Telehealth services supporting allied health work-integrated learning: A pilot study

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This study aimed to explore the experiences and support needs of allied health students undertaking WIL with established and ongoing telehealth services. Semi-structured qualitative interviews of allied health students (n=10) and clinical educators of allied health students (n=8) were undertaken. Data were subjected to reflexive thematic analysis. Four themes were constructed from the data: 1) Additional benefits through telehealth, 2) Adapting for a unique type of practice, 3) Reflecting on students' clinical learning progression, and 4) Modes of supervision and feedback. The features of telehealth that were perceived to be beneficial included the ability of clinical educators to provide covert supervision and immediate feedback without interrupting the session. Limitations of the research include the small sample size. Recommendations are made to support WIL where telehealth services are used, specifically recommending the use of video resources of previously recorded telehealth to support students learning.

In Australia, the COVID-19 pandemic resulted in a significant expansion of telehealth service delivery to respond to social-distancing restrictions. Telehealth refers to the provision of healthcare remotely in real-time, through methods such as audio calls or videoconferencing (World Health Organisation, 2016). Despite established feasibility and effectiveness of telehealth, traditionally there has been a relatively low uptake across healthcare settings (Charters et al., 2022; Wade et al., 2014). The COVID-19 pandemic has led to a significant increase in clinician acceptance of telehealth and acknowledgement of the efficacy of telehealth, as well as recognition of the unique advantages of telehealth in achieving accessibility (Cheng et al., 2021; Pit et al., 2021).

As part of the increased uptake of telehealth secondary to the COVID-19 pandemic, a significant portion of health professional students' work-integrated learning (WIL) was moved online (Bacon et al., 2022; Bridgman et al., 2022; Filbay et al., 2021; Learoyd et al., 2022; Lyons et al., 2022; Pit et al., 2021). Approaches to WIL that were adopted included telehealth services where the student videoconferences from their own residence or attends a clinic setting to videoconference a client in a remote location. Allied health students' experiences of this rapid transition to telehealth for WIL have been documented

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in the extant literature (Krahe et al., 2021; Lawton et al., 2021; Ross et al., 2021, 2022; Salter et al., 2020). Challenges identified by allied health students include perceived difficulty with adapting their assessment and treatment to online settings (Ross et al., 2021), adapting their communication skills (Ross et al., 2021, 2022), and technical challenges such as operating videoconference platforms or troubleshooting connectivity issues (Ross et al., 2021). Suggested approaches to supporting allied health students during this rapid transition included appropriate orientation to the technology required (Salter et al., 2020), assistance in setting up the client's environment (Ross et al., 2021), and strategies for communication adaptations (Ross et al., 2021, 2022). Since the rapid shift to telehealth service delivery during student WIL, there has been an increased focus on health professional education curricula that specifically addresses preparation of students for telehealth within the classroom, prior to WIL (Davies et al., 2023; R. Martin et al., 2022a). However, yet to be explored are the experiences of students undertaking WIL via telehealth, since telehealth has been more commonly introduced to health professional education curricula.

Despite there being a large body of research regarding the rapid move of health services to a telehealth setting during student WIL, the majority of this research focuses on temporary strategies applied by clinical educators (CE) and organizations (Salter et al., 2020) and the acceptability of telehealth as a rapidly implemented alternative for WIL settings and services (Krahe et al., 2021; Lawton et al., 2021; Ross et al., 2021). There was some research undertaken regarding students experiences of telehealth prior to COVID-19 (Serwe et al., 2020), however there has been significant societal shift since the pandemic with telehealth now permanently included in Australian primary healthcare (Department of Health and Aged Care, 2021). The experiences of students engaging in WIL where telehealth services are established and ongoing following the changes caused by COIVD-19, presents as a gap in the literature. Furthermore, the support needs of students during 'usual times,', i.e., following the turbulent expectations of the COVID-19 pandemic, are not known. This gap is acknowledged by the preceding research, which recognizes the lack of longevity in their findings beyond the rapidly changing context of COVID-19 (Brownie et al., 2022; Pit et al., 2021; Ross et al., 2022).

