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## Child health nurses' perceptions of the Family Communitybased Assistance Resourcing and Education program in contemporary practice: a qualitative study

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\***Correspondence to:** Jeanine Young School of Health, University of the Sunshine Coast, Petrie, Qld 4502, Australia Email: jyoung4@usc.edu.au ABSTRACT

Background. The Family Community-based Assistance Resourcing and Education Program (FCP) is a nurse home visiting program that was introduced in Queensland two decades ago to redress health inequalities for infants from families experiencing specific social stressors. Locally adapted versions of this home visiting program are still in use, but have not been evaluated. This study examined child health nurse perceptions of the adapted FCP in one regional Queensland health service. Methods. A qualitative descriptive exploratory study using two focus groups (conducted May 2019) with Child Health Nurses who delivered the FCP was conducted. Transcripts of digital recordings were analysed using Braun and Clarke's (2006) six-step framework for guided thematic analysis. Results. A total of 16 Child Health Nurses participated in the study, with a mean of 10 years' experience with the program. Data analysis generated 12 themes organised under three domains: 'Establishing the relationship with families', 'What works in practice' and 'We could do it better'. Participants cited flexibility, expert input and in-home delivery as key program benefits. However, narrow eligibility criteria, poor screening for perinatal anxiety and resourcing constraints were identified as limitations. Conclusions. This study is the first to measure Child Health Nurses' perceptions of an adapted FCP. It sheds light on their 'practice wisdom', including the program's ability to meet the needs of families with social vulnerabilities. The study supports prior calls for home visiting programs to be evaluated against clearly stated program intentions. Participant insights have been shared to inform practice and program implementation both locally and as part of Queensland's First 2000 Days health service delivery reform agenda.

**Keywords:** child health services, community health: nursing, family health, family support, maternal-child health centres, organisation: models, social determinants, sustained home visiting.

### Introduction

There is broad consensus within the research literature that children's early years are critical for ensuring positive long-term outcomes, and that investment in supporting families during this time can positively influence learning, school success, employment, social capacity and health (Heckman and Mosso 2014; Moore *et al.* 2015, 2017). The Australian Research Alliance for Children and Youth has reported a widening gap between families that function well and families with social vulnerabilities (Moore *et al.* 2012). Sustained home visiting programs are used across Australia to support families experiencing disadvantage or vulnerability. They aim to promote health equity by mitigating risk factors, strengthening protective factors and building resilience via intensive and sustained services, delivered in a family's home environment (Australian Health Ministers' Advisory Council 2011; Bonakdar Tehrani *et al.* 2022).

Governments in Australia and internationally continue to invest in home visiting programs. However, these have shown mixed results in the limited randomised control trials conducted, with the Maternal Early Childhood Sustained Home-visiting program the most studied Australian program (Goldfeld *et al.* 2019). The Australian Research Alliance

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for Children and Youth review concluded that evidence on the effective components of home visiting programs was inconsistent, unsubstantiated or questionable, with the authors recommending these programs be evaluated on their ability to achieve their intentions or outcomes (Moore *et al.* 2012). For example, Adams *et al.* (2019) highlighted that inconsistent service delivery and data collection limited evaluations of program effectiveness in the Victorian Enhanced Maternal and Child Health service. These findings were confirmed by a recent scoping review of contemporary Australian home visiting programs by Latham *et al.* (2020), which highlighted the continuing paucity of evidence for these programs or for a consistent approach to improving outcomes for families with vulnerabilities.

In Queensland, Australia, the Family Community-based Assistance Resourcing and Education Program (FCP) was trialled at select hospitals and health services between 2000 and 2004. The FCP was designed as a structured, 12-month nurse home visiting program for families experiencing mental health, domestic and family violence, and/or financial stress (Queensland Health 2018; Queensland Health 2000). By developing rapport between Child Health Nurses (CHNs) and families, the FCP aimed to improve maternal and infant health, parent-infant attachment and self-efficacy in parenting; support infant cognitive and physical development; decrease maternal depression (State-wide Maternity and Neonatal Clinical Network 2014), anxiety and distress; and reduce the risk of infant abuse and neglect, vaccine-preventable morbidity and mortality, and sudden infant death syndrome (Queensland Health 2000). The FCP is still in use, in adapted formats, across many of these sites (as of January 2024). A recent document analysis by Latham et al. (2023) compared the original FCP with adapted FCP home visiting programs. The authors identified generally low levels of alignment with the key program elements of the original FCP (particularly eligibility criteria, evaluation measures, program duration and target group) and little evidence of data collection to support evaluation of the programs against stated objectives. Only one hospital and health service identified high alignment, although program variations were still evident (Latham et al. 2023).

