Telepractice for children with complex disability

Guidelines for quality allied health services

Dr Monique Hines, Dr Kim Bulkeley, and Prof Michelle Lincoln
Wobbly Hub Rural Research Team
Faculty of Health Sciences
Sue Cameron and Simone Dudley
Therapy Connect
Telepractice for children with complex disability

Introduction

Telepractice is the delivery of assessment and therapy services at a distance by linking clinicians to clients, carers, or others, via technology such as web-based videoconferencing.

Telepractice has the potential to spread allied health professionals' (AHPs') reach further into rural Australia. AHPs play important roles in helping children with disability achieve their goals. There are fewer AHPs in rural and remote Australia compared to metropolitan areas. This means that children with disabilities living in rural areas may not receive the therapy services they need. Providing therapy services via telepractice could reduce these inequities and ensure that all children receive the supports they need, regardless of where they live.

Telepractice delivery of therapy services to children with complex disability is consistent with the principles of choice and control which underpin contemporary disability services. People with disability have the right to make choices about their life, including the services they receive. Yet, the reality is that in many parts of rural and remote Australia, there are not disability services and supports available from which to choose. Telepractice has the potential to provide people with real choices, regardless of where they or their preferred AHPs are located.

Telepractice guidelines in allied health rightly insist that telepractice services should be equivalent in quality to those delivered in-person (Speech Pathology Australia [SPA], 2014). Therefore, telepractice services should not simply be an option of last resort, but should be a quality option for disability services. Yet, how can AHPs ensure that their telepractice services are equivalent in quality to those they deliver in-person?

As a first step towards exploring this issue, we conducted a research study funded by the auDA Foundation in 2016-17, and in partnership with Therapy Connect, a private allied health practice. We collected information about the allied health telepractice services received by four children with complex disabilities and their families living in rural or remote Australia. We found that AHPs, despite being geographically remote from children and families, could deliver services consistent with contemporary practice and supported children to achieve positive, functional outcomes. We identified the essential components of successful telepractice models needed to achieve real outcomes for children with disabilities through this and other research conducted by the Wobbly Hub Rural Research Team. Our key learnings from this research informed the development of guidelines for telepractice delivery of allied health services to children with complex disability, as summarised in this document. Quotes from parents and AHPs interviewed as part of this research are included to illustrate each point.
Guideline 1: Quality telepractice is founded on person-centred practice

Telepractice for children with complex disability must be consistent with person-centred approaches, just as one would expect from in-person therapy services (Early Childhood Intervention Australia [ECIA], 2016). To achieve this, AHPs must make sure the person with a disability and their family and carers are the centre of decision-making about the services and supports they receive.

Selection of specific telepractice components are driven by the goals of the child and their family, their needs, their preferences, and the resources that are available to them. No two telepractice service delivery models may be the same. Some telepractice models could involve sessions conducted in the family home, at school or preschool, or in another local community venue with the required technology such as a public library or early childhood clinic. Telepractice sessions could be supported and attended by parents or carers, allied health assistants or teachers’ aides, teachers, older siblings and members of the extended family, disability workers, or elders in the community. Children with a disability may be supported to interact directly with the AHP via online activities, but alternatively, AHPs may coach a parent or other significant person to implement therapy-based activities with the child. In this way, telepractice services can be tailored to the individual child and their family.

Case example: Occupational therapist describing her approach in telepractice:

“I think that it’s so individual. So for each child, their individual goals and the family’s goals are going to obviously design the therapy plan, which in turn designs what resources you use and what approach you work with.”

Case example: Parent negotiated weekly telepractice sessions for her son to be conducted at his school during the morning:

“Morning sessions are better for my son because after school he’s really tired. He wouldn’t take anymore. So my child’s speech pathologist suggested ‘Why don’t we do it in the school then? If the school agrees, we can do it over there.’ That’s why I went to school and talked to them.”