As of January 2022, the Australian government subsidized Medical Benefits Schedule confirmed the ongoing provision of telehealth services following their rapid and temporary inclusion during the first years of the COVID-19 pandemic (Department of Health and Aged Care , 2022). This approach, combined with the sustained uptake of telehealth, the use of telehealth for WIL and the need for allied health clinicians to be proficient in telehealth service delivery can be assumed to continue similarly. With limited understanding of the support required by allied health students for undertaking WIL where telehealth services have become the norm, further research is warranted. Therefore, the purpose of this study was to explore the experiences and support needs of allied health students for undertaking WIL where telehealth is an established and ongoing approach to health service delivery.

METHODS

Semi-structured interviews were undertaken with allied health students and clinical educators of allied health students to explore perceived support needs for engaging in WIL settings where telehealth services are established and ongoing. Semi-structured interviews were chosen as the qualitative methods with consideration for the appropriate depth of response that they facilitate (Patton, 2002) and consideration of the resources available to the authors at the time. Participants were recruited through the professional networks of the researchers. Interviews were conducted in 2022, which was the year when the majority of COVID-19 restrictions were no longer relevant in the state that the University is based in. Initial thematic analysis was undertaken with subsequent thematic networks to triangulate

stakeholder perspectives (Attride-Stirling, 2001). Ethical clearance was obtained from The University of Queensland — Institutional Human Research Ethics, project number 22022/HE000257.

Participants

A purposeful and snowballing strategy was used to recruit allied health students and clinical educators of allied health students. Students invited to participate had either undertaken WIL that was entirely via telehealth or had undertaken WIL that included telehealth. The WIL that was entirely telehealth included both remote attendance by the student and in-person attendance to access telehealth facilities. Student participants were required to have completed a minimum of five weeks WIL to ensure that they had adequate experiences to reflect on. Clinical educators invited to participate were required to have supervised at least one student during WIL that included telehealth, following of the COVID-19 lockdown periods.

Potential participants were identified as individuals who met the inclusion criteria within the professional networks of the research team. Clinical educators in speech pathology, physiotherapy and occupational therapy who were identified as potential participants included colleagues who had previously worked with members of the research team. Students in speech pathology, physiotherapy and occupational therapy who were identified as potential participants included those who were attending WIL that featured telehealth services organized by university clinical education liaison managers at The University of Queensland. Approximately 200 students enrolled at The University of Queensland, across the professions identified above, were emailed and asked to reply if they met inclusion criteria. Student and clinical educator participants were not required to have undertaken clinical placement together to be included in the study. Potential participants were contacted via a singular email, that outlined the aims of the research and included a participant information sheet. If the potential participant replied, then a mutually convenient time for an interview was arranged. All participants provided written informed consent.

Data Collection

Semi-structured interview guides were created for both allied health students and clinical educators of allied health students (see questions below). The interview guides were informed by a review of the literature, the experiences of the research team teaching telehealth content to allied health students prior to WIL, and the research questions. Student interviews were conducted via telephone and recorded using a second electronic device. All student interviews were undertaken by the lead author (RM) who was not involved in the students' WIL. Clinical educator interviews were conducted via telephone or videoconference, based on the preference of the participant. Interviews with clinical educators were conducted by an author of the same professional discipline as the interviewee, for the disciplines of physiotherapy (RM), speech pathology (AP), and occupational therapy (FP). None of the authors who conducted the interviews were involved in students' WIL.

Student Interview example questions

1. Can you describe the telehealth services you have been required to use during WIL?
2. What was your experience when you started using telehealth?
3. Which aspects of telehealth did you required additional training in?
4. What do you think is the best way to prepare students' clinical skills in telehealth?
5. What have supervisors done to manage your training in telehealth?

Clinical Educator Interview example questions

1. Can you describe the telehealth services the students have been required to use during WIL?
2. What has been your experience of providing clinical education via telehealth?
3. What has been your experience of supporting students who are undertaking WIL via telehealth?
4. What support needs have students had when undertaking WIL via telehealth? Have these differed from the support needs for in-person WIL? How?

