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## Enhancing access to parenting services using digital technology supported practices

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**Title:**

**Enhancing access to parenting services using digital technology supported practices**

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EB, WS, CF Primary authors and AM, JK had key role in conception, design and editing manuscript.

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Additional ethics approvals were granted by five Human Research Ethics Committees:

- Curtin University HREC (HRE2019-0185)
- Sydney Local Health District HREC (X19-0170 & 2019/ETH10667)
- South Western Sydney Local Health District (2019/STE15956)
- University of Technology Sydney (ETH19-4219)
- Queensland Children's Health (LNR/19/QCHQ/54409)

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### What is known about the topic?

- E-health, telemedicine and telehealth services have been used by the medical profession for many years.
- Telehealth interventions are being increasingly utilised for health service delivery and these interventions are associated with positive outcomes for clients.
- The COVID-19 pandemic has highlighted the escalating need for the delivery of health and social services through digital technologies.

### What this paper adds:

- Specific knowledge of practitioner and manager use of digital technology in early parenting services in Australia and New Zealand.
- Practitioner experiences of personal qualities and systematic processes that enhance or hinder effective service delivery via digital technologies.
- Increased knowledge and evidence to support efficient and effective technology supported service provision for early parenting services.

## Enhancing access to parenting services using digitally supported practices

### ABSTRACT

**Background:** Early parenting services in Australia provide a range of expanding and rapidly changing services, including using innovative digital technologies to improve service access for metropolitan and rural families.

**Aim:** This research aims to provide comprehensive information required for the planning, implementation and evaluation of the use of digital technologies for service delivery with parenting/child and family services in Australia and New Zealand in metropolitan and rural settings.

**Methods:** A methodology of interpretive descriptive approach was applied using semi-structured interviews from 23 early parenting practitioners and managers in five sites.

**Findings:** These are presented in main categories: preparing the way, practitioner qualities, benefits of using technology, presenting challenges, and management and professional development requirements. The findings have provided recommendations for the ongoing work in this area and the recruitment of new employees and ongoing professional development and planning of services using digital supported technologies.

**Conclusion:** This study has explored the experiences of both practitioners and managers with a positive response despite navigating the initial and ongoing challenges that can occur with technology and internet capabilities. Overwhelmingly, the use of digital technologies for rural and remote families cannot be underestimated, due to many not having easy access to parenting services locally.

## **Enhancing access to parenting services using digital technology supported practices**

### **Introduction**

Australia and New Zealand have highly regarded early parenting services (EPSs) that provide parenting information, interventions and education, with several organisations operating for over 100 years (Ngala 2019; Tresillian 2019; Plunket n.d.). These organisations provide a range of expanding and rapidly changing services, while maintaining current well-established services for families and their young children living in metropolitan and rural areas.

EPSs support families and build parenting capacity to enhance parent-child relationships, strengthening community networks and connecting them with other services (Bennett et al. 2019). EPSs provide support for issues related to children's sleep, nutritional advice, behaviours, or adjustment to parenthood (Bennett et al. 2019). Practitioners provide support and information that varies from individual consultations to group sessions, including specialist support such as counselling or residential parenting services.

There are significant opportunities to increase service delivery to further support parents by improving service access for both metropolitan and rural families using innovative digital technologies. Evidenced by the increased rate of internet use and mobile handset subscribers among Australians (ABS 2018), most parents have the digital hardware and technical skills to participate in these new services. Knight and Hunter (2013) suggest that even isolated and marginalised groups are using technology in their everyday lives.

This research aimed to provide comprehensive information required for the planning, implementation and evaluation of parenting services using digital technologies for service delivery within parenting/child and family services in Australia and New Zealand. Using a qualitative approach of semi-structured interviews with practitioners and managers from five EPSs, the findings have informed recommendations for the use of digital technologies to support and enhance future delivery of parenting services across metropolitan and rural areas.

Prior to 2020 and the onset of the COVID-19 pandemic, not all EPSs in Australia were providing digital services, though the use of digital technologies is not a new concept for service delivery. This research involved those services that had established the use of digital consultation practices as part of normal services. Digitally supported consultations can be defined as practices with technology that would have been traditionally provided face-to-face through centre-based services or home visits. This includes modes of delivery such as telehealth, video conferencing (PEXIP, Vidyo, Zoom), Facebook chat and SMS messaging. Since the beginning of the COVID-19 pandemic, EPSs have quickly embraced alternative and innovative ways of consulting with parents, providing much needed support using digital technologies.

