're not going to get the high-level guidance around health… we have one position that supports that direction [health outcomes for children] but that's so risky, isn't it? It's fragile … (PM4 education)

Review of current funding models and amounts

When considering scaling and sustaining a hub model across Victorian CHS, stakeholders strongly re-iterated some of the previously mentioned funding issues, including: not enough funding being available; too many different sources of funding, each with separate reporting requirements; limited funding flexibility to support integration and coordination of care; short term funding, and funding models based on the activity provided rather than outcomes for community members.

Funding flexibility and sustainability are identified within the Victorian Government's CHS Reform Plan currently underway. One policy maker describes below the CHS Reform Plan's work on this issue:

One of the things we're doing [in the Reform Plan] is looking at the funding model for community health […] that work is looking at what are the options to provide for more flexible funding arrangements for community health that would enable them, I guess, to better meet the needs of vulnerable and complex clients. (PM2 health)

Consistent client management systems and workforce capabilities

Other themes that emerged from interviews were addressing barriers, such as different client management systems between local service providers and a considerable investment required for workforce development and creating consistent capabilities across sectors to support efficient and effective scale-up of a hub model. One policy maker expressed these concerns below.

How do we create common and shared competencies from a workforce perspective because the needs of families are dynamic and changing and they'll move between different parts of the system? … how do we make sure that regardless of where people are in the system and the particular service provider at any point in time that the approach to service delivery and use of evidence-based to service delivery is really consistent and thought about broadly rather than in a solo sort of way. (PM1 health)

Political will of the Victorian government and policy timing

Having an integrated model of care that is supported by the sector was identified as important, however, CHS stakeholders underscored the importance of political will for making the model a reality. One CHS stakeholder expressed the need for government drive below:

We've been involved in the delivery of the COVID testing this year ... I know it's once in a 100 year pandemic, but it's amazing the type of money that can be put into something when the government have a genuine interest in shaping something and changing something... It's probably costing $2000 a day to be directing traffic [… for COVID-19 testing], whereas I've got a maternal child health nurse who works three days a week, who's juggling God knows how many highly vulnerable, at times suicidal mums, who are in and out of psych units, family violence situations. So, from my point of view, if we were thinking about this as a risk point of

view, is that I'd need to be putting more money into that space. But that's just not the way the money flows to us. (CHS6)

Many CHS spoke about the positive relationships that they experienced with state government departments and felt that PMs were supportive of the issue and would be open and accommodating to working in new ways. However, it was recognised that there are many demands that government faced, including the demand to provide treatment and services for those with established health concerns drawing attention and resources away from prevention.

I think the biggest challenge for government is that getting pre-eminence in a system that is really poor at prevention, often because of the demands around the current. I would have thought that would be the biggest issue. (PM4 education)

PMs from DET and DFFH expressed the importance of bringing evidence together to make a case for investment, including evidence demonstrating the impact of adversity on mental health and other outcomes, such as educational outcomes.

Finally, CHS and PM stakeholders both expressed that the timing was right to garner political will, due to several timely opportunities. These opportunities included the Victorian Deputy Premier holding ministerial obligations for both education and mental health and, therefore, the concept of a Child and Family Hub being relevant to both of his portfolios and the upcoming Victorian state election (2022).

Discussion

The concept of an integrated hub which brings together health, mental health and social care within a primary care setting has generated increased interest and enthusiasm in recent decades given the potential for improvements in service access[33] and patient experience,[34] while reducing treatment costs for conditions that have been averted or better managed.[35] This is the first study to explore the feasibility of an integrated health and social care hub based in CHS to better identify and respond to the needs of families experiencing adversity as an upstream preventable determinant of mental health problems. Overall, there is sufficient evidence to show CHS are well placed to respond to family adversity, and the proposed integrated Child and Family Hub model of care is feasible to implement in relevant CHS across Victoria.

To support local implementation co-design, local leadership, co-location, and virtual delivery of some hub components will be required. To scale and sustain the proposed model clear government leadership and political will are required, as well as system-level supports such as appropriate funding models and amounts, adequate workforce mixes and capabilities and consistent client management systems.

The novel component of this paper is that it captures the views of policy and implementation stakeholders relating to integrated health and social care within an Australian context. These views are important as these stakeholders are responsible for agenda setting and translating policy and practice. These views reinforce international evidence relating to barriers and facilitators for an integrated health and social model of care and provide solutions relevant to an Australian context.

This study identified many facilitators and existing capacities of CHS, suggestive of a readiness and capability to implement integrated hub models of care for family adversity within this platform. These facilitators included the existing remit of CHS to focus on prevention, early intervention, and the broader determinants of health. CHS' existing relationships with local communities, developed through their work to engage the community and understand their needs to inform service provision, were also recognised as facilitators of a hub within this platform. However, broader system-level barriers may impede this work. Barriers identified for implementing and scaling hubs within a CHS platform aligned with international evidence on impediments to integrated care, including inadequate funding[23-25] and inappropriate and rigid funding models,[23-25] such as activity-based funding. CHS are funded by the Victorian Department of Health, through the Community Health Program (CHP), which provides activity-based funding, with activity measured by service hours.[36] Although the unit cost for the CHP increased between 1.5% and 2.5% yearly, the base unit cost has not been reviewed since 2007.[37] This information, as well as feedback from stakeholders, indicates the unit price is unlikely to accurately reflect the current cost of care in CHS.

To support the scale and sustainability of the proposed Child and Family Hub model of care a review of current funding amounts, alternate funding models, or mix of funding models for CHS should be considered. A report by The George Institute called for a mix of activity-based and capitation-based payments, which would provide incentives that align with delivering long-term, patient-centred, integrated healthcare including telehealth, non-face-to-face interactions, involvement of non-medical team members and many preventative activities.[38] However, there is limited research identifying the cost and health outcomes of alternate funding models and mix of models in primary care to promote integrated care and further research will be required to inform the ideal funding model and mix required to achieve equitable and effective outcomes for CHS clients.