Although the original FCP demonstrated some positive short-term outcomes (Armstrong *et al.* 1999), few studies since its implementation have considered the program's efficacy in improving maternal and child outcomes (see Flemington *et al.* 2015; Flemington and Fraser 2016). To date, there have been no published evaluations of adapted forms of the FCP. Where no best evidence exists, the National Framework for Universal Child and Family Health services suggests that child health services 'harness practice wisdom' (Australian Health Ministers' Advisory Council 2011, p. 2), an approach used in several studies of nurse home visiting programs previously (e.g. Bonakdar Tehrani *et al.* 2022). This study aimed to explore the 'practice wisdom' of CHNs delivering the adapted FCP in one Queensland hospital and health service to contribute to the evidence base for home visiting programs in Australia.

A qualitative case study was conducted across two phases. The first phase, a document analysis comparing adapted programs in use across the state, has been reported elsewhere (see Latham *et al.* 2023). The results of this comparison have informed the current study – an exploratory descriptive qualitative study of CHN perceptions of how the adapted FCP is used, its strengths and limitations, intentions and anticipated outcomes, and the implications of the model's use in contemporary practice. The primary research question for this study was: What are child health nurses' perceptions of the intentions, strengths and limitations of the Family Community-based Assistance Resourcing and Education Program provided by this service?

#### **Methods**

The target population consisted of CHNs currently employed by a single regional health service delivering the FCP within south-east Queensland. This service was identified by Latham *et al.* (2023) as having high fidelity with the original FCP program. Two focus groups were conducted to gather meaningful qualitative data about CHN perspectives of the FCP. The study was granted ethical approval from the relevant health service (LNR/2018/QRBW/43040) and university (S191308) ethics committees, and site-specific approval from the health service involved in the study (SSA/2019/QSC/43040).

Written invitations to participate in a short demographic survey and one of two focus groups were distributed to approximately 30 CHNs. The invitation was accompanied by participant information, the demographic survey and a consent form. Eligible participants were registered nurses and/or midwives, employed full-time or part-time as CHNs in the service and conducting home visiting as part of the FCP.

A purposive sample of 16 CHNs completed the demographic survey and participated in one of two focus groups held at the service in May 2019. Table 1 presents the questions used to guide discussion.

Table I. Focus group guiding questions.

I What do you see as the intentions of the FCP?	
2 What key elements do you believe to be the most important aspect the home visiting program that you use to support families with vulnerabilities?	s of
3 What do you see to be the advantages, strengths or benefits of the F	CP?
4 What are the issues or limitations of the FCP?	
5 How does the FCP meet the needs of a family with specific vulnerabilities?	
6 What do you see as the outcomes of the FCP?	
7 What changes would you recommend to the FCP to better meet th needs of a family with vulnerabilities?	e

Focus groups were 60 min in duration and digitally recorded in two ways: audio recording/transcription and Padlet, an electronic application allowing participants to contribute anonymous written submissions via their personal mobile device. Focus groups were an efficient data collection method that allowed perspectives to be shared from a considerable proportion of the target population within the time and resources available. An experienced CHN facilitated the discussion, while an academic researcher transcribed verbal discussions into Padlet. The Padlet application allowed participant notes to be displayed with the scribe's discussion notes on the screen. The site remained active for 48 h after the focus groups to enable further additions by participants. The facilitator confirmed the validity of the scribed notes by clarifying with the participants as the session was conducted. The facilitator used a reflexive diary and field notes to record impressions, feelings and points of interest immediately after both focus groups.

Braun and Clarke's (2006) six-step framework was used to guide inductive thematic analysis of collected data, which was organised into codes and consolidated into themes. The audio recording was listened to repeatedly and transcription notes were reviewed using an iterative process. The first author independently examined all transcription notes and identified initial codes, then emergent themes based upon an initial coding of the transcribed data. The second author also read a sub-sample of transcripts and independently coded them. Multiple codes were identified from the transcribed focus group interviews and Padlet. By research team consensus, similar codes were consolidated into themes where patterns emerged or repetition and/or overlap was identified. Themes were then grouped into three overarching domains.

### **Ethics** approval

Ethical approval was granted from the participating ethics committee (LNR/2018/QRBW/43040). The research was assessed as low risk.

## Results

A total of 16 CHNs participated in the focus groups; eight per focus group. All participants were female and aged between 35 and 64 years (mode age range of 50–54 years). Most CHNs had worked in child health for  $\geq$ 6 years, either fulltime or part-time, and half held a Bachelor or Master's degree. Participants had an average of 11 years' experience working with the FCP (±s.d. 6.8 years). Table 2 provides demographic characteristics of the study participants. Data also illustrate the range of qualifications held (lactation consultant qualification being the most frequent [n = 7]) and training undertaken to support staff working with the FCP. The most frequently reported training was Family Partnership training and updates