### **Researching the literature**

The medical profession (Mieir 2013; Young 2016; Myers 2018), mental health/psychiatry practitioners (Davis et al. 2016; Shore et al 2018), and population health management (Moumtzoglou 2018) have been using digital technologies such as e-health, telemedicine and telehealth for communicating, assessment and treatment modalities with patients for many years (Davis et al. 2016). However, there is little evidence of research that explores the online provision of social services, such as early parenting services (Smart 2018). An

Australian survey found that the child, youth and family sector identified a number of issues with the use of digital technologies, such as when and how to use, the efficacy of its use, and limited resources to support use (Smart 2018). Additional concerns highlighted by Smart (2018) include mitigation of risks associated with the use of digital technology, a lack of training for practitioners, and barriers such as costs and organisational support.

An Australian systematic review and meta-analysis (Speyer et al. 2018) described telehealth interventions (from 43 studies) delivered by allied health professionals and nurses in rural and remote areas and compared the effects of telehealth interventions with standard face-to-face interventions. Nurses and psychologists were represented most frequently, and the meta-analysis results slightly favoured telehealth interventions compared with face-to-face interventions but did not show significant differences. Interventions using a combined physical and cognitive approach appeared to be more effective. This was found to be encouraging given the potential benefits of telehealth in rural and remote areas with regards to healthcare access and time and cost savings.

The COVID-19 pandemic has highlighted the need for the delivery of health and social services through digital technologies, realising the potential of scalability and flexibility that digital services can offer (Torous et al. 2020). Evidence suggests that telehealth interventions are being increasingly utilised and these interventions are associated with positive outcomes for clients. However, further work is yet to be done to ensure greater access to quality services fully utilising digital technologies (Torous et al. 2020). Torous et al. concluded that further investment is needed to gather evidence of outcomes, workforce training, user engagement and ethical use of digital technology. Even less is known about the qualitative experiences of health practitioners who deliver digital early parenting interventions, or their impressions about the types of practitioner qualities and systematic processes that enhance or hinder effective service delivery via digital technologies. This study aimed to explore the gaps in knowledge and evidence to support efficient and effective technology supported service provision for EPSs.

## **Methodology**

This research was guided by an interpretive descriptive approach to qualitative research methodology (Thorne 2016). Interpretive description acknowledges that human experiences are context-bounded, while accepting there are shared realities (Thorne et al. 2004). Meanings and explanations are explored from the data that may inform a practical clinical application (Thorne et al. 2004).

## **Ethics**

Approval was received from each site organisation. Ethics approvals were received from five Human Research Ethics Committees.

- Curtin University HREC (HRE2019-0185)
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- University of Technology Sydney (ETH19-4219)
- Queensland Children's Health (LNR/19/QCHQ/54409).

## **Recruitment**

Participating organisations were sent an information sheet and consent form. Managers and practitioners who were willing to participate signed the consent form and returned it to the

research team. The participation criteria required that the clinical staff be regularly engaged in providing consultations using digital technologies, and the managers were responsible for supervising the use of digital technologies within their organisation.

## **Participants**

Interviews were conducted with nine clinical managers and 14 practitioners. Participants working at five organisations; Ngala, Tresillian Family Care Centres, Karitane, Ellen Barron Family Centre and Plunket were interviewed.

## **Data collection**

The data for this study were collected using semi-structured interviews. Telephone interviews were conducted and digitally recorded. The interviews explored three main areas: practitioner qualities (knowledge, skills and attributes) for telehealth service provision; qualities and resources necessary to provide practitioners with effective peer support via digital technologies; and the management resources required for effective implementation of parenting/child and family digital technology services. The interviews were half to one hour and were sent for transcription. The transcriber signed a confidentiality form and de-identified the data. Data were securely stored to meet ethical requirements.