Case example: Parent describing why home-based telepractice sessions best met her son’s needs:

“Being in his home environment, not having the stress of getting to an appointment, or being in an unfamiliar space, put him in a relaxed frame to better receive help with anxiety because he wasn’t at a heightened state of anxiety to start with.”

Guideline 2: Telepractice is relationship-based

Quality telepractice is underpinned by AHP’s relationships with others—children with complex disability, their family members, and a range of other people central to the child’s life. Rather than compromising therapeutic relationships, quality telepractice is enabled by, and builds strong, collaborative relationships.

Many AHPs are initially concerned about the impact that telepractice may have on therapeutic relationships with children, however those with experience in telepractice do not report major concerns, even reporting success in engaging shy children, or children with autism in therapy tasks (Hines, Lincoln, Ramsden, Martinovich, & Fairweather, 2015). Further, research has shown that there is no difference in the quality of therapist-child relationships developed online with those developed during in-person therapy sessions (Freckmann, Hines, & Lincoln, 2017).
**Case example:** Parent of a 5-year-old son with autism spectrum disorder commenting on her son’s rapport with his occupational therapist:

“I was concerned with it not being face-to-face, but I think he’s actually getting lot more out of it now, even though it’s via teleconference. I really think that his therapist is very attuned to my son and very in tune with his needs. That puts me at ease as well, knowing that he’s developing a good rapport with her.”

In order to develop rapport with children during direct therapy sessions, AHPs may need to tailor their approach for each child, and incorporate children’s interests into therapy activities to increase engagement (Hines et al., 2015).

**Case example:** Occupational therapist describing how she worked with a child with autism who was initially disengaged in telepractice sessions:

“That provided me an opportunity to talk to Mum about how to engage him in activities that are challenging, and that’s when we discovered the power of a visual schedule. That was very successful. That opportunity also allowed me to ask Mum about his specific interests. She told me that he loved cogs. I spent some time researching cogs and I found a lot of interesting fine motor play that had a cog basis that I could email Mum. She had them printed and laminated so we were really, really organised with his preferences. The next session was a lot better and we didn’t have a problem from then on.”

Telepractice makes use of strong collaborative relationships with familiar people in a child’s environment. Being remote from the child, AHPs often employ coaching approaches, training the child’s parent or other familiar person to implement intervention strategies in the child’s natural environment. This is consistent with contemporary disability practice, emphasising approaches that build the capacity of familiar people in the environment to meet the child’s needs and support their learning (Early Childhood Intervention Australia [ECIA], 2016).

**Case example:** Speech pathologist describing parent’s role in telepractice therapy program:

“She was the agent for change, I suppose you’d call it. It was a lot about me giving her advice. If they were reading a book together, I could suggest the questions that she might ask. And then she could practise that and I could give her some feedback. So a lot of goals have been around teaching her how to question and model language to her son.”

**Case example:** Parent commenting on the benefits of a coaching approach:

“This is very new to us, what to do, how to help my son. Before the first two or three sessions, I was getting emotional. I didn’t know what to do. I didn’t have any idea. But now I’m learning how to read to my son, how to write with my son, how to ask him questions, how to interact. Everything—every single thing. I learned quite a lot from the speech pathologist actually. I am feeling more confident in helping him.”

Strong, collaborative relationships also assist AHPs to overcome many challenges presented by working from a distance. For instance, AHPs may need to work with carers, teachers, or therapy assistants to negotiate access to the required technology; gain more information about a child’s functioning in their everyday environment; better understand a child’s strengths, needs, interests, and preferences; and to ensure that therapy strategies are incorporated into children’s everyday routines.