#### **Table 2.** Demographic and educational data of participants (n = 16).

	n	%
Sex		
Female	16	10
Male	0	0
Age (years)		
35–39	Ι	6
40-44	I	6
45-49	3	19
50–54	5	3
55–59	4	2
60–64	2	Ľ
Level of education		
Certificate	5	3
Diploma	3	19
Degree	7	4
Master	I	6
Years as a child health nurse (part-time) <sup>A</sup>		
I-5 years	4	3
6-10 years	4	3
II-15 years	2	1
15–20 years	2	13
21–25 years	I	8
Years as a child health nurse (full-time) <sup>B</sup>		
I-5 years	5	5
6–10 years	3	30
II-15 years	I	10
15–20 years	I	10
21–25 years	0	0
Years working with FCP <sup>C,D</sup>		
I-5	5	3
5–10	3	2
11–15	2	ŀ
16–20	4	2
Mean = 11 years ( $\pm$ s.d. 6.8 years); median = 10 years		
Work-related qualifications <sup>E</sup>		
Immunisation endorsement	I	6
Health promotion education	I	6
Certificate IV trainer and assessor	1	6
Lactation consultant	7	4
Rural and remote practice	1	6
UK nurse prescriber	2	Ľ
Family Partnership facilitator	2	Ľ
Triple P facilitator	-	6
Training undertaken relevant to the FCP <sup>F</sup>		J
Domestic violence training	4	2!

(Continued on next page)

#### Table 2. (Continued).

	n	%
Suicide training	I.	6
ALICE women-centred care	2	13
Safe Sleep	4	25
Smoking cessation	I	6
Brief intervention for a healthy lifestyle	1	6
Family Partnership training	14	90
Circle of Security	5	31
FCP training	5	31
Mental health	3	19
Together in Mind program	2	13
Breastfeeding	2	13
Child safety	I	6
Acceptance and commitment therapy	I	6

<sup>A</sup>Missing data: n = 3 missing data.

<sup>B</sup>Missing data: n = 6 missing data.

<sup>C</sup>Missing data: n = 2 missing data.

<sup>D</sup>Family Community-based Assistance Resourcing and Education Program.

<sup>E</sup>More than one response permitted per participant; not all participants contributed data.

<sup>F</sup>More than one response permitted per participant; does not constitute a full list of training options. Some training, such as Family Partnership and Circle of Security training, have mandatory attendance requirements for staff.

(n = 14), FCP training and updates (n = 14), and Circle of Security training (n = 5).

A total of 12 themes were generated from the thematic analysis and organised as three key domains: 'Establishing the relationship with families', 'What works in practice' and 'What we could do better'; presented in Table 3. These domains and respective themes are illustrated using de-identified participant quotes.

# Domain 1: Establishing the relationship with families

Domain 1, relating to the importance of relationship, comprised three themes.

# Supporting parents in reaching their parenting goals

Developing strong therapeutic relationships with families to help identify and achieve family-determined goals was seen by participants as the cornerstone of the FCP, as reflected by these illustrative quotes:

Developing a relationship with the client ... Finding out what their needs are, not necessarily what we are desperate for them to do. It's not our agenda, its theirs ... Offer them options. Table 3. Study findings: domains, themes and sub-themes.

Domains	Themes
Establishing the relationship with families	Supporting parents in reaching their goals
	Building rapport, trust and mutual respect
	Partnering in care
What works in practice	Home visiting has multiple benefits
	Sub-themes
	More equal dynamic
	Improved understanding of family functioning
	Practical solution to addressing inequities in access information, support and resources
	Flexibility in delivery to meet family goals
	Program structure facilitates parent confidence
	Opportunities to reflect on practice
We could do it better	Eligibility criteria can exclude priority families
	Tensions in optimal program structure and duration
	Insufficient resources
	Poor understanding of roles and program intentions
	Lack of measures to monitor program fidelity and outcomes

... to facilitate them to identify how best they can support and reach, identify some goals for themselves through the program that they would decide to you know um, to be the parent that they wish to be.

Participant responses generally indicated the FCP program achieves its intention of providing support for families who may have limited access to health services for a variety of reasons:

I think another intention ... of the program is that it is a family, that it's a home visiting program, that we are going into people's homes as their guests. And that was a way of accessing at-risk families that may not normally access health services.

#### Building rapport, trust and mutual respect

CHNs identified that building rapport and trust, and developing a mutual respect were central elements of developing a therapeutic relationship to find solutions to family issues. Participants reflected:

There is a wonderful rapport you can develop with the client that they trust you and they listen to you, and you help them problem solve, you help them establish some of their goals.

I think too that it's about establishing a trusting relationship ... and to put us into that unique position

of forming an incredible rapport with these families built on trust ... again ... so better outcomes for those families and children ... we can facilitate their care in a, in quite a unique environment of their home ...

Participant responses also suggested that the FCP family– nurse relationship presented a unique opportunity to actively demonstrate respect for individuals and their families, an experience not always common for families experiencing social challenges. This can impact their self-esteem and engagement with health and social support systems.

... some of these clients never have anyone turn up for them, the fact that we turn up, you know 90% of the time when we are supposed to ... even that for someone can change, you know, their perception and how they feel about themselves ... some people don't think that they are worth turning up for, so their perception that we are going to turn up is that we are probably not going to. So even that, that's something that is so minute for us, but for that person would be just humungous I would imagine.