## **Data Analysis**

A thematic analysis approach was used to identify, organise and provide insights into the pattern meaning or themes within the data (Braun & Clarke 2012). There were six thematic analysis stages: gaining familiarity with the data, this requiring read and re-read the transcripts; the generation of initial codes; identifying themes; reviewing the potential themes; defining and naming themes; and the production of a report (Braun & Clarke 2012). Three researchers conducted the initial and final analysis, cross-checking codes. The final coding was validated by the other two authors.

## **Findings**

Participants in this study had worked in their organisations spanning 15 months to 33 years.

There were common digital technologies used across the sites, including video conferencing and Facebook live chat. These technologies enabled virtual consultations, group programs, parent/child therapy programs, and mixed programs (virtual, centre-based, and phone contact).

The findings are presented into five main themes: preparing the way, practitioner qualities, benefits of using technology, presenting challenges, and management and professional development. Each theme is described, and quotes provided in italics with a code identifying the interview and the participant, (practitioner (P) or manager (M)).

### **1. *Preparing the way***

#### *Setting up the environment*

Participants identified the importance of a conducive environment to prepare and conduct digital sessions. Private space, quality equipment, time for preparation, navigating the challenges and organised back-up support were important. One participant suggested that

appropriate ergonomically designed office furniture was important, and another suggested options such as stand-up desks.

Technology was discussed in all of the interviews, particularly when preparing for digital services. Participants' comments included.

*Finding the right software, being able to have software that enables the type of therapy that we do. (P4)*

*The actual connection is tricky and having the equipment too, you know having the right equipment to do it, not all families have that. (P9)*

It was also identified that it was important that the focus of the service remained on the client and not the technology;

*The technology, unless kept in its rightful place, will have a tendency to become the most important factor when it's clearly not. (P14)*

### *Orientation and training*

Participants identified that new skills were needed to assist with the provision of digital services, including navigating communication when using technology, use of the equipment and being able to problem solve when technical challenges arose. Having the appropriate orientation and training to use technology was important when providing digital services. One participant explained.

*Adequate training and adequate time to like learn the technology and also know that you know that the first half a dozen times that you use it with a family, it is going to take you much longer... (P2)*

Another participant described the difficulties maintaining a personal connection with clients while documenting the session.

*[The] main challenge for me is documentation while I'm talking, in a video conference I can't do it to the same extent because you need to be looking at the person but that's been a bit of a place of change as well. (P2)*

### *Resource back-up*

Access to information technology (IT) support was a recurring issue throughout the interviews for participants. Various IT support approaches were identified, including just having a number to ring for assistance. One participant explained.

*Having a good IT support department behind you, that can be there at every workshop, so if you've got families dialing in and having issues, "oh I can't get on, I keep dropping off" – somebody else can do that trouble-shooting with a family so you're not trying have to do that at the same time. (P4)*

One manager suggested that physical resources were of importance.

*...and IT resources like headsets and computers and laptops and phones and tablets. (M3)*

## **2. Practitioner Qualities**

Practitioner qualities for successful digital services were highlighted by both practitioners and managers. Practitioner qualities identified by the participants are presented in **Table 1**.

**Table 1: Necessary qualities when conducting virtual services**

<b>Domains</b>	<b>Attributes</b>
Clinical/practice knowledge and skills	<ul style="list-style-type: none"> <li>• Up-to-date clinical knowledge and skills</li> <li>• Commitment to working in partnership</li> <li>• Experience working in a similar service</li> <li>• Broad knowledge base of topics for working with groups</li> <li>• Contemporaneous documentation</li> </ul>
Personal attributes	<ul style="list-style-type: none"> <li>• Problem-solving skills</li> <li>• Flexibility</li> <li>• Ability to work outside comfort zone</li> <li>• Work under pressure</li> <li>• Awareness of necessary etiquette when conducting group work or client consultations e.g. tolerating silences during the consultation</li> <li>• Able to multi-skill during consultations e.g. listen, talk and type to enable documentation of interaction</li> </ul>
Technological skills	<ul style="list-style-type: none"> <li>• Basic computer knowledge</li> <li>• Willingness to learn to use the technologies</li> <li>• Problem-solving technical problems</li> </ul>
Communication skills	<ul style="list-style-type: none"> <li>• Listening skills and empathy</li> <li>• Need to be mindful of the client's environment</li> <li>• Clinician's and client's body language</li> <li>• Communication when working with groups</li> </ul>
Risk management	<ul style="list-style-type: none"> <li>• Identify risks for the client (e.g. someone else in the home)</li> <li>• Be able to quickly work out how to manage the risk for the client (e.g. suicidal ideation)</li> <li>• Competence in documenting and reporting the risk</li> </ul>

