How COVID-19 shaped new models of care for a child and family health nursing service

Keywords child and family health nursing, COVID-19 pandemic, telehealth

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Abstract

Background Child and family health nurses (CFHNs) provide care and support to families with children in their first 5 years to ensure that they have the best possible start in life by supporting their health, wellbeing, capacity and resilience. Evidence supports the existence of critical development windows for this age group, with these window periods continuing to close regardless of external events (NSW Health 2019).

South Eastern Sydney Local Health District (SESLHD) child and family health nursing services offer a variety of services to families that are mostly face-to-face contact. With the COVID-19 pandemic, access to face-to-face child and family health nursing services in order to provide care and support to families created challenges where face-to-face contact was comprised. Telehealth, including video conferencing and telephone support, was identified as an effective method to bridge this gap between client demand and provider availability.

Aim The aim of the study was to describe what occurred and what worked best when implementing telehealth in a child and family health nursing service during the COVID-19 pandemic between April and September 2020 to inform future practice. Changes in client uptake of services during this 6-month period of lockdown were compared to a pre-pandemic 6-month period. Mothers' perceptions, satisfaction and perceived benefits of using telehealth services as well as the clinician experiences of implementing telehealth service provision were examined.

Methods This is a case study of a quality improvement (QI) activity of a service change using mixed methods. Data on the number of consultations for both 6-month periods was collected from electronic medical records (eMR). Mothers and staff were surveyed for feedback on the change to a predominantly telehealth service.

Findings The child and family health nursing service maintained the same number of consultations throughout the pandemic as the previous year for the same period. A total of 90% of the mothers who responded had no issues accessing the telehealth service. Approximately 80% felt the telehealth experience helped them to make decisions about their needs, their child's needs and their family's needs, and 92% would likely to very likely recommend telehealth. Identified benefits included: being safer due to COVID-19; being convenient; saving time; being able to network with other parents; and accessing professional support. Some barriers included technical issues and staff experiencing communication concerns with clients. Interestingly, 73% of mother respondents would prefer a face-to-face consultation over a telehealth consultation in the absence of a pandemic.

Conclusion Utilising telehealth that includes video conferencing and telephone support has been identified as an effective method to bridge the gap between client demand and provider availability in response to the COVID-19 pandemic. While the surveys identified many benefits of telehealth, this study has shown telehealth should not been seen as an alternative form of healthcare, but instead should be integrated within existing child and family health nursing services.

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Introduction

It is well recognised that child and family health nursing services provide essential support, health promotion and early intervention care to families of children aged 0–5 years, with the main role being the screening and monitoring of the infant/child's growth and development, maternal psychosocial screening and support, and promoting parental self-efficacy and their responsiveness to the needs of their children (Grant, Mitchel & Cuthbertson 2017). In developing and maintaining the relationship with the families, child and family health nurses (CFHNs) play a valuable role in promoting optimal growth, health and development in infants and children (Whiteman, Hutton & Grant 2021). This has traditionally been through home visiting, clinics and family and residential care centres.

The COVID-19 pandemic of 2020 highlighted the need for new ways of delivering health services when face-to-face consultation is no longer an option; telehealth has been identified due to its flexibility and ability to reach far and wide (Bennet et al. 2020; Northug, Brataas & Rygg 2018; Smith, Taki & Wen 2020). Telehealth encompasses telemedicine, tele-education, tele-therapy, tele-mentoring and tele-monitoring, and can be used for assessment, intervention, consultation, education and supervision (Agency for Clinical Innovation [ACI] 2020; NSW Health 2020).