Data sufficiency was determined in part, by the availability of resources, and in part by the presence of recurring codes and themes as perceived by researchers. Interview data were transcribed verbatim by two of the authors (CN/YS) with the assistance of an online transcription service. All participants were provided with a written copy of their interview transcript to allow for member checking of the data. No changes resulted from this process.

Data Analysis

Reflexive thematic analysis (Braun & Clarke, 2022) was independently undertaken by two of the authors (CN/YS) supported by qualitive analysis software NVivo. The author who undertook the first independent analysis (CN) is a third-year student enrolled in a Bachelor of Physiotherapy. The author who undertook the second independent analysis (YS) is a second-year student enrolled in a Bachelor of Speech Pathology. The analysis process followed the six-step conceptual framework outlined by Braun and Clarke for reflexive thematic analysis (2022). Initially, both authors became familiar with the data during the transcription process. A first round of coding of the data was then undertaken to identify recurring ideas and patterns of shared meaning. NVivo was used to support the generation and organisation of these codes. Themes were then identified by both authors. A third author (RM) was then included in the analysis process to assist in reviewing, defining, and naming themes. The third author involved in the analysis process (RM) is a teaching and learning researcher with four years of qualitative research experience, who was familiar with the data from data collection. The three authors (RM/YS/CN) met to discuss similarities and differences in the independent analyses and to triangulate the stakeholder perspectives. Following the refined naming of the themes, the full research team reviewed the results of the analysis process. The research team included a breadth of experiences ranging from undergraduate students to clinical education managers and lecturers across the disciplines of physiotherapy, occupational therapy, and speech pathology. The diversity of experiences present within the authorship team will have impacted the results of the analysis, given the inherent relationship between the researchers that interpret data and generate qualitive results.

Efforts to ensure trustworthiness of the research process were informed by Lincoln and Guba (1985), and included the recording of interviews, transcription using an online transcription service, member data checking, and the use of NVivo for data coding. Efforts to ensure the validity of the results included independent analysis by two researchers, and revisions of the results by the full research team. The some of the interviewees were known to some of the interviewers secondary to teaching and learning efforts at the University, and the interview guide was adhered to in efforts to reduce this bias.

RESULTS

Ten (n=10) interviews with allied health students and eight (n=8) interviews with clinical educators of allied health students were undertaken in 2022. Demographics of the sample are available in Table 1.

TABLE 1: Participant demographic information.

Demographic	Student n (%)	Clinical Educator n (%)
Discipline		
Physiotherapy	1 (10%)	2 (25.0%)
Speech Pathology	5 (50%)	3 (37.5%)
Occupational Therapy	4 (40%)	3 (37.5%)
Gender		
Female	9 (90%)	
Male	1 (10%)	
Other	0 (0%)	
Prefer not to say	0 (0%)	
Age (mean)	30.6 (21 – 53yrs)	
Program		
Bachelor	8 (80%)	
Master	2 (20%)	
Total	10	8

The student interviews were an average of 18 minutes. Student participant details are outlined in Table 2 below

TABLE 2: Student participant details.

No.	Discipline	Gender	Age	Program
1.	Physiotherapy	Male	21	Bachelor
2.	Speech Pathology	Female	53	Bachelor
3.	Speech Pathology	Female	53	Bachelor
4.	Speech Pathology	Female	22	Bachelor
5.	Speech Pathology	Female	25	Bachelor
6.	Speech Pathology	Female	23	Masters
7.	Occupational Therapy	Female	42	Masters
8.	Occupational Therapy	Female	21	Bachelor
9.	Occupational Therapy	Female	23	Bachelor
10.	Occupational Therapy	Female	23	Bachelor

The clinical educator interviews were an average of 25 minutes. Clinical educator participant details can be seen in Table 1 (Physiotherapy 2, Speech Pathology 3, Occupational Therapy 3).

Following analysis, four themes were constructed from the data: 1) Additional benefits through telehealth, 2) Adapting for a unique type of practice, 3) Reflecting on students' clinical learning progression, and 4) Modes of supervision and feedback.