#### Partnering in care

In discussing the intentions of the FCP, participant responses highlighted that the family–nurse relationship was a partnership, working together to achieve goals prioritised by the family:

It's more that partnership model rather than going in and doing a weight and things like that, so it's more that relationship-based rather than you know the expert model.

Some CHNs raised that this family–nurse relationship can provide an opportunity for the family to reflect on their social relationships and how these may impact their interactions with their children:

[Families have more] complexity in their lives don't they so it's even about that relationship complexity. I am kind of the reflection of them [the family] on how they are being in [a] relationship.

CHN participants discussed opportunities for supporting families with vulnerabilities, particularly families at risk of poor maternal–infant attachment. Some CHNs mentioned that these opportunities may reduce involvement with child protection services. A considerable proportion of CHNs identified undertaking training in the Circle of Security attachment model (Hoffman *et al.* 2006) and the Together in Mind program (Queensland Centre for Perinatal and Infant Mental Health 2017). These professional development opportunities support this partnership work with families in supporting their goals that centred on developing secure attachment with their children. ... establishing the secure relationships as well as opportunities for children ... you are strengthening relationships.

... [the intentions of the FCP] supporting vulnerable families ... at risk of a poor attachment relationship between mother and child ... attachment benefits through support and education ... in the home you can see more about the attachment.

In summary, CHNs identified the FCP as a program that supported their ability to foster therapeutic relationships with families based on a partnership model, which aligned with original program intentions. Other beneficial aspects and strengths of the program from the perspectives of CHN program providers will now be explored.

### Domain 2: What works in practice

Four themes relating to benefits of the FCP in practice were generated from participant data and included: 'multiple benefits of the home-visiting model', 'flexibility in delivery', 'program structure facilitates parent confidence' and 'reflecting on practice'. The benefits of home visiting for families included three sub-themes: 'more equal dynamic'; 'improved understanding of family functioning'; and 'a practical solution to addressing inequities in access to information, support and resources.'

#### Home visiting has multiple benefits

Visiting a family in their home environment was regarded by CHNs as having multiple benefits. CHNs recognised that this environment provided for a more equal dynamic in the family–nurse relationship:

In their own home they have a sense of empowerment ... we are a guest in their own home ... you are more likely to gain that good relationship.

... environment that they feel comfortable in that we are not in a clinical environment. Different power base, isn't it?

This environment was viewed by participants as providing a better understanding of the family's functioning, as it facilitated growth in the trusting relationship and greater sharing of information to inform care assessments:

You get their true self in the home ... I find that I have seen somebody in clinic, and in that one clinic appointment you have built that trust in you, and you go to that next visit and it's in the home and they are different. They share a lot more with you ... Because you get to go into their home and they invite you in and they are happy for you to come in, you get to see the true family life, the true person. Home visiting was also valued, as it was perceived to facilitate family awareness of, and access to, information and sources of support, including primary medical care and other referral pathways, for families who may not access clinic-based services, for a variety of reasons:

... that it's a home visiting program, that we are going into people's homes as their guests ... accessing at-risk families that may not normally access health services ... in a centre.

Several participants highlighted their FCP role as a family's primary source of information during the first year of the child's life:

I think one of the key elements is that we are their source of information, that we are their source of truth ... we are their avenue to seek information about growth and development and to give them that sense of the health professional as primary resource.

Participants also recognised that for some families with social vulnerabilities, the home visiting program provided an avenue for the family to receive social support, which they may not have been able to otherwise access, despite referral systems in place for these supports (e.g. community play groups).

... some families are so isolated, they don't have the resources to get the social contacts ... sometimes we are just the person that comes through the door, its sometimes ... as simple as that ... and not only a person, a non-judgemental person that's not involved; 'cause [people] in their limited social networks they are invested in their lives emotionally and we can come in and listen to their story and not go, 'you shouldn't do it that way'.

Home visiting was also viewed as a practical solution for families already burdened with complex health and social circumstances. Care is provided in a familiar comfortable environment within the family's resources to access.

... reduction of stress, how many parents get stressed loading the child up into the car ... they have had a bad day and they've got to go into the clinic or whatever. So knowing that that person is coming out to your house does reduce those stress levels.

#### Flexibility in delivery to meet family goals

CHNs also shared how the flexibility of the FCP home visiting model facilitated options in program content to support family goals. This flexibility was regarded as an important element:

... the advantage to the program is its flexibility ... Around the process as well as when we visit ... And how often we visit, you know there is the suggested visits and we can have flexibility around that as well.

It gives flexibility, because you can go in to do a 6-week check, but the baby's screaming, there is a lot of distress in the house and the mother doesn't want to focus on the developmental review, she wants to get help with her unsettled baby. So you can use that visit to do that and then come back. Because it's the FCP, you can go back the following week and catch up.

#### Program structure facilitates parent confidence

The structure of the FCP – providing more visits early in the transition to parenthood, with reduced frequency in the latter half of the first year – was regarded by participants as a strength of the model, supporting the family to develop skills and confidence over time:

I think that another element is the fact that it's staggering home visits, so intensive in the beginning and then we get decreasing amount of visits, so we kind of, I think by the end there is a purpose behind about that, about this empowerment ... it enables them to build up their own skills with that reassurance from you as the helping professional and to gain, they obviously gain confidence as we move through the program.