Evidence supports that telehealth can be utilised in healthcare settings with positive client outcomes by still being able to provide healthcare, particularly for remote or vulnerable populations, when face-to-face consultation is no longer an option (Nordtug, Brataas & Rygg 2018). Results from a study in Sweden on the use of telehealth (Skype) methods for neonatal care of premature infants in the home showed their use made parents more confident taking care of their infants, and reduced the need for home visits from the nurse (Gund et al. 2013). Further studies indicated that videoconferencing was useful for making assessments and offering advice, particularly with breastfeeding, in postpartum care for mothers being discharged early from hospital after childbirth (Lindberg, Ohrling & Christensson 2007). The Communicating Healthy Beginnings Advice by Telephone (CHAT) study has demonstrated a telehealth service offering support and advice on a range of infant health behaviours to their parents in their own home as a successful alternative way of delivering information. It offered convenience to the mother as it was delivered when it suited her and her baby, was cost effective, and did not rely on transportation and location (Smith, Taki & Wen 2020).

Systematic reviews on the use of telehealth interventions with children and families provide further evidence of social support assisting with problem solving, with carers reporting significant improvement in their psychological health and decreased maternal fatigue (Jennett et al. 2003; Chi & Damaris 2015). The Royal Children's Hospital child health report (2020) states that 46% of parents report that the COVID-19 pandemic of 2020 has had a negative impact on their own mental health. Utilising telehealth can provide support to these families who may be at increased risk of depression, anxiety or family violence due to the isolation requirements related to the pandemic (Campbell 2020).

The research therefore suggests possibilities that utilising telehealth could be an effective and valuable modality that may provide safe and timely access to child and family health services for families, with this new model of care being central to responding to the COVID-19 pandemic. This paper will describe the evaluation of a rapid implementation of a new telehealth orientated model of care, presented as a quality improvement (QI) activity.

The early response to COVID-19 in Australia

When the World Health Organization (WHO) declared an international COVID-19 pandemic on 11 March 2020 (WHO 2020), the way healthcare was to be delivered in Australia was transformed. Residents of NSW were directed by the government to stay at home and were only allowed to leave their house for health needs and necessary shopping, or if they were defined as essential workers. Maintaining a social distance of 1.5 metres was advised at all times. This isolation and social distancing resulted in new service delivery recommendations by NSW Health, including the directive that developmental checks of children and breastfeeding support remain essential care, and that mental health and psychosocial support for early parenting remain with every consultation (NSW Government Clinical Excellence Commission 2020; NSW Health 2020). The challenge therefore was to ensure the service was providing the best possible child and family health nursing service to support families in the context of responding to the outbreak of the COVID-19 pandemic and recommended guidelines by NSW Health.

The case study context

The South Eastern Sydney Local Health District (SESLHD) child and family health nursing service is a community-based primary healthcare that offers a variety of services to families with children under the age of 5 years. It covers a region that encompasses almost 930,000 people living in the Eastern and Southern parts of Sydney, Australia. Specialised CFHNs perform health and developmental screening and surveillance assessments on children under 5 years of age at designated age intervals, as demonstrated in the Personal Health Record (PHR) book (NSW Health 2020). CFHNs also provide health promotion, early intervention care, perinatal mental health/maternal psychosocial screening and family functioning support.

The *First 2000 days framework* (NSW Health 2019) provides evidence regarding the critical development windows from conception to the first 5 years of life, and notes these window periods will continue to close regardless of events. CFHNs are guided by this framework in providing care and support to families so that all children have the best possible start in life. The development of the COVID-19 pandemic in 2020 dramatically impacted the service delivery approach. It was acknowledged that reducing or ceasing our services as a result of the pandemic, especially for children who are developmentally vulnerable, could have significant consequences and lifelong impacts on this age group. Current research suggests a likely increase in adverse childhood experiences (ACE), defined as forms of abuse, neglect and household dysfunction, during the COVID-19 pandemic (Bryant, Oo & Damian 2020).

Utilising telehealth may assist in maintaining connection between the service and the families it supports. This paper describes what occurred and what worked best when implementing telehealth, and examines how the service has developed new models of care using telehealth services as a result of the COVID-19 pandemic.