Staff attributes or characteristics were crucial to the success or failure for the transfer of client services from face-to-face to digital services. Other skills which were found to be essential were the ability to respond to challenging and unexpected situations as they arose. The following quote encapsulates the importance of having appropriate knowledge, skills and attitudes.

*The person who's facilitating is key. Technology is important, but that person who's there is ...really crucial. (M7)*

### **3. Benefits of using technology**

Many benefits were cited for using digital technology for service delivery, including benefits for the client and the service. These were collated into four themes.

*Accessibility for clients and wider reach of services*

Accessibility to parenting services for people who would otherwise not be able to access was a benefit of digital services emphasised continually by the participants, particularly for rural families.

*You can reach a wider community and so it's been lovely to work with families that are quite rural...it's been very rewarding because you tend to find that these clients are the ones that don't have access to services...(P3)*

*If we're looking at a rural site, lots of farming, lots of isolated workers, lots of vulnerable families that don't have, potentially don't have access. (M5)*

Another benefit of digital services was the access for fathers, allowing flexible access even while at work. One participant explained this.

*The other benefit is engaging fathers. I've managed to do that a lot more with this service 'cause dad can be at work and he can go to a computer and he can log in as well as his wife and they can both have the consultation or I'll just get a dad at work in his lunchbreak or he's got a flexible work they let him take an hour a two and do his consultation while he's at the workplace. But that was something we never did before. (P10)*

#### *Client receptiveness*

Participants explained how clients were receptive to digital services.

*The flexibility of digital and especially if you can see on the screen, they love it...some still would rather pick up the phone rather than do it on video conferencing, but now that they don't need a computer, they can do it on their phone...they've loved it. (P4)*

*Everybody has been very complimentary and gosh I was a bit skeptical about how much help you'd be able to do over videos, but wow you know things are so much better. (P2)*

#### *Practitioner time gained and reduced cost for travel*

Another benefit identified was the cost saving for staff with reduced travel times. As one manager explained:

*Of course you don't have the same costs associated with travel but the types of distances we're talking about... we just purely would not be able to afford to send out staff that far out, if they did go out they'd have to probably stay overnight to travel back, and then they're only seeing one client, so it's not that we'd save money because we just wouldn't have been able to do it, it wasn't viable. (M2)*

## **4. Presenting challenges**

### *Assessment via technology*

Practitioners identified the challenges they face when conducting client assessments that would ordinarily take place in face-to-face consultations. These included breastfeeding consultations and therapies for child behaviour.

*If I'm wanting to look at the angle a baby latches to the breast, it's really hard sometimes for the mothers to actually position either the device or the baby. (P1)*

*When you take it to an internet platform it introduces a number of unknown variables so the clinician really needs to be on top of the therapy and adapting that therapy as need be. (P3)*

#### *Navigating the home environment and distractions*

Practitioners also identified the challenges with digital services held in the family home. Challenges included other children being present, and parents managing technology while managing behavioural issues or a crying baby. Practitioners explained;

*One of the challenges is kids – especially 'cause we're dealing with kids with destructive behavioural problems – they like to turn the computers off mid-session so navigating that space has been tricky...(P3)*

*.. if you've got a toddler or someone hitting the screen and the keyboards, you've gotta be able to be very patient and flexible. (P10)*

#### *Cultural and language issues*

Navigating the challenges of cultural differences and language barriers were identified by the participants. Examples included using a live chat when English is not your first language or overcoming the technical issues when language is a barrier. One participant identified that using technology to communicate was not the most effective way of communicating with Aboriginal or Torres Strait Islander families. Another participant identified that there was poor uptake of virtual services from Maori and Pacific families.