Additional Benefits Through Telehealth

Students and clinical educators reflected that their experiences of telehealth during WIL provided insight to the benefits of telehealth as a method of service delivery. Students acknowledged that telehealth enabled service delivery for clients who may not be able to attend a traditional clinic. Additionally, students felt that telehealth can provide specific benefits such as insight into the client's home environment without the need for a home visit:

> I guess just getting out of that speak like "telehealth is useless" …you can actually achieve a lot of outcomes using telehealth. (CE#1)

> One of the huge positives… both of my aphasia telehealth clients could not have attended a clinic were it not for telehealth. *(S#4)*

> [Telehealth] has some really nice benefits, as opposed to only seeing [the client] in a clinic room and getting them to record what they're doing at home. (CE#4)

> You can actually do it in their own homes, which would be comfortable for [the client] using their own materials… That kind of changed my perspective of how much outcome we can get from online therapy. (S#8)

Clinical educators also acknowledged the learning opportunities facilitated by telehealth including the ability to easily create asynchronous resources, for example, videos of specific assessment and treatments, and opportunities for peer observation and feedback. Students were also able to undertake peer learning by watching pre-recorded telehealth therapy conducted by their peers and their clinical educators, without imposing on the client.

> We did have telehealth session recordings for [the allied health student/s] to watch before they deliver the sessions and heaps of themed sessions that they could work from, [which was] the most valuable thing to prepare the students I found. (CE#8)

> One of the benefits of being on tele- and particularly Zoom that we've been able to do is … we've gotten permission from the parents, recorded the sessions, shared the recordings with the speech team or vice versa. (CE#6)

The majority of students voiced that they had low or no expectations of telehealth as an effective method for service delivery prior to their WIL. Exposure to the service delivery benefits and the learning opportunities presented by telehealth contributed to the improved perceptions of the efficacy, feasibility, and importance of telehealth held by most students.

> When I first sort of started, I had the thought "oh you know, is what I'm going to be doing to be as effective as in-person?" "Oh, is this real therapy?"… once I got into it, I saw that, you're doing the same things, it's just a different platform. (S#3).

> I was surprised that it worked really well. I had one in-person client and then three tele-, and yeah, they all went really well. So, I was really happy with it. (S#1)

Adapting for a Unique Type of Practice

Multiple adaptations required for telehealth practice were noted by both students and clinical educators, and these were viewed to be one of the main challenges for students on WIL. Communication and rapport building were discussed as the major adaptations required for effective practice via telehealth compared with services provided in-person. Students reported that their clinical educators provided guidance and support for appropriate non-verbal communication via telehealth, for example, their positioning in the camera's frame.

> We did build a bond with the client, but it was extra work than you would if you were sitting face-to-face with someone. There was the extra stress "Oh my gosh, I've got to follow my therapy plan but no, I'm distracted by trying to look at the camera," and then you're missing out on seeing what the client's doing. (CE#3)

> We always learned how to… use yourself and how we interact and engage children and parents in the room together while we play or do any activity. But given that we're doing it through online just computer, it really requires to use our body language or more exaggerated facial expressions to help engage through the screen with the children. (S#10)

> I do think that you have to connect with clients in a different way and communicate with them differently online versus in-person. (S#5)

Outside of direct client contact, students and clinical educators reflected on the significant workload and resources required for effective therapy delivery via telehealth. The planning that was required included structuring the session and sharing resources with the client or the therapy assistant who was attending the telehealth session with the client prior to the session beginning. Due to the requirement to pre-plan telehealth therapy, students felt that they were not able to be as flexible with the structure of their therapy sessions and they could not deviate easily from the resources that they had provided to the client or the therapy assistant.

> The way the tele-rehab clinic worked was that we have to send in our plans two or three days before so that the teacher aide on their site can prepare it, can print it. That limited what I can do and adapt on the spot. Especially since I know they won't have as much access to the resources that we may have as compared to our face-to-face intervention. (S#8)

> A major difference … would be being able to change things at the last minute or being able to bring in activity that you think would be really beneficial for the child … you can't really do that with telehealth because you have to send everything first. (S#9)

Students felt that the planning required prior to each telehealth session was significantly more than their previous experiences of traditional WIL, due to the requirement to share resources with the client or therapy assistant. Students also reflected that the recording of telehealth therapy sessions for additional resource development, feedback, or ongoing analysis of client data further contributed to their perceived sense of increased workload. For some students this perceived increase in workload created stress and frustration.