#### **Opportunities to reflect on practice**

The ability for CHNs to access case conferencing (reflective supervision to confidentially discuss family goals and care plans within a multidisciplinary child health team) was regarded as a strength and support mechanism for staff. These forums enabled nurses to reflect on practice decisions and receive support in managing care of complex families, within a professional environment.

... [Case conference] it's having those other pair of eyes on it, especially when you have a really complex family, you can get so sucked in to their own dramas, as much as you try to stay outside of it, it can block your view of what to do sometimes, you can't see the wood for the trees and you are not sure where else to go with it. Or sometimes just to be told ... I wouldn't have done anything else ... that can be really reassuring as well. We are all really good at reflective practice and offloading to each other informally, but having a formal structure is really valuable. It's also quite protective for the clients and for us.

Some participants reflected on the value and meaning of their role as CHNs working with families with complex needs, which they took forward in establishing new relationships: Tackling the inequalities of health, targeting resources at families that are more vulnerable ... [the] most needy, the most complex, the most vulnerable.

You home visit someone for 12 months and you run into them two years down the track and they have had another baby and they are saying that things are going really well ... We have been able to keep a job or we have been able to keep our house... [the] previous work ... helped build that ... I think that you go in with that intention of giving them the best that you can.

While multiple advantages to the FCP were identified by participants, they also shared their perceptions of several limitations, which identified areas for improvement.

### Domain 3: We could do it better

CHNs did identify potential improvements to the current FCP, with five themes generated under this domain. There was concern among participants that the FCP may not be reaching all families in need due to its eligibility criteria and duration, as well as the tensions arising from providing both a universal and sustained home visiting program to a targeted population. Resourcing constraints, a lack of clarity regarding the CHN role among the public and the healthcare sector, and poor evaluation processes were also identified as limiting the current program's accessibility to, and ability to meet the needs of, the target population.

#### Eligibility criteria can exclude priority families

Participants identified that the FCP eligibility criteria was too narrow and did not account for contemporary families with vulnerabilities:

We are not meeting all of those needs for the criteria ... in family care at the moment, it doesn't fit really with what is happening socially for the increased drugs and alcohol. They don't automatically fit into those criteria anymore.

... there are more criteria that we could open up to meet more vulnerable people.

Participants highlighted the limitations of the Edinburgh Postnatal Depression Scale screening tool. Although useful for screening depression, participants suggested it did not always effectively assess mothers experiencing perinatal anxiety whom they felt would potentially benefit greatly from FCP.

Even the antenatal screening bit, with just doing an EPDS [Edinburgh Postnatal Depression Scale] for depression, obviously we are seeing so much more anxiety ... which doesn't score, and half of these women would really benefit from the program, PTSD all of those sort of things. So we

change how we are assessing that so we meet those famil[ies] needs a bit more.

A counterargument to broadening the eligibility criteria is that the CHNs have a particular skillset, enabling them to specialise in assisting families with specific risk factors.

I would be a little reluctant to open up the [eligibility] criteria too much, just because of our skill level ... we are looking at a lot of significant mental health illness ... I think there is a safety in the criteria currently, that is there for us.

Despite this conjecture, there was a consensus within and across both focus groups that ensuring services were targeted towards those families most likely to receive benefit would assist in achieving program outcomes.

But then it is also where we can make a difference ... the people who are not critically unwell with something like psychosis, I mean we do address that and support them, but we have got to get beyond our own service to support them, so it's about where we can make a difference.

# Tensions in optimal program structure and duration

Several CHNs suggested that program structure was useful, and that a lack of structure can make working with families experiencing adversity difficult.

Sometimes I think we need a bit of structure but, I feel sometimes we might get a little bit lost and if you look at other types of programs ... they do have structure and [families] enter the program knowing that there is going to be an education model so I think that sometimes [helps] with these chaotic families.

In contrast, others perceived the program structure to represent a lack of flexibility, particularly with respect to the timing of visits and allocation of resources to families with greater needs:

... talking about the structure for me, the thing I struggle with is when we go two-monthly. 'Cause I would argue that if most people can go two-monthly they probably don't need us.

I think [if] we had more flexibility in our model we could access more people that needed it and not spend so much time on people that perhaps don't.

Many CHNs also identified that antenatal contact, although not mandatory to the program, would be ideal to support the establishment of the relationship with the family: ... I would actually like to see two or three antenatal visits, so we have really established the relationship with the mother before the baby is in the picture, and you have talked about goals with parenting and all those expectations.

The 1-year duration of the program was seen as a limitation by some CHNs:

I think one of the other limitations for me is that it does only go on for a year ... I'm wondering if it would be more effective in a sense of being involved in that family a little down the track.

... these people are so vulnerable, but then we visit them at home and expect them at a year [to be] fixed.