Service description

The service is comprised of 15 child and family health clinics and a family care cottage (FCC) across St George and Sutherland Shire Local Government Areas, and staffed with 71 CFHNs. The services are conducted through home visiting, clinics, parenting and feeding support groups, FCC and a home visiting program. Initial engagement with families occurs through a home or clinic visit with babies aged 1–4 weeks of age, and the sustained home visiting program supports vulnerable families with infants that have identified clinical and/or psychosocial risk factors. Clinic consultations are offered for all eight mandated development checks for children until 5 years of age. Parenting groups, facilitated by the CFHN on a weekly basis, are conducted at most clinics offering education and peer support for parents with infants under 3 months of age. Feeding drop-in services are also available in various clinics which assist families that are breast or bottle feeding. The FCC is a secondary service which offers parenting advice, sleep and settling, and feeding support to families with infants via extended day visits to the centre.

Overview of the transition

The child and family health nursing service responded to the pandemic by implementing strategies that included prioritisation of service delivery and risk assessments for families while utilising a mix of modalities. This involved continuing some face-to-face consultations in the home for the most vulnerable families, identified with psychosocial risk factors, using the Levels of Care service response according to the Families NSW Supporting Families Early Package (NSW Health 2009). Other face-to-face consultations continued in the clinics for newborns and infants up until 8 weeks of age. The introduction of telehealth services, which included telephone support, virtual consultations and virtual groups, was implemented for families requiring our services in April 2020.

A telephone parent helpline, staffed by a CFHN, was introduced to offer advice and support with parenting and feeding to carers of infants and children up to 5 years of age. Some virtual consultations were offered to the older children (up to 5 years old) if indicated, after being triaged through the helpline by the CFHN, with their physical measurements being encouraged to be completed by their GP. Virtual parenting groups commenced to replace the face-to-face groups that occurred in clinics, and further virtual consultations were conducted at our FCC. The child and family health nursing service advertised these changes on its Facebook page and website, and an information flyer was given to new parents before being discharged from the local maternity hospitals.

It was agreed to implement only telephone and virtual components of telehealth as opposed to all the services that e-health includes (e.g. apps and home monitoring systems) as time constraints were an issue, with the priorities being technical implementation and staff education. It was viewed as important to make it a feasible service that addressed the needs of the families who access the service, and the helpline and virtual consultations met this requirement.

Evaluation of telehealth

Method

This is a case study of a QI activity of a service change using mixed methods. Combining the case study framework with other methods can lead to better evaluations, resulting in shared learning from this implementation of telehealth related to clinical care (Datta 1997). The mixed-method approach enabled an exploration of the changes to service usage together with the experiences of clients and staff using the service. The qualitative research method enabled us to study a range of social dimensions, gaining a deeper understanding of the clients and staff's behaviour while maintaining contextual focus (Carcary 2009).

Three components – the service delivery and results from both the mothers' survey and the staff experience survey – were analysed using frequency and descriptive statistical analysis for scale and numerical responses, and qualitative descriptive analysis for the short answer responses.

Service delivery

Aim 1: To identify any changes in client uptake of services during a 6-month period of COVID-19 pandemic lockdown compared to a pre-pandemic 6-month period.

Data was collected by the SESLHD Children and Communities Health Information Officer from electronic medical records (eMR) between April and September 2020 to find the number of:

- Virtual consultations.
- Virtual parent groups.
- Parents that contacted the parent helpline.
- Infant/child consultations that were conducted (this included all face-to-face and virtual consultations)

As a point of comparison, further data were extracted from eMR on the number of infant/child consultations that were conducted for April to September 2019. This was face-to-face consultations only as there was no telehealth services in this period.

Mothers' survey results

Aim 2: To identify mothers' perceptions, satisfaction and perceived benefits of using telehealth services.