> Not only am I talking about the self-reflections, on top of that, we had to analyze client data and do transcriptions, which would take hours to analyze … Let's say I did a session with my client,

and I had to rewatch and transcribe the whole session, figure out the type of stutter, how many syllables per minute. (S#2)

A standout skill that was developed through telehealth practice was the ability and comfort in directing other professional staff to assist in the telehealth consultation with the client. The role of the therapy assistant was often assumed by a teacher, teacher's aide, or allied health assistant and students were acutely aware of acknowledging the professional knowledge of the therapy assistant and their own roles as novice learners. Students reflected on the two-way nature of the telehealth session, as both the students and the therapy assistants were learning from each other. Clinical educators felt that this skill contributed towards students' development of their professional identity.

> The role of the OT that I had to be trained in was to coach the teacher's aide as to how they can help the child. So, it's a bit complicated for that dynamic … I am leading the session in essence and trying to have my intervention with the child, but also have that coaching component, which is something that my CE gave me big feedback for because I wasn't the most comfortable with engaging someone older than me, someone more experienced than me. (S#8)

> At the beginning, I felt it a little bit tricky of explain to the teacher how to position [the child] properly … it was strange because you want to talk straight to the kid but you have to talk to the teacher. (S#9)

> The teaching assistant doesn't necessarily know what kinds of things OTs are looking for or want so, they're not necessarily doing things the way that you want them to … so you have to find a way to say it politely in the session … If you're trying to give them a cue and they're not picking up on it or they're still doing the same thing, you don't want to be nagging them. (S#7)

Reflecting on Students' Clinical Learning Progression

Students and clinical educators reflected that telehealth practice helped facilitate other facets of students' development, including their clinical efficacy in face-to-face practice, their use of language, and their rapport building and engagement skills. Students reported that their skills developed despite an original perception that telehealth would not be valuable for skill development.

> I guess our feedback often in a face-to-face session is more about "how you positioned yourself? How did you position the patient?" Whereas the telehealth one is more about "what language did you use? How else could have you have said that?" (CE#2)

> [Telehealth] actually helps [students] build up their skills a bit more because a lot of times, we're so used to feeling things but also, it's those nonverbal cues and objective signs that they become a lot more adaptive because you actually have to focus a lot more. (CE#1)

> It's important for us as supervisors to talk about the benefits of tele because often the students will bring "oh, it's tele, it's not in-person and I really need that in-person experience to develop my skills, I'm not going to get it through tele." (CE#4)

One challenge noted by clinical educators was difficulty in distinguishing whether a poorly performing student was not demonstrating competence in a skill, or if the student was competent in the skill, but was struggling to transfer the skill to the telehealth format.

> I've definitely seen clinical skills that they're demonstrating face to face, say, in grading an activity, considering the environment. They've developed that skill but throw that skill on to telehealth and try to get that generalization of this skill and it's not necessarily there. Whether that is to do with the anxiety of the mindset of "telehealth is something different" or whether it's an actual clinical lack of the generalization. (CE#7)

Another challenge noted by educators was professional behavior via telehealth, as some students did not appropriately translate the expected standard of professional conduct to the online setting, for example, conducting therapy sessions with 'unmade beds in the background' (CE#7). Reduced professional behavior in telehealth clinics was also noted:

> I really found a difference in professionalism and the way [students] presented themselves or conducted themselves in the office if there wasn't a supervisor speech pathologist there, but there were other support crew members. (CE#6)

> There is no different expectation. If I request you wear your uniform to placement, wear your uniform on telehealth. Consider the environment of telehealth just like you would consider the environment of a clinic room. Show up to the Zoom room on time in the same way that you would show up to the therapy session on time. There are just little niggly things, you would assume it is unspoken, but my experience has been that we have had to have firm conversations around professional etiquette on telehealth platforms. (CE#8)

Modes of Supervision and Feedback

A significant difference from usual face-to-face WIL was the capacity for clinical educators to provide supervision either overtly with their video camera turned on, or covertly without their camera turned on, both in real-time.