*Probably our target demographics are Maori and Pacific families haven't taken it up as regularly as we'd like and I think it's partly technology issues, partly being a bit more shy...not really understanding the full technology side of it... (P2)*

#### *Building the client relationship*

Practitioners felt that building a relationship with the client was sometimes challenging when using digital technologies. Good communication, also identified as a necessary practitioner quality (see Table 1), was seen as crucial. One practitioner stated;

*[Having] empathy, really trying to connect and really listen, understand ...in that holistic way, and being interested. You know you really, you're interested in that person and that comes across and then they trust you...building that trust because often digital can be a barrier. (P4)*

#### *Technology disruptions*

A strong finding was the challenges that practitioners face with technology when conducting digital services. Practitioners felt challenged when technology didn't work, when internet connections were broken during a digital service, or when connections were slow.

*Sometimes the connection is slow, I can see them but they can't see me, I can hear them but they can't hear me. Sometimes, for no obvious reason the connection drops out. (P14)*

*So not assuming that everyone has technology that works, that's functional. So I think that is one of the kind of logistical barriers of technology. (P7)*

#### *Client safety and confidentiality*

Concern over client safety and confidentiality was identified as a challenge when delivering digital services. For example, practitioners were concerned for some clients regarding domestic violence and others about confidentiality when there are other family members in the household.

*There are a lot of things that we can't guarantee in terms of, for example, domestic violence screening and things like that when you can't determine whether the clients by themselves or whether they're safe. (P3)*

*So you know there might be other family members home, sometimes they may not necessarily agree that this family is you know having therapy for child behaviour issues. (P12)*

One practitioner described how the challenge of delivering digital service in clients' homes fostered a sense of flexibility to overcome them.

*It's been challenging as a practitioner because you do have to be very flexible, there a lot of unknown variables added in to the work and particularly because we're doing the therapy in client's homes as opposed to a clinic setting, there is a lot of uncontrollable element to the therapy so it makes it quite difficult at times, but also kind of fun to navigate the novel ways that you can implement this therapy. (P3)*

#### *Client non-attendance*

Practitioners expressed some concern about wasted time when clients don't attend digital services, particularly in a group situation.

*For a group – sometimes people fail to turn up so you've wasted a lot of time sitting around and hoping they will turn up. (P1)*

Another practitioner had concerns that parents may miss out on the social connection with other parents when there were non-attendances.

*So sometimes we do only have one parent turn up for an early parenting group and yeah there are benefits in that because they do get a very tailored workshop just for them, but I feel that they're missing out on the social connection side of things so that's a bit of a pitfall as well. (P7)*

### **5. Management and professional development requirements**

Management support is a mechanism to provide staff guidance and mentoring to ensure that staff have the policies, guidelines, equipment, and supervision that are necessary to perform their practice. There were several areas regarding management and professional development identified by participants as being essential.

#### *Clinical governance and practice supervision*

Strong management and clinical governance, practice supervision and reflective practice were stressed as important by participants. One practitioner explained how supervision helped when 'working through' challenging situations.

*Drawing from other people's experiences and how they've overcome some of the difficulties and having good supervision around... you know how you're managing these families and I think being able to – when things don't go to plan... kind of work through them in a logical way, in a safe environment. (P8)*

One of the managers highlighted the importance of regular team meetings to support the practitioners.

*We do regular practice audits, we have regular multi-disciplinary team meetings just to make sure they you know that's the clinical side of things – just to make sure people are well supported and if they do have complex cases. (M3)*

#### *Professional development and support*

Participants identified the importance of professional development and management support required to enable digital services. This included support to use the technology (resource back-up was discussed as a finding in 1. *Preparing the way*) and IT training, professional development for cultural awareness, group facilitation training and clinical professional development.

Managers also identified the change management required to enable digital services. This included when practitioners needed additional support using technology or other training.

*...you need to take people on a journey, because if – it depends on the age of your work force as to how familiar staff are with the technology side of things or the fear that might be attached with that. (M7)*

*I think obviously just that guidance around change – you know change and training that goes hand in hand with the resources that are required and allowing for that, obviously, for that training to be completed. (M6)*

#### *Additional support within the organisation*

Participants identified ways that other staff within the organisation could support digital technology. This included marketing support and administration support. One manager described how the upskilling of administration staff may also provide a support mechanism to 'troubleshoot' technological issues:

*...aim to build the confidence about administration assistance...we could do a test run with the parents prior to the appointment with the clinicians... they can also be on hand to trouble-shoot if they take the call about this. (M2)*

#### *Cost benefits*

Managers identified the cost savings and economies of scale that can be achieved when delivering services through digital technologies. This required them to be clear on the model that they were delivering. One participant described how economies of scale can be achieved.