**Case example:** Occupational therapist describing how working closely with a parent enabled her to overcome challenges of not being in-person:

“The mother was my eyes and my feedback mechanism for looking at the child’s fine motor skills. In this setting, I would often ask mum for feedback on posture and positioning. When I’m working on handwriting, quite often I will get the parent to manipulate the camera angle downwards. So I can see hands and the paper really clearly, but I can’t see faces and posture. In that instance, I’m asking parents to check things like stabilising hand posture and then likewise when the camera’s back up, the mum might be looking at what is going on right down at the hand level.”
Guideline 3: Technology is simply the vehicle for service delivery

The core of successful telepractice is not the technology that is used, but rather, the quality therapy service that it enables. Technology is simply the vehicle, or the tool used to deliver therapy. As when delivering in-person services, AHPs uphold ethical practice standards, and adhere to relevant policies and guidelines regarding safe use of technology, privacy and confidentiality (Canadian Association of Occupational Therapists [CAOT], 2011; Speech Pathology Australia [SPA], 2014).

Since technology is simply the tool used to deliver services, parents’ and carers’ evaluations of telepractice largely focus on the quality of the therapy and the skills of the AHP rather than their assessment of the technology used. In particular, parents highly value the timely, responsive, and regular access to expert disability support that is enabled by telepractice. Occasional glitches with technology may be inevitable, but they are not necessarily deal breakers (Lincoln, Hines, Fairweather, Ramsden, & Martinovich, 2014). In fact, AHPs who deliver telepractice services do not routinely identify as having advanced skills with technology, and neither do the families they work with.

Case example: Parent commenting on ease of use of technology:

“Telepractice was wonderful. I’m not the most technically-minded person, so playing with laptops, playing with different computer programs to do the meeting was quite an experience. It was a lot easier than I expected.”

Guideline 4: Quality telepractice utilises multiple technology modes

AHPs may use a combination of different technologies to deliver telepractice services. These may include real-time videoconferencing, telephone, email, apps, instant messaging, and asynchronous video, photos, and audio clips. Multimodal use of technology helps AHPs tailor intervention to children’s preferences, interests, and needs, and develop strong partnerships with others by providing a sense of AHPs’ presence and accessibility despite being remote.

Case example: Occupational therapist describing her multimodal use of technology:

“Quite often, the child’s mother would be taking photos of her daughter whilst we were in the middle of a session, texting them to me so I could exactly see her handwriting. Sometimes I think the mother might have even taken a little video of her daughter and texted that. So texting whilst we were videoconferencing at the same time was really effective. I could then save those images straight into her file from my phone because we have cloud-based practice management software. That was easy for me to do.”

Use of different technology modes may also help to circumvent challenges such as insufficient internet connectivity. For instance, certain low bandwidth videoconferencing platforms may be more suitable for working with families who live in areas that have slow internet connections. Similarly, use of audio-only conference calls, telephone, text messages, or email may be sufficient to meet the goals of therapy sessions that would otherwise be cancelled due to insufficient connectivity. As outlined in Guideline 1, person-centred practice underpins selection of technology platforms. This therefore requires AHPs to critically analyse situations and work with families to identify the best fit of technology solutions.

Case example: Parent describing how digital resources were incorporated into her son’s therapy program:

“It was like a video game that he was playing. That was really engaging for my son, which really helped with keeping him present in that situation.”
Guideline 5: Excellence in telepractice is enabled by skilled allied health professionals

Strong professional skills adapted to the telepractice setting are the foundation of quality telepractice. These professional skills in many cases are common to those required to achieve quality in-person services and help to support positive outcomes for children and their families, despite being geographically separated from their AHPs.

Communication skills, in particular, are a cornerstone of successful telepractice (Hines 2015). When coaching people to build their capacity to support a child with disability, AHPs need to clearly explain intervention strategies, and provide specific feedback. Since the team involved in supporting the child may include a dispersed range of people, including parents, teachers and teachers’ aides, allied health assistants, other AHPs, and disability support workers, AHPs engaging in telepractice also need to establish clear communication processes to support the wider interdisciplinary team.

Case example: Occupational therapist describing the importance of interdisciplinary communication in telepractice:

“Good communication is really important, especially with a child with complex needs. We all need to take a consistent approach. It’s not just the mum or it’s not just the learning support assistant that needs to know about what we’re doing and what our goals are. So I think emailing, keeping everybody informed about what’s happening and what our goals are, helped them to implement other strategies day to day in the classroom.”