Identifying the appropriate workforce mix and capabilities within the hub and the ability to employ and support this workforce will be imperative to scale and sustain the proposed hub model. Two important components of this workforce mix are community general practitioners (GPs) and paediatricians, currently not funded through the CHP. Community GPs will play a vital role within Child and Family Hubs; however, are primarily funded by Medicare on a fee-for-service basis,[39] which limits their ability to work with other professionals in a coordinated way to support clients with complex needs.[40] The lack of access and funding for community paediatricians was also identified by CHS stakeholders as a barrier to supporting families with adversity. Community paediatricians are likely to be an important component of the workforce mix within a hub as they provide a broad understanding of the health and developmental context for a child's medical, developmental, and behavioural presentations, and can act as a clinical lead for a hub. An evidence-informed, needs-based workforce model for hubs would be required, similar to the process outlined by Segal et al.,[41] which ideally considered the appropriate workforce mix and capabilities not only across health, but also across mental health and social service staff.

The final system-level barrier that will impact on the scale and sustainment of hubs is the numerous incompatible client management systems, an issue consistent with the integrated care evidence base.[42] Consistent and shared client management systems enable data sharing between practitioners, avoiding unnecessary duplication of care and families needing to re-tell their stories. Developing and implementing a shared system is likely to be resource-intensive

across the many services provided within CHS; however, it is possible as shown by the implementation of the Epic client management system[43] at the Melbourne Royal Children's Hospital. The Epic roll-out saw more than 1,600 different paper forms replaced, along with multiple digital systems that were poorly integrated and required multiple log-ons. The outcomes of implementing this system were a reduction in lab tests (6.3%) and imaging being undertaken (12.5%) and a reduction in prescribing and administration errors (13.4%).[44]

Whilst the proposed Child and Family Hub model was perceived by CHS and PMs as feasible, further work will be required to support the scale and sustainment of the model. The results of this study will inform a knowledge translation strategy to support the scale and sustainment of the hub model and is likely to include activities such as reviewing evidence of funding models on health outcomes, developing a needs-based, evidence-informed workforce model for hubs and advocating for compatible client management systems. These activities will be supported by an ongoing stakeholder engagement strategy to maintain and further develop government relations, further promote political will and advocate for the importance of early identification and response to the needs of families experiencing adversity as an upstream preventable determinant of mental health problems.

Our study has some limitations. This sample of participants from CHS may not be representative of all CHS across Victoria and it is possible selection bias occurred through the snowball sampling of participants. Although this is a limitation to scaling a hub model to all 82 CHS across Victoria, the results indicate a good level of support from five CHS, which is an initial point from which to commence further discussion on the implementation of the model. Similarly, the sample of government PMs may not be representative of all PMs from these departments. However, comments made by PMs within health and social service departments align with the current policy agenda of government through CHS Reform Plan[45] and Roadmap to Reform[46] policies. A final consideration is although co-design incorporated local service provider and family involvement in the development of the hub model in Wyndham Vale, ongoing involvement of families and services providers will need to be considered in the scale and sustainment of a hub across other CHS in Victoria.

Implications for public health

The child mental health burden is significant and likely worsening due to COVID-19 restrictions. More needs to be done to prevent and intervene early, rather than waiting until families are in crisis. By focusing on upstream preventable determinants, such as family adversity, a substantial proportion of the population burden of mental illness could be averted.

CHS provide a readily available platform for proportionate universalism, whereby health actions are universal, but with a scale and intensity that is proportionate to the level of disadvantage,[47] improving the equitable delivery of prevention and early intervention. With their existing community and service relationships, a Child and Family Hub delivered through this platform could provide a locally responsive, effective, and efficient response to the health and wellbeing needs of families experiencing adversity across a range of health, social, and economic issues. Utilising the CHS platform for early identification and response to family adversity will increase the reach of this approach across the community, driving population health responses. Moreover, both CHS and government departments see the value and potential of an integrated hub model based within the CHS platform.

These findings are timely, with policy recommendations arising from the Royal Commission into Victoria's Mental Health System and the National Mental Health Strategy for Children and Adolescents recommending hubs to support children's mental health. In addition, these findings will help to inform the CHS Reform Plan being undertaken by the Department of Health in Victoria by providing rich evidence to meet their strategic goals and priorities. Several states are developing hub models of care to improve child and family health and wellbeing, thus the findings from this research can inform broader national work.

Subsequent implementation and outcome research will be required to ascertain how a hub can be effectively implemented within Victorian CHS and whether an integrated hub model can improve identification and response to family adversity. Through the Centre of Research Excellence in Childhood Adversity and Mental Health we will now test and evaluate the proposed Child and Family Hub model of integrated care in Wyndham Vale, Victoria and Marrickville, NSW. We will provide evidence on impacts and costs of a hub model of care that aims to better identify and respond to family adversity and child and parent mental health. If effective, this model could substantially improve how Australia meets the mental health needs of some of the most vulnerable children and families. The results of this study will inform how to best scale and sustain the proposed hub model of care more broadly and ideally generate broader population impacts.

Ethics approval

Ethical approval was granted by The Royal Children's Hospital Human Ethics Research Committee (HREC #62129). Participants provided written informed consent to take part in the audio-recorded interviews.

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Supporting Information

Additional supporting information may be found in the online version of this article:

Supplementary File 1: Interview Guide: Understanding the policy and service environment to scale up a Child and Family Hub model of care.