All mothers who received a telehealth consult in the nominated 6-month period from April until September 2020 were given the opportunity to participate in an online questionnaire survey, with the aim to evaluate the telehealth service they received. The instruments in the survey were developed from a telehealth survey developed by the Sydney Children's Hospital Network and the authors, and were piloted and tested in the child and family health nursing service. The survey was sent to the mothers via an SMS message (after accessing telehealth services sent to their mobile phone with a Telstra Integrated Messaging (TIM) message)

and contained the link to the survey. The initial uptake was low so a follow-up contact phone call was made to the mothers which resulted in a higher uptake of the survey. Participants were mothers that attended:

- Virtual parenting group.
- Virtual FCC consultation.
- Virtual clinic consultation.
- Parent helpline consultation.

The return of the survey implied consent, and the survey results were analysed and themed by the authors who all have extensive knowledge and understanding of the context of the study. Qualitative comments resulting from open-ended questions asked in the survey were analysed manually using qualitative interpretive description. Themes were verified for cross checking with three authors and are discussed and presented thematically for readability and clear understanding (see Appendix 1: telehealth survey).

Staff experience survey results

Aim 3: To identify clinician experiences of implementing telehealth service provision during the COVID-19 pandemic lockdown.

A paper survey with three open-ended questions was conducted with seven CFHNs who were involved in the implementation and running of telehealth services in the same period. Participation in the survey assumed consent. The questions asked were:

- What were the challenges, if any, with implementing telehealth?
- What did you feel worked well with telehealth?
- How could we improve the telehealth experience?

The survey data and the results were thematically analysed by three authors and cross referenced for comparisons.

Table 1. Service delivery

Service delivery	No. consultations April – September	
	2020	2019
Virtual consultations	1265	0
Virtual parent groups	174	0
Telephone consultations	997	0
Face-to-face consultations	7267	9329
Total of all infant/child consultations	9703	9329

Ethics approval was gained from SESLHD Human Research Ethics Committee (HREC Reference 2020/ETH01442) for the whole study.

Results / findings

Service delivery

Comparing the data from 2019 for the same period shows the service maintained and increased its service delivery to the families throughout the pandemic (Table 1). This data reflects that the service was successful in providing a child and family health nursing service in the context of responding to the outbreak of the COVID-19 pandemic, and recommended guidelines by NSW Health. Further evaluation of the survey results and the staff experiences will determine the value and outcomes of the telehealth implementation.

Mothers' survey results

The survey was sent to 553 mothers who were involved in a telehealth consultation from the period April to September 2020; 145 responded (26%). The survey included 14 questions (Appendix 1). Findings can be summarised under the headings service use (Table 2), satisfaction with telehealth (Table 3) and perceived benefits (Table 4). Four themes emerged from the qualitative analysis of the mothers' responses in the survey – technical issues, meeting expectations and benefits, improving the service and client delivery mode preference.

Technical issues

The majority (90%) of respondents stated they had no issues accessing telehealth. Of the 10% who did experience difficulties, the main issue related to the sound quality as it was hard to hear the nurse and each other when participating in the individual consultations or groups (57%). They also stated the video connection dropped out (28%), with comments that *"the sound was really poor, there was a constant echo and it was difficult to have a conversation with other participants"* and *"I couldn't hear, it kept cutting out and stalling the video, I could not participate at all".* Other technical issues for this 10% of respondents included the equipment not working (28%), needing to change devices (28%), and some difficulty understanding the access instructions (14%).