Barriers created by less-than-ideal technology may often be overcome by AHPs’ advanced communication and problem solving skills, especially when technical issues arise in the course of a telepractice session. Effective communication skills allow AHPs to work with the person supporting the telepractice session on the remote end to identify the cause of any technology issues, to work with them in selecting the most appropriate solutions, and to provide specific instruction on how to rectify these issues.

Case example: Speech pathologist describing how she overcame the challenge of slow internet speed:

“The school’s internet was atrocious at the start. It was harder to share the screen. Because there was often a lag, the types of things I used on the screen were too slow and he couldn’t hear what I was hearing at the same time. So we just did a lot more low-tech things. It meant that I sent emails with therapy activities and the teacher’s aide would print those off. The low-tech activities were just as engaging for him really.”

Case example: Teacher commenting on how working with an occupational therapist enabled them to successfully work around inadequate internet connectivity:

“Videoconferencing has worked, except last week we did have a bit of a hiccup. We didn’t have any screen but we had audio. The plan B was that the occupational therapist would just talk us through [the activity] and she would guide me. She couldn’t see what the child was doing; she relied on me to be able to tell her what he was doing. That is not ideal, but I believe she felt confident with me because we built up that rapport; obviously she felt confident that I knew what I was doing. It was a good session and we got a lot out of it.”

Preparedness and adaptability are also critical to achieving positive outcomes in telepractice (Hines et al., 2015). AHPs need to let the person who will be supporting the telepractice session on the remote end know well in advance what is planned for the session, including the resources, toys, or equipment that will be needed to achieve session goals. Similarly AHPs need to be well prepared for telepractice sessions to ensure they can maintain the attention and focus of children during sessions. Preparedness also means that AHPs have back-up plans and necessary resources ready to support a change of approach when needed. Flexibility is
especially needed when addressing issues that may arise during a session, such as engaging children in therapy tasks and resolving issues with technology.

**Case example:** Parent explaining why it is important that parents and AHPs are well-prepared:

“We make sure we’ve got the session planned beforehand. That way, I’m not trying to go find [the resources and equipment] at the last minute… I will have it all written down so I know, for instance, that play dough is first and then we might do some cutting. Okay then, that means I will need to make sure I’ve got pen and paper. The occupational therapist gives me heaps of notice in terms of what I need to get, which is great.”

**Case example:** Parent describing how her child’s occupational therapist needed to demonstrate flexibility during telepractice sessions:

“She had to be a lot more flexible if the jar of play dough I had in my hand had completely dried out. Unfortunately we can’t do play dough, so we rolled tiny bits of crepe paper to make little balls instead.”

**Guideline 6: Success in telepractice is enabled by a ‘proof of concept’ demonstration phase**

Telepractice is emerging as a service delivery option in disability and is still very new to service providers and consumers alike. As a result, many parents and carers may be unclear about what to expect and how sessions are carried out, and may even be skeptical about whether it is an appropriate option for their child. They may be unfamiliar with the coaching and capacity building approaches commonly utilised in telepractice, and how these are consistent with best practice. Other people, such as teachers, therapy assistants, and disability workers, who may be crucial for successful telepractice outcomes, may hold similar reservations.

As a result, AHPs may need to convince others of the feasibility and potential of telepractice by completing a ‘proof of concept’ phase. By providing a demonstration of telepractice, AHPs can work with key players to identify and trial different telepractice components, such as various locations, technologies, intervention approaches, and communication strategies across the wider team. This demonstration phase also provides AHPs with an opportunity to build collaborative relationships with individuals who later may be essential to successful implementation.

**Case example:** Parent describing the importance of a trial session before the start of the telepractice program:

“Well, initially we didn’t know how it would work. I hadn’t actually heard of it in terms of occupational therapy before hearing about [this service]. We do Skype to relatives overseas but I was like: ‘Ooh how’s this going to work?’ I actually had a session with her to start with before we had a session with my son, discussing the whats and ifs and hows and all that sort of thing.”