#### Insufficient resources

Home visiting was recognised as time and resource intensive in terms of staff and transport required, with a lack of service resourcing affecting the availability of the FCP for all families who may benefit.

Resources never matched what we need to do, you end up doing a lot of home visits, and you can have this wonderful program, but still have lack of resources in time and cars.

Having the FCP embedded within the universal child health service created tensions related to resourcing. CHNs reported that when resources were strained, families with the greater perceived vulnerabilities were often prioritised last.

Resources, staff ... our biggest struggle is annual leave ... our universal program gets the priority ... so if someone is off sick where straight away our family care get knocked off and the universal gets taken over.

# Poor understanding of roles and program intentions

Participants highlighted the lack of understanding of the CHN role in the FCP, both by the public and other health care professionals.

We are not promoted enough. We don't have universal promotion in the community, we are not part of health forums, we are not a part of generalised community support, you know we are just a little part of child health, community health, that even now some people don't even have a clue what we are.

CHNs expressed the view that families may confuse the role of the CHN and statutory child protection services, a misunderstanding which could affect the family's level of engagement with the FCP. I think our name child health is a misinterpretation ... that we don't really see the absolute vulnerable people, because they think that we are a part of ... child safety.

# Lack of measures to monitor program fidelity and outcomes

Respondents also identified there was a lack of clarity around how or what outcomes of the FCP were measured, as evaluation was not clearly embedded into program delivery and quality control measures to monitor program fidelity are lacking. Poor evaluation of programs provided staff with little objective evidence of what, if anything, a family's involvement in FCP achieves, as suggested by this response:

... it's not measured, we don't know how family care meets it, no one is measuring it ... we have no questionnaires, you know we don't even gain feedback.

### Discussion

The aim of this study was to explore CHNs' understanding of the intentions and outcomes of the FCP together with their perceptions of program benefits and limitations, and how the program works in contemporary practice. Participating CHNs identified two intentions of the program: creating secure maternal-infant attachment; and creating lifelong benefits by positively influencing family relationships, child health engagement and life trajectories. Supporting the family's ability to create secure attachment with the infant was perceived to be facilitated by employing frameworks, such as the Circle of Security attachment model (Hoffman et al. 2006). This model uses parent education and psychotherapy to support maternal and infant attachment, and is a core theoretical component of the FCP, as adapted by this health service (Hoffman et al. 2006; Sunshine Coast Hospital and Health Service 2013).

Participating CHNs reported multiple positive outcomes for families involved with the adapted FCP. The ability to refer clients to appropriate services, and increased parental awareness of services, was seen by CHNs to improve parental resourcefulness and efficacy. Family resilience, secure attachment, reduced involvement from child protection services and less emergent medical service attendance were also reported. These observations are consistent with findings of the initial Family Community-based Assistance Resourcing and Education. research project, although these findings were not sustained when measured at 18 months post-intervention (Huston and Armstrong 1999; Armstrong *et al.* 1999, 2000). Despite the positive subjective outcomes identified by the CHNs, they lamented being unable to quantitatively know the impact they were having, as family outcomes were not being measured. A paucity of data, combined with non-specific program objectives, makes it difficult to evaluate whether the adapted FCP is delivering upon its intentions.

Achieving lifelong benefits was a broad intention of the original FCP (Queensland Health 2000), and was discussed by CHNs who had observed improvements in family skills, efficacy and resourcefulness. However, with non-sustained outcomes in the longer term (Huston and Armstrong 1999; Armstrong *et al.* 1999, 2000) and a lack of evaluation measures in place, it is impossible to associate any perceived long-term benefits with interventions under the adapted program considered here. The official aim of the FCP – to 'redress the health inequalities of more vulnerable families with newborns by providing supportive, professional home visiting services' (Sunshine Coast Hospital and Health Service 2013, p. n.p.) – requires further clarification and definition.

Study findings revealed valuable insights into how CHNs perceive the FCP functions in contemporary practice. Participants articulated the importance of establishing a trusting relationship with the family and how this influences engagement with the FCP. Previous research has found that effective home visiting services require relationship-based methods of interaction that involve partnership development between families and the clinician (Adams et al. 2019; Latham et al. 2023). Effective home visiting programs should ensure that parents can develop meaningful personal goals, be provided with a range of strategies and support to select or develop their parenting style, and build parenting confidence and competence (Moore et al. 2012; Adams et al. 2019). Study participants reaffirmed this view, and identified antenatal contact and visiting within the family home as critical vehicles for relationship building; findings in keeping with previous qualitative research with nurses delivering sustained home visiting programs (Bonakdar Tehrani et al. 2022). There is evidence that home visiting programs commencing during the antenatal period are more effective and provide greater positive outcomes than programs initiated following birth (McDonald et al. 2012; Latham et al. 2023).