> The majority of the sessions where we were doing supervision by Zoom, we would hide ourselves unless it was a situation where I might have needed to jump in. (CE#3)

> I'm just doing it in my room, but having the CE always sit in the session even though it's hidden from the [primary school] student on the screen. (S#10)

For students who were undertaking telehealth from a clinic, supervisors were able to provide similarly overt or covert supervision by positioning themselves on or off camera in the physical room in which that the student was conducting the telehealth.

> Most of the time I would say she would be either in the observation room or she would just listen from outside, at the door. (S#5)

A major feature of supervision noted was the use of the online "chat" function, whereby clinical educators were able to provide immediate discrete feedback to their students without interrupting the session and without the knowledge of the client. Students and clinical educators felt that feedback in this form was less likely to disrupt the therapy. The chat function was also discussed by students as a useful tool for requesting assistance from clinical educators during the therapy sessions:

> It really helps but they just pop-up questions on the chat box ... feedback right on the spot so that helps us to keep on time or how to adjust how we say the thing next time. (S#10)

> Students always appreciate the live coaching because it gives them the opportunity to implement the feedback as soon as it's received … It might be another two weeks before they given the opportunity to demonstrate implementing that feedback. (CE#7)

> We use the chat function and that just worked so well because you imagine if a student is working in a session and the CE walks in the room … and the student freezes … throughout the session I could give ongoing feedback … and you can just see them set up with confidence. They knew that what they were saying was the right thing because I prompted them … students really benefited from that, and we had good feedback. (CE#8)

Students and clinical educators voiced that the use of the chat function for feedback and covert supervision with the clinical educator's camera turned off increased the student's sense of autonomy as the treating clinician and improved the client's perception of the student's ability to provide the therapy. The students attributed this to the ability of the clinical educator to guide the interaction without undermining the student.

> If it is one of those parents who already aren't trusting a student's ability, I'm less likely to live coach because I don't want them to feel like I'm questioning the student's ability by giving that live coaching. I always really pick my moments as to who's the client, who's the parent, what's the students anxiety level's like, is it the right time, but with telehealth it's easier to do so because I can jump off screen, I can quickly mute us, I can do all that without the client actually knowing that the live prompting is happening. (CE#7)

> I would set up my computer with me and the client … [the CE] was on the Zoom call and she could pop in and out as she wanted to but without interrupting at all. (S#10)

Overall, the use of the chat function was perceived as a benefit of delivering healthcare services via telehealth, as it facilitated positive experiences of prompting and coaching and was understood to increase students' confidence.

DISCUSSION

This study has explored the experiences and support needs of allied health students undertaking WIL where established and ongoing telehealth services are utilized. Both students and clinical educators reflected positively on the unique features of telehealth that were suited to clinical education and facilitated positive experiences for students and perceived positive experiences for clients. The features of telehealth that were perceived to be beneficial included the ability of clinical educators to provide covert supervision and immediate feedback in real-time to the student without interrupting the session. Educators encouraged use of video resources of previously recorded telehealth as learning resources to support allied health students undertaking WIL that includes telehealth services. Challenges of telehealth service delivery during WIL included developing skills in directing other professional staff, and workload challenges stemming from the additional preparation required prior to conducting telehealth therapy.

The findings of this study highlight the benefit of providing students with video resources of telehealth sessions that had been previously recorded, as these resources were perceived to increase students' confidence and preparedness to conduct telehealth therapy within their specific WIL setting. Allied health students undertaking coursework online have previously identified that short videos demonstrating clinical assessment and treatment techniques are beneficial for learning (Forbes et al.,

2021). The results of this current study also strongly support the use of video recordings of telehealth therapy during their pre-WIL university training. Immersive and realistic videos prior to WIL have been found to improve students' perceived competence for clinical practice in other settings, including rural practice (R. Martin et al., 2022b) and practice with people from culturally and linguistically diverse communities (Ward et al., 2018). Furthermore, clinical educators supervising students on WIL with established telehealth services are encouraged to provide training tools that include video resources during their orientation to WIL, to support student preparedness. Further research is warranted into how these video resources may be best used, so that students who utilize the training resources can practice adapting their telehealth therapy prior to their use of telehealth with clients.