**Case example:** Teacher describing the value of having preliminary discussions with an occupational therapist to discuss how sessions would be carried out:

“We did have a conversation, a really great probably 40-minute conversation before the therapy program started about what it would look like, and the purpose, so I had this set up. The admin conversation before was great. It was valuable. Making sure we were on the same page.”
Guideline 7: Successful telepractice is enabled by essential ‘behind-the-scenes’ work

Success in telepractice includes what happens during the telepractice session and what happens outside billable occasions of service. AHPs may need to invest additional time and resources in order to achieve positive outcomes for children via telepractice. For instance, consultations conducted via telephone, email, or video conferencing may be needed to develop strong, collaborative relationships with the people who will be critical to the success of telepractice for any individual child (Lincoln et al., 2014). This could include contact with a range of people, from parent and carers, through to teachers and IT staff in local community venues. AHPs may also need to schedule time for regular communication with members of the wider team in order to keep them informed about client progress.

**Case example:** AHP describing the importance of investing in behind-the-scenes work to facilitate positive outcomes:

“In telepractice, the level of what I call input for the back story: establishing the connections and the relationships, offering the initial consultation at no cost to demonstrate how we work, and then the time necessary to build connections with the school and meet with the teacher—that was all at no charge. I think that you just have to invest in those relationships and those connections to really get the most out of telepractice.”

In addition, AHPs may need to spend time researching available technology options in the child’s local community, learning how to use new technology platforms, and checking the internet speed and preloading therapy activities immediately prior to conducting a telepractice session. To meet specific needs of children and their families, AHPs may also need to spend time identifying additional online and electronic resources; and preparing, purchasing and/or mailing physical resources for use during telepractice sessions.

**Case example:** Occupational therapist describing importance of keeping up-to-date with advancing technologies:

“I’m always trying to find something new. Sometimes you try things and they might appear to be amazing. I’ve got a classic example: I bought a mouse pen, thinking that when I’m screen sharing it would allow me to use the pen as a mouse so that I can demonstrate letter formations, for example, on a screen with lines of paper that I’m sharing. But you know, it just hasn’t been a great tool. It just isn’t efficient, and so I’ve thought okay, that’s good to know. We’ll go back and try something more traditional approach until I get the next idea.”

It is true that some of these tasks are not unique to telepractice, and may be necessary for successful in-person therapy services. However, this additional investment may be even more critical for telepractice, given the unique challenges that arise from AHPs’ lack of physical presence in the child’s immediate environment. Time spent outside of billable occasions of service needs to be reflected in telepractice business models, in recognition that these tasks are an essential part of achieving quality services. Systematic collection of data related to the time AHPs spend in client-related activities may help to identify viable business models for telepractice, and help to identify solutions that improve efficiency without compromising quality of telepractice services.
Conclusion

Telepractice for allied health therapy services promises to enable accessible care for children with disabilities living in rural and remote areas. The available evidence suggests that quality telepractice can support person-centred approaches consistent with contemporary disability practice, and is enabled by skilled AHPs who develop strong partnerships with parents, carers, and others in delivering services. Yet, for most AHPs, telepractice for delivery of therapy supports to children with disabilities is an unfamiliar and as yet, largely untested service delivery model. It is our hope that the practical information and exemplars of good practice contained in these guidelines will assist AHPs to understand how they can make telepractice a success, and help to dispel any reluctance to adoption. In this way, we hope to contribute to sustained practice change that sees telepractice realise its potential in equalising access to therapy supports in rural and remote Australia.

References


For more information
Please see the related project brief “Telepractice for children with complex disability: Quality service delivery”, available for download here: http://hdl.handle.net/2123/17243

Or contact the Wobbly Hub Rural Research Team:
Faculty of Health Sciences
T +61 2 9351 9034 | E kim.bulkeley@sydney.edu.au
sydney.edu.au/health-sciences/research/wobbly-hub/