Much of what was discussed by the CHNs are known advantages of effective home visiting programs. In addition, however, they identified new issues, including elements lacking from this regional service's adapted FCP. Although some research encourages embedding home visiting programs within universal child health services (Flemington and Fraser 2016; Kemp et al. 2019), participating CHNs saw this as a challenge for effective program delivery. Participants cited resourcing issues and the sense that universal services were prioritised over the FCP during staff shortages. CHNs were very vocal about the limitations of the program, which were discussed in-depth by the participants. They nominated issues related to program structure, including eligibility criteria, and the duration and timing of visits, which were seen as requiring greater flexibility. However, program flexibility was also identified by participants as a strength of the model used. This finding may indicate that some CHNs operationalised the inherent structure as a restriction, rather than as a base framework for care that could be adapted. Home visiting programs need to be flexible enough to accommodate each family's different needs and preferences while maintaining a structured core evidence base to ensure fidelity of program intention and interventions (Moore *et al.* 2017; Latham *et al.* 2023).

A major limitation CHNs identified was the narrow eligibility criteria, nominating multiple family types and circumstances who could benefit from a home visiting program (e.g. families with twins, parental history of mental health issues or substance abuse); an issue also identified by a previous evaluation of nurse home visiting programs (Bonakdar Tehrani et al. 2022). However, CHNs were also cognisant that broadening the eligibility criteria too expansively, within an environment in which resources are already stretched, risks making the program unsustainable. Research states that program effectiveness is best achieved by targeting moderately at-risk families, with multiple or complex problems, who are most likely to benefit (Stubbs and Achat 2016; Adams et al. 2019). However, one meaningful improvement identified by participants would be to ensure antenatal and postnatal screening tools are accounting for women experiencing anxiety, as well as depression, in addition to domestic and family violence, to make certain this vulnerable cohort are eligible for the FCP. An evaluation of the eligibility criteria is needed to ensure the program is targeted towards complex families, whose needs are most likely to be met by the program, and that can be provided by services within resourcing limitations.

Use of focus groups allowed a feasible exploration of individual CHN views, as well as shared contextualised knowledge on the delivery of the FCP, supporting the study's intention to understand how the FCP was used in practice within health service teams. The sample size comprised >50% of this service's eligible target population, with data therefore representative of CHNs of that service. A potential study limitation was that not all participants may have contributed to data collection, and it was not possible to differentiate responses based on participant characteristics. However, anonymous contributions via Padlet during and after the focus group allowed all participants to have their opinions included. The results are limited to the experiences of CHNs providing an adapted FCP to families in a single regional Queensland health service and, therefore, are not generalisable across other states or models of care.

### Conclusion

This study is, to our knowledge, the first evaluation of an adapted FCP model used in contemporary practice in Australia since the conclusion of the original FCP trial period (2000–2004). CHNs delivering the program were able to identify elements of the adapted FCP that align with those that research has established as the hallmarks of effective home visiting programs. They also highlighted limitations of the model in their practice and identified a range of improvements needed.

Currently, it is not possible to determine if the FCP being delivered in Queensland, in any of its adapted forms, is meeting the original program intentions and expected outcomes. Further research is needed in relation to the FCP specifically, to develop clearer program intentions, eligibility criteria and predetermined outcome measures to facilitate evaluation of the program's effectiveness. This would ensure Queensland families are receiving best-practice, evidencebased interventions to address known risk factors for adverse health outcomes for infants, and reduce the degree of inequality experienced by families with vulnerabilities.

### References

- Adams C, Hooker L, Taft A (2019) The enhanced maternal and child health nursing program in Victoria: a cross-sectional study of clinical practice. *Australian Journal of Primary Health* **25**(3), 281–287. doi:10.1071/PY18156
- Armstrong KL, Fraser JA, Dadds MR, Morris J (1999) A randomized, controlled trial of nurse home visiting to vulnerable families with newborns. *Journal of Paediatrics and Child Health* **35**, 237–244. doi:10.1046/j.1440-1754.1999.00348.x
- Armstrong KL, Fraser JA, Dadds MR, Morris J (2000) Promoting secure attachment, maternal mood and child health in a vulnerable population: a randomized controlled trial. *Journal of Paediatrics and Child Health* **36**, 555–562. doi:10.1046/j.1440-1754.2000.00591.x
- Australian Health Ministers' Advisory Council (2011) National framework for universal child and family health services. (Canberra) Available at https://www1.health.gov.au/internet/main/publishing.nsf/Content/ 4C6E476B74CC27D1CA257BF0001B0ABD/\$File/NFUCFHS\_National Framework for Universal Child and Family Health Services.pdf
- Bonakdar Tehrani M, Kemp L, Baird K (2022) Sustained nurse homevisiting with culturally and linguistically diverse families: Australian nurses' perspectives. *Public Health Nursing* **39**, 40–47. doi:10.1111/ phn.12996
- Braun V, Clarke V (2006) Using thematic analysis in psychology. Qualitative Research in Psychology 3, 77–101. doi:10.1191/14780887 06qp0630a
- Flemington T, Fraser JA (2016) Maternal involvement in a nurse home visiting programme to prevent child maltreatment. *Journal of Children's Services* **11**, 124–140. doi:10.1108/JCS-02-2015-0003
- Flemington T, Waters D, Fraser JA (2015) Maternal involvement and outcomes in nurse home visiting. *Journal of Children's Services* 10, 311–323. doi:10.1108/JCS-02-2015-0006
- Goldfeld S, Price A, Smith C, Bruce T, Bryson H, Mensah F, Orsini F, Gold L, Hiscock H, Bishop L, Smith A, Perlen S, Kemp L (2019) Nurse home visiting for families experiencing adversity: a randomized trial. *Pediatrics* 143, e20181206. doi:10.1542/peds.2018-1206
- Heckman JJ, Mosso S (2014) The economics of human development and social mobility. *Annual Review of Economics* 6, 689–733. doi:10.1146/ annurev-economics-080213-040753