*..so if you've got lactation consultants who are providing a national service and they're in Melbourne and one's in Sydney, one's in Canberra, you know we can provide that from a centralised location ... and service the whole country. But there is a lot of cost benefits to do with that. (M1)*

### *Quality and risk management*

Managers identified the need for quality and risk management when providing digital services. One manager suggested policy development was required to support digital services.

*We really do need a policy called virtual consultation that includes you know script around how to check in, how to trouble-shoot the equipment and how much time to actually allow to set up. It's not the same as inviting them to a consultation room... and the hardware issues. (M4)*

### *Evaluation*

Participants were asked about the evaluation of the digital services they had been providing. Participants spoke of feedback forms, online surveys and emails seeking feedback, however there was little evidence of qualitative evaluative processes to undertake continuous improvement or data analysis to inform future services. One manager understood the need for evaluation but questioned the value.

*So you would want something to validate and evaluate the usefulness of that rather than just do it because it's the right thing to do, you know but who's any better off for doing it. (M7)*

There were some exceptions; one participant described an extensive evaluation project and a PhD study currently underway within their organisation, and another reported that research papers had been written with ongoing evaluation and assessments using wellness scales (such as the Edinburgh Postnatal Depression Scale).

### **Discussion**

This research study commenced in late 2019 with wide ranging findings that included issues of: IT support and equipment; program governance; staff attributes; staff support and education; and program evaluation. The value and risks for clients and organisations were also discussed by participants. Digital support services have been identified as improving the impact and reach of EPSs (Hall & Bierman 2015).

Providing digitally supported parenting services is not without reputational risks for EPSs. While existing face-to-face interventions and programs carry risk, the introduction of new approaches expand that risk due to the staff needing to develop a new set of skills to assist in anticipating and managing the problems. For example, practitioners need to develop competence in the delivery of clinical services via digitally technologies, to be able to read the body language and the client's physical and emotional situation. This can be difficult, especially if domestic violence or mental distress is occurring, resulting in a risk of poor client engagement when assessing and providing care within a virtual environment. For some clients and cultural groups the use of technological support programs may not be acceptable (Hall & Bierman 2015) or they may lack the necessary equipment or a reliable internet connection.

Four underpinning administrative requirements were highlighted by the participants. The first requirement was for easily accessible IT support that was responsive to the technical needs of the practitioners. The second requirement was for fit-for-purpose equipment. The third was governance practices developed to support staff in their new roles, including robust policies and guidelines. The fourth was administrative support. In some organisations, administrative staff had been trained to assess the suitability of the client's equipment and their internet connection so that the practitioners' time was not spent managing technical issues. According to the participants, these requirements were not always met, with some organisations being better prepared with specially designed IT systems, management support, and digital technologies governance practices in place.

Staff attributes were identified by the majority of participants as of greater importance than the equipment used. The ability to develop a therapeutic relationship and gain client confidence has been found to be significant. Achieving this therapeutic relationship was at times more difficult when providing digital support services (Owen 2020). Demonstrating high levels of competence as a practitioner was balanced with the ability to problem-solve IT disruptions and a willingness to learn new digital related skills that included being able 'to type with more than one finger'. Neter and Brainin (2012) found in their study of eHealth literacy that participants who were younger and regularly searched the internet for health information were more likely to be able to successfully use emerging communication and information technologies. Reassuringly, in this current study these digital skills were identified by many participants as being able to be taught.