When undertaking telehealth practice, both students and clinical educators had to adapt their skills for a telehealth context. Challenges experienced by students in adapting skills were unsurprising, as telehealth specific skills adaptations are well documented in the literature regarding the rapid transition to telehealth during the COVID-19 pandemic (Brownie et al., 2022; Krahe et al., 2021; Lawton et al., 2021; Ross et al., 2021, 2022; Salter et al., 2020). This current research supports the presence of similar challenges in WIL settings and adds to the existing research by highlighting challenges in settings where telehealth services are established and ongoing. Interestingly, clinical educators voiced that they had to adapt their usual approach to clinical education to support students' learning in this setting. One example of this phenomenon is the need for clinical educators to ascertain if the student lacked the clinical skill or lacked the ability to perform the clinical skill in the telehealth setting. Supporting students who are performing poorly during WIL and identifying non-telehealth challenges that may be contributing to poor performance is required in a timely manner. However, steps towards addressing a WIL challenge are often halted as clinical educators feel discomfort in actioning processes of support (Boileau et al., 2017). Whilst not explored in this current study, the impact of the telehealth interface on clinical educators' ability to identify and support struggling students presents as an area for future research.

Student and clinical educators in this current study voiced that their experiences of telehealth during WIL enhanced their understanding of the benefits of telehealth for both clinical service provision and clinical education. This outcome has been reflected in previous telehealth literature, which emphasizes that opportunities for experiencing telehealth during WIL increase students' intentions for future telehealth practice (R. Martin et al., 2022a; Ross et al., 2021). Interestingly, the experiences of using telehealth for clinical education align with the authors' understanding of constructivism as a theory for teaching and learning (Elliott et al., 2000). As suggested by Ausubel (1968) the most important factor influencing learning is what the learner already knows. Students in this current study felt that telehealth was an opportunity to build upon and strengthen their existing clinical skills, and that their perceptions of telehealth were significantly impacted by their firsthand experience during WIL. Future research is warranted into the long-term impact of experiences of telehealth during WIL on allied health professionals' practice.

The efficacy of tele-supervision (i.e., videoconference, phone-calls, emails) for the clinical education of health professionals has been previously established in a 2018 systematic review, which reported that it is a "feasible and acceptable form of clinical supervision if set up well" (P. Martin et al., 2018, p. 1). Both participant groups in this current study reflected positively on the unique features of telehealth that facilitated effective clinical education, and that were not features typically available during in-person WIL. For example, the ability of clinical educators to covertly observe therapy sessions in real-time was thought to provide the students with an increased sense of autonomy. A 2022 study of physiotherapy students and educators in Australia and the United Kingdom, conducted by Clouder et

al., explored similar concepts related to the development of autonomy during WIL. Clinical educators in Clouder et al.'s study voiced differing opinions on the helpfulness of observation and interruption during in-person clinical education. This current study identifies telehealth as a method that may overcome this challenge, as clinical educators may be able to more effectively balance timely feedback and student autonomy.

With regards to the timing of feedback, the use of the online chat function was perceived as a significant benefit by both students and clinical educators, as students were able to implement immediate feedback without the feedback undermining or interrupting the performance of the student. Ross et al. (2022) explored telehealth WIL during the COVID-19 pandemic and identified the use of the chat function as helpful for clinical educators to provide in-session feedback; however, they did not explore students' experiences of the chat function. Previous work by Ross et al. (2021) established student's perceptions of the chat box has helpful during therapy sessions however only for its use in trouble-shooting technical difficulties. In Hardavella et al.'s (2017) research regarding effective feedback for clinicians, they note that feedback in the presence of clients or colleagues can lose objectivity and may impact professional relationships. Clinical educators of allied health WIL that rapidly shifted to telehealth service delivery during the COVID-19 similarly found that they had more flexibility to provide shorter however more frequent supervision sessions with students (Salter et al., 2020); shorter and more frequent supervision sessions have been identified as effective tele-supervision practices (Chipchase et al., 2014; P. Martin et al., 2018). The value of immediate feedback in clinical environments is supported by the results of this current study, which further emphasizes the diversity of the methods that can be adopted to provide timely feedback. The experiences of students and clinical educators in this current research