Meeting expectations and benefits

Overall there was positive feedback from the respondents about the virtual healthcare experience which included the parent groups, parent helpline and FCC consultations. A respondent stated that *"the service was very professional and delivered*

Table 2. Service use

Telehealth service	Percentage of respondents accessing a service n=145	Age range of children	Overall access to services
Virtual parent group	57%	3–6 weeks old	70% of all respondents accessed two or more times 45% of all respondents accessed three or more times 4% of all respondents accessed five or more times
Helpline	28%	3 weeks to 23 months, with 84% of children aged 7 months or younger	
Personal Health Record (PHR) checks	27%		
Family care cottage (FCC)	21%	3 weeks to 12 months old	
Parent support team	9%	3 weeks to 23 months old	

Table 3. Satisfaction with telehealth

Theme / mothers' feedback
Satisfaction with the quality of the sound and/or video
94% 'strongly agree' to 'agree' 2% 'strongly disagree'
Issues accessing telehealth
90% had no issues accessing telehealth 10% experienced issues. Of these, this included: • Sound was difficult to hear (57%) • Connection dropped out (28%) • Equipment didn't work (28%) • Needed to change devices (28%) • Video difficult to see (14%) • Difficulty understanding the access instructions (14%) • Clinician had telehealth connection problems (14%)
Helping parents make decisions about their needs, their child's needs and their family's needs
At least 80% of respondents felt the telehealth experience helped them to make decisions about their needs, their child's needs and their family's needs
Meeting parents' expectations
92% felt telehealth met their expectations
Likely to recommend telehealth to friends and family
93% are 'likely' to 'very likely' recommend telehealth

Table 4. Perceived benefits

Benefits in accessing telehealth
Convenient (77%)
Saved time (58%)
Safer due to COVID-19 (53%)
Networking with other parents (41%)
Access to professional support (40%)
Able to stay home (33%)
Access the service where otherwise unable to (19%)
Allowed other family members to attend (12%)
Saved me money (10%)
No benefits (2%)

extremely well, as though it had always been delivered in this way, the advice and service was beyond expectations". Others described the experience as convenient *"I could just go into the kitchen and make my baby a bottle while on telehealth"* and *"fantastic support and convenient when having a newborn and not having to leave home"*. Other respondents stated access to health professionals was valuable as they *"received fantastic advice and information from professionals"* and the nurses were *"excellent facilitators with a wealth of knowledge".*

The respondents felt the parent groups were valuable as they *"provided facilitated discussions on baby's needs and normalised issues" and "offered opportunity to meet others mums and normalise experiences"*. One respondent offered a comment that *it "was a great solution in the midst of a global crisis".*

The parent helpline was also commended as a useful service, with mothers stating *"it was helpful to be able to pick up the phone and ask a quick question"* with one mother reporting she called the helpline regarding feeding support and *"due to the recommendations and support they helped me to solve the problem very easily, me and my husband felt very happy for the support provided to us".*

Measuring whether expectations were met or not was done within the survey by asking for further responses if the respondents answered 'no' to the question 'Did your telehealth experience meet your expectations?' Feedback from the respondents included poor sound and video quality with *"the sound echo being a problem"* with one mother stating *"the session wasn't always the easiest to participate/hear everything"*, and another *"it was also difficult to connect with others as I feel the virtual aspect is a barrier".*

Another issue identified from the survey responses was the lack of skills and continuity of the staff conducting the virtual appointment or groups. One respondent *stated "staff have clearly not been trained on how to effectively move these services online",* and the *"introduction during group took up all the time".* One respondent stated *"our group had 3 different facilitators so it felt disjointed and repetitive".*

Improving the service

There were 105 mothers that responded. Of the respondents, 35% felt there was no need to improve the service. Suggestions included improvement with technology, mainly with sound quality (15%) *"Improvement in sound quality would make this service better"* and *"use a microphone for clarity of sound"*. Respondents suggested additional parent group sessions (12%) and more focused information and structure to these sessions (8%). They recommended to *"provide some video clips or google links that help the parents in any issues"* and *"more content online that we can be linked"* and *"a little more structure to ensure conversation flows with focused talking points, topic and ideas for us".*

Respondents also suggested for the service to offer both virtual and face-to-face groups (5%) in the future. They stated *"an option to have both would be convenient with a newborn"* with a request to "*please keep this going after COVID 19, its amazing just going to the computer for an appointment".*

Other suggestions for improving the service included smaller groups, advertising the groups, user guide for mothers, the same facilitator, and training nurses on presenting structured education topics.

Client delivery mode preference

The service was commended for offering an alternative service during a global pandemic *"during a time where a face-to-face mothers groups couldn't happen".* Some respondents expected the virtual service not to be the same or as good as a face-to-face experience and a preference for more "*hands on sharing"* was expressed. They felt it was still essential to have face-to-face consultations to measure baby's growth and development.

Staff experience survey results

The CFHNs from the survey all worked in the service during this innovation conducting the virtual parenting groups, consultations and receiving calls from the parent helpline. They have shared their experiences as to how they adapted to the changes and what they think is important for future service delivery. Themes were adjustment, connection with families, team support and delivery mode preference.

Adjustment

The CFHNs commented that the implementation of telehealth to the service worked well as *"it allowed accessibility to our service during the COVID-19 pandemic/lockdown and restrictions to face-to-face services"*.

Obtaining sufficient equipment, distribution of this equipment to staff, and training the staff in its use were identified as barriers to the implementation process. They also acknowledged that adjusting to virtual consultations was initially challenging due to technology issues with poor internet connection and an inability to see or hear their clients, with one nurse stating *"one of the challenges was navigating the IT (Information Technology) difficulties with connection and clients having difficulty enabling microphone or audio – there was very limited IT support to assist nurses to provide information to clients – learnt to trouble shoot on the job!"* However, once gaining more confidence with the IT systems, one nurse felt that she was able to use it more freely to connect with clients who were unable to connect face-to-face due to illness or other circumstances.

The CFHNs felt they were able to offer parenting support to their clients associated with developmental and feeding issues and sleep and settling concerns (especially for the older babies being able to stay in their own home).

Connection with families

All the CFHNs felt that telehealth supported them to maintain a connection with the clients which was their priority, commenting how important this connection was especially with vulnerable families, Culturally and Linguistically Diverse (CALD) families, parents who were working full-time, first time parents and families isolated from their relatives living overseas. They felt it "*helped decease anxiety and stress for parents and having their concerns addressed"*. However, communication was commented as a barrier, with one CFHN stating "*it felt hard and impersonal if, or when, a client became upset or overwhelmed*" and another CFHN reflecting on how difficult it was to pick up on any emotional health problems as they were not in the room with the client.

The CFHNs felt the parent groups were a good way for mothers to connect with each other residing in a similar area so they could connect in person in the future. One CFHN commented that the parent groups were a *"great initiative... that parents were still able to connect with virtual group and are still in contact with each other today"*.

The helpline was also regarded as a *"creative way"* to provide quick and timely support for clients in a pandemic, especially for the families who were adapting and adjusting to having a newborn. One CFHN commented that she was able to answer general parenting questions and managed to identify developmental concerns and weight issues with children which may have otherwise been missed.

Team support

All the CFHNs commented how *"quick and efficient"* the service was in providing this new innovation for the families, with one nurse stating *"I feel the CFHNs embraced telehealth as an additional way to communicate with our families and it should continue as an option"*. Another CFHN commented that resources were made available right at the beginning, and support from within the team made the implementation process so much easier and less overwhelming. She stated *"whenever there was a nurse new to conducting a telehealth session everyone pitched in to help and guide her through the processes"*.

Staff delivery mode preference

The CFHNs' feedback supported the mothers' preference of face-to-face consultations over virtual consultations. The nurses felt that communication and technical issues created barriers, and the lack of face-to-face interaction affected the interpretation of the social and emotional cues between themselves, the parent and the child. They all agreed that the telehealth service has been valuable and one which could continue post COVID-19 pandemic restrictions, stating that they felt the "*mothers were very grateful for the service and able to access support during isolation"*.

Discussion and recommendations

Findings from the three sets of data – the service delivery, results from the mothers' survey and the staff experience survey – have resulted in areas for discussion that will influence future recommendations and new models of care. These include technical barriers, parent group development and staff education. Offering a combination of virtual and face-to-face consultations will also need to be considered.