Parents are increasingly accepting and engaging with digital technologies as they use the internet to provide parenting support and to seek health information (Appleton et al. 2014). The range of models of service that the participants spoke about were diverse and included some innovative models that went beyond a digital consultation. Evidence for the efficacy of these programs is scarce, though there is Australian research that provides a base to draw reassurance from. For example, a randomised control trial (RCT) of the online MumMoodBooster program with the women on completion no longer meeting the diagnostic criteria for depression (Milgrom et al. 2016). One EPS is providing a parent-child intervention program using digital technologies. Another organisation was using a hybrid model that allowed choice for rural parents to either attend face-to-face consultations, participate in a series of digital consultations or participate in a mixed program of face-to-face and digital consultations. A hybrid model has been identified as having the capacity to improve the impact of the interactions with the parents (Hall & Bierman 2015). A study by Owen (2020) reported that most clients would choose a hybrid model of care if available. The EPSs were also offering group programs using digital access. In a recent RCT that investigated the success of an online supportive educational parenting program resulted in significantly better outcomes than for the control group (Shorey et al. 2019)

Through the participant responses there was consensus that the provision of parenting support services using digital technologies was appreciated by the clients. This was especially for rural clients as they significantly reduced the cost and time required for travel and disruption to the family. A similar outcome was the reduction of the cost of travel and disruption of the practitioner's day, especially when providing a home visiting service. The cost benefits for the organisations in this study have not been tested, however these may be negated due to the cost of up-dating and maintaining digital equipment.

Practitioners in all organisations reported that staff were supported in varying degrees, with education sessions, mentoring, clinical supervision and/or peer support (formal and informal). The use of regular video conferencing peer support sessions and professional development has been found by other digital programs to increase practitioners' knowledge, skills and confidence (Owen 2020). While some organisations had well developed processes, others were needing to further develop and formalise staff support processes.

The evaluation of digital services for most organisations were in the early stages and mainly focused on client satisfaction forms. Only one organisation was starting to implement a more rigorous evaluation process based on a research project. An organisational commitment to ongoing evaluation of these programs is needed to demonstrate the value and efficacy of the programs and continued program acceptability by clients.

Digitally supported parenting services in several states are being developed and provided to allow for expanded and enhanced access for clients. Having existing services implemented has allowed for rapid expansion of digital services during the early part of 2020. This has assisted the management of services during the Covid-19 pandemic to reduce service disruptions for parents. Many of these digital services will be maintained as a way of increasing access and equity to parenting services and may lead to new and innovative service packages for supporting parents.

#### *Limitations*

This research was conducted in five EPSs (four Australian and one New Zealand) so the findings may not be generalisable to other Australian or New Zealand EPSs or to universal services. Further research is needed to evaluate individual organisational approaches to providing digital services.

#### **Conclusion**

The context in which these data were collected has dramatically changed due to the onset of the Covid-19 pandemic. EPS and universal child and family health services have had to rapidly change and/or modify their service provision. This has required most services to shift from a majority of face-to-face services to providing many services using digital technologies. This research will benefit EPSs and universal services to assist with the planning and implementation of processes to provide parenting services through digital technologies, and the resources and change management requirements necessary for recruitment, implementation and evaluation.