- Hoffman KT, Marvin RS, Cooper G, Powell B (2006) Changing toddlers' and preschoolers' attachment classifications: the circle of security intervention. *Journal of Consulting and Clinical Psychology* **74**, 1017–1026. doi:10.1037/0022-006X.74.6.1017
- Huston C, Armstrong K (1999) Home visiting family therapy for children at risk. *Australian and New Zealand Journal of Family Therapy* **20**, 41–45. doi:10.1111/j.0814-723X.1999.00094.x
- Kemp L, Bruce T, Elcombe EL, Anderson T, Vimpani G, Price A, Smith C, Goldfeld S (2019) Quality of delivery of "right@home": implementation evaluation of an Australian sustained nurse home visiting intervention to improve parenting and the home learning environment. *PLoS ONE* 14, e0215371. doi:10.1371/journal.pone.0215371
- Latham N, Young J, Gray M (2020) Key elements of sustained child health home visiting programs for vulnerable families in Australia: a scoping review. *Journal of Children and Young People's Health* 1, 3–16. doi:10.33235/jcyph.1.1.3-16
- Latham N, Young J, Wilson J, Gray M (2023) Measuring success: program fidelity of Queensland's child health home visiting services. A document analysis. Australian Journal of Primary Health 29, 575–586. doi:10.1071/PY23002
- McDonald M, Moore T, Goldfeld S (2012) Sustained home visiting for vulnerable families and children: a literature review of effective programs. Prepared for the Australian Research Alliance for Children and Youth. (Parkville, Vic., Australia) Available at https:// www.rch.org.au/uploadedFiles/Main/Content/ccchdev/CCCHright@home-LR2-programs-June-2012.pdf
- Moore TG, Mcdonald M, Sanjeevan S, Price A (2012) Sustained home visiting for vulnerable families and children: a literature review of effective processes and strategies. Prepared for the Australian Research Alliance for Children and Youth. (Murdoch Childrens Research Institute and The Royal Children's Hospital Centre for Community Child Health: Parkville, Vic., Australia) Available at https://www.rch.org.au/ uploadedFiles/Main/Content/ccch/resources\_and\_publications/Home\_ visiting\_lit\_review\_RAH\_processes\_final.pdf
- Moore TG, McDonald M, Carlon L, O'Rourke K (2015) Early childhood development and the social determinants of health inequities. *Health Promotion International* **30**, ii102–ii115. doi:10.1093/heapro/dav031
- Moore T, Arefadib N, Deery A, West S (2017) The first thousand days: an evidence paper. (Centre for Community Child Health, Murdoch Children's Research Institute: Parkville, Vic., Australia) Available at https://www.rch.org.au/uploadedFiles/Main/Content/ccchdev/CCCH-The-First-Thousand-Days-An-Evidence-Paper-September-2017.pdf
- Queensland Centre for Perinatal and Infant Mental Health (2017) The perinatal and infant mental health day program: final report 2017. (Brisbane) Available at https://www.childrens.health.qld.gov.au/ wp-content/uploads/PDF/qcpimh/PIMH-day-program-researchproject-report.pdf
- Queensland Health (2000) The Family C.A.R.E home visiting guide. Queensland Government, Brisbane.
- Queensland Health (2018) Antenatal screening for domestic and family violence. (Brisbane) Available at https://www.health.qld.gov.au/\_\_ data/assets/pdf\_file/0032/712688/qh-gdl-456.pdf
- State-wide Maternity and Neonatal Clinical Network (2014) Perinatal social and emotional wellbeing screening: a learning package for perinatal psychosocial screening with Aboriginal and Torres Strait Islander peoples. (Brisbane) Available at https://www.health.qld. gov.au/\_data/assets/pdf\_file/0024/439017/smncn-atsi-reportphase2.pdf
- Stubbs JM, Achat HM (2016) Sustained health home visiting can improve families' social support and community connectedness. *Contemporary Nurse* 52, 286–299. doi:10.1080/10376178.2016.1224124
- Sunshine Coast Hospital and Health Service (2013) The Family C.A.R.E Home Visiting Program – procedure manual.

Data availability. The data that support this study may be shared upon reasonable request to the corresponding author.

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