Technical barriers

Feedback from the surveys comment on the technical barriers and challenges. Both parties have described issues with the sound and visual quality and the lack of technical expertise of the clinicians, with the clinicians recognising that these issues are frustrating and ongoing. Although the majority of respondents reported no issues with technology, the issues that were identified were significant and matched the clinicians' experiences, so it was worthwhile to look at changes that could be implemented.

Technical barriers to telehealth that have been identified in the literature include communication difficulties, technology issues and delay in the development of rapport between the clinician and client (Fiske, Livingstone & Pit 2020; Owen 2020). Headsets with microphone have since been distributed to all clinicians participating in virtual consultations, with the feedback being positive regarding improved sound quality. NSW Health have developed another platform, My Virtual Care, which will be adopted to improve the communication barriers and overcome some of our technical issues identified in this paper.

Parent group development

The respondents to the survey suggested many improvements for the parent group sessions, including additional sessions, the same facilitator, and more information on topics and structure. One of the CFHNs surveyed received positive feedback from a mother who experienced a virtual parent group – with restrictions lifted, all the mothers are now meeting face-to-face. While the virtual groups have been well received, it is worth acknowledging 73% of the respondents from the survey, along with the CFHNs, still preferred face-to-face interaction given the choice. It is well recognised that parent groups provide important community development opportunities and can help reduce possible isolation for mothers with young children. In their study, Strange et al. (2014) demonstrate participation in face-to-face parent groups in the local community facilitates forging relationships, thereby building the parents' supportive networks and community connectedness.

Future developments for the parent group will include a combination of virtual groups (for infants aged 0–6 weeks for three sessions) followed up with face-to-face groups (for infants aged 6–12 weeks for four sessions). The virtual groups would accommodate families with cultural restrictions or mobility issues (e.g. mothers that have had a caesarean), and the face-to-face groups would reinforce community connectedness. All the sessions will have structured information topics for discussion that will include sleep and settling, play and development, adjusting to parenting, and health promotion topics pertinent to this age group. Further feedback from this hybrid model will be valuable and influence the future direction of our parent groups.

Staff education

Telehealth education for staff and practice guidelines pertinent to child and family health nursing will only enhance the families' experience and care. Evidence supports that education and exposure to telemedicine is critical to expanding its acceptance among providers (Saeed & Pastis 2018). Telehealth guidelines (ACI 2020) and Virtual care in practice (ACI 2021) are documents which support clinicians to develop a deeper understanding of the value and impact of video conferencing in their practice. They provide the foundations to build a dynamic and adaptive workforce with the integration of technology. Bennet et al. (2020) provide information on the qualities required for early parenting services in Australia when conducting virtual services. This includes clinical practice knowledge and skills, personal attributes, technological and communication skills and risk management, and the belief that staff attributes are crucial to the success of using digital technology. This research demonstrates the contribution of the CFHNs in this rapidly changing environment.

Staff education within the service related to conducting telehealth consultations is now offered to all staff and is ongoing, with management providing financial support in the form of clinical nurse educators specific for this role.

Combination of virtual and face-to-face consultations

Offering a combination of face-to-face and virtual consultations within the service will also need to be considered. Feedback from parents as well as the CFHNs agreed that telehealth services can be a valuable modality to deliver healthcare. Offering parent group support to parents with newborns in the home could be well received, allowing for peer and professional support. FCC virtual consultations will also prove valuable to parents for support with feeding issues and sleep and settling management with their infants.

Strengths and limitations

Identified strengths of this study were the pragmatic approach to evaluation research using multiple data sets within a very short timeframe, all while the telehealth processes were being implemented. This was due to the dynamic and flexible approach of the staff involved and a reflection of their commitment and belief in the service.

An identified limitation is the low response rate from the mothers' survey with the respondents, which may not represent the view of all parents, and may have skewed the results. Feedback from the families who chose not to use telehealth and their reasons behind this may have improved the study. More insights and understanding from the parents' and staff experiences on any limitations of telehealth would hopefully reflect and influence further evidence of longer-term benefits and patient care outcomes.

The findings of this study may be useful in similar service contexts (e.g. other child and family health services) experiencing comparable changes due to the pandemic. Further research is required to fully explore the implications of the service changes described.

Conclusion

Utilising telehealth that includes video conferencing and telephone support could be an effective and valuable modality that may provide timely access to the families that access health services where meeting face-to-face is no longer an option. This paper has identified that telehealth comes with its challenges that involve technical and communication issues, but can still allow connection and peer and professional support for the families supported by SESLHD. Developing and maintaining the relationship with the families remains critical to their future health, wellbeing, capability and resilience. Telehealth and new models of care have therefore been central to responding to the COVID-19 pandemic.

While evidence suggests that telehealth is a valuable modality, it should not been seen as an alternative form of healthcare, but instead should be integrated within existing healthcare services. Further investigation into the parents' and staff experiences may provide further evidence of longer-term benefits and patient care outcomes.

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Appendix 1: Telehealth survey

1. Declaration by the participant

I understand I am being asked to provide consent to participate in this research study.

I have read the Participant Information Statement.

I provide my consent for the information collected about me to be used for the purpose of this research study only.

I understand that if necessary I can ask questions and the research team will respond to my questions.

I consent to participate in this research:

o Yes
o No

2. What telehealth services did you access? (Please select* all that apply)

o Parenting and/or Feeding Helpline (telephone consultation)
o Family care cottage (sleep & settling or feeding support)
o Health check ('Blue Book')
o Virtual Parents Group
o Parent Support Team (Virtual Consultation)

3. What is your baby/child's date of birth?

DOB

Date

DD/MM/YYYY

4. How many times did you access a telehealth service?

o once (1)
o twice (2)
o three times (3)
o more than three (3+) times

If more than 3 times – How many?

5. Overall I was satisfied with the quality of the sound and/or video during the telehealth service

o Strongly agree
o Agree
o Disagree
o Strongly disagree

Did you have any issues in accessing telehealth?

o Yes
o No

7. What issues did you have in accessing telehealth? (Please select* all that apply)

o The sound was difficult to hear
o The video was difficult to see
o The connection dropped out unexpectedly
o My equipment didn't work (e.g. microphone, camera)
o I needed to change from one device to another
o The clinician/s had telehealth connection difficulties
o I had difficulty understanding the access instructions
o Other issue (please specify)

8. How well did your telehealth experience help you make decisions about?

Your needs	Your baby/child's needs	Your family's needs
o Very well	o Very well	o Very well
o Well	o Well	o Well
o Somewhat	o Somewhat	o Somewhat
o Not at all	o Not at all	o Not at all

9. What benefits were there for you in accessing telehealth? (Please select all that apply)

o It allowed other members of my family to attend the consultation
o I felt safer as I was able to isolate from others due to Covid-19
o It was convenient
o It saved me money
o It saved me time (e.g. I didn't need to travel, take as much time off work)
o I was able to stay closer to home and/or my family
o Networking with other parents
o Access the service where otherwise unable to
o It allowed me to access professional support
o There were no benefits
o It benefited me in other ways (Please provide details)

10. Based on your experience, how likely are you to recommend telehealth to your friends and family?

o Very likely
o Likely
o Unlikely
o Very unlikely

11. Did your telehealth experience meet your expectations?

o Yes
o No – please provide details.

12. How could we improve this service?

13. If there was no COVID-19 pandemic how would you prefer to access our service?

o Face-to-face
o Virtual
o Telephone

14. Would you like to be contacted from our service?

Please provide your contact details

Thank you for taking the time to complete this survey – your feedback allows us to continually improve our service