## References

- Appleton, J, Fowler, C & Brown, N 2014, 'Friend or foe? 'An exploratory study of Australian parents' use of asynchronous discussion boards in childhood obesity', *Collegian*, vol. 21, no. 2, pp. 151-158.
- Australian Bureau of Statistics 2018, *Internet Activity*, Australia, June 2018. cat. no. 8153.0, viewed 29 May 2020  
<https://www.abs.gov.au/ausstats/abs@.nsf/productsbytopic/00FD2E732C939C06CA257E19000FB410?OpenDocument>
- Bennett, E, Allix, S & Bulsara, C 2019, 'The nursing history of Ngala since 1890: an early parenting organisation in Western Australia', *Australian Journal of Child and Family Health Nursing*, vol. 16, no. 1, pp. 24-32.
- Braun, V & Clarke, V 2012, 'Thematic analysis' in H. Cooper, P. Camic, D. Long, A. Panter, D., Rindskopf & K. Sher (eds.), *APA Handbook of Research Methods in Psychology: Vol. 2. Research Design*, American Psychological Association, Washington.
- Davis, TL, DiClemente, R, Prietula, M 2016, 'Taking mHealth forward: examining the core characteristics', *MIR Mhealth Uhealth*, vol. 4, no. 3.
- Hall, C & Bierman, K 2015, echnology-assisted interventions for parents of young children: Emerging practices, current research, and future directions', *Early Childhood Research Quarterly*, vol. 33, pp. 21-32.
- Mieir, CA, Fitzgerald, MC & Smith, JM 2013, 'eHealth: extending, enhancing, and evolving health care', *The Annual Review of Biomedical Engineering*, vol. 15, no. 359, p. 82.
- Milgrom, J, Danaher, B, Gemmill, A, Holt, C, Seeley, J, Tyler, M, Ross, J & Ericksen, J 2016, 'Internet cognitive behavioural therapy for women with postnatal depression: A randomized controlled trial of MumMoodBooster', *Journal of Medical Internet Research*, vol. 18, no. 3.
- Moumtzoglou M 2018, 'Population health management and the science of individuality', *International Journal of Reliable and Quality E-Healthcare*, vol. 7, no. 2, pp. 1-26.
- Myers, CR 2018, 'Using telehealth to remediate rural mental health and healthcare disparities', *Issues in Mental Health Nursing*, vol. 40, no. 3, pp. 233-239.
- Ngala 2019, *Annual Review 2019*, viewed 29 May 2020 [https://www.ngala.com.au/wp-content/uploads/2019/11/NGALA\\_Annual-Report\\_2019-WEB.pdf](https://www.ngala.com.au/wp-content/uploads/2019/11/NGALA_Annual-Report_2019-WEB.pdf)
- Neter, E & Brainin, E 2012, 'eHealth literacy: extending the digital divide to the realm of health information', *Journal of Medical Internet Research*, vol. 14, no. 1.
- Owen, N 2020, 'Feasibility and acceptability of using telehealth for early intervention parent counselling', *Advances in Mental Health*, vol. 18, no. 1, pp. 39-49.
- Plunket n.d., *Our Story – Ngā Pūrākau a Whānau Āwhina* viewed 3 June 2020  
<https://www.plunket.org.nz/what-we-do/who-we-are/our-story/>
- Shore, JH, Yellowlees, P, Caudill, R, Johnston, B, Turvey, C, Mishkind, M, Krupinski, E, Myers, K, Shore, P, Kaftarian, E, Hilty, D 2018, 'Best practices in videoconferencing-based telemental health', *Telemedicine and e-Health*, vol. 24, no. 11, pp. 827-832.

- Shorey, S, Ng, Y, Ng, E, Siew, A, Mörelius, E, Yoong, Y & Gandhi, M 2019, 'Effectiveness of a technology-based supportive educational parenting program on parental outcomes (Part 1): randomized controlled trial', *Journal of Medical Internet Research*, vol. 21, no. 2.
- Smart, J 2018, *Digital technology use in the child, youth and family sector*, CFCA Resource Sheet – July, viewed 20 May 2020 <https://aifs.gov.au/cfca/publications/digital-technology-use-child-youth-and-family-sector>
- Speyer, R, Denman, D, Wilkes-Gillian, S, Bogaardt, H, Heckathorn, DE, Cordier, R 2018, 'Effects of telehealth by allied health professionals and nurses in rural and remote areas: A systematic review and meta-analysis', *Journal of Rehabilitation Medicine*, 2018; vol. 50, pp. 225–235.
- Thorne, S, Reimer Kirkham, S & O'Flynn-Magee, K 2004, 'The analytic challenge in interpretative description', *International Journal of Qualitative Methods*, vol. 3, no. 1, pp. 1-11.
- Thorne, S 2016, *Interpretive description (2<sup>nd</sup>ed)* Routledge, New York.
- Tresillian 2019, *Annual Report 2019*, viewed 29 May 2020 [https://www.tresillian.org.au/media/1941/tresillian\\_annualreport\\_2019\\_web\\_revised\\_jan14.pdf](https://www.tresillian.org.au/media/1941/tresillian_annualreport_2019_web_revised_jan14.pdf)
- Torous J, Jän Myrick K, Rauseo-Ricupero N, & Firth J 2020, 'Digital mental health and Covid-19: Using technology today to accelerate the curve on access and quality tomorrow', *JMIR Mental Health*, vol. 7, no. 3.
- Young, HM & Nesbitt, TS 2016, 'Increasing the capacity of primary care through enabling technology', *Journal of General Internal Medicine*, vol. 32, no. 4, pp. 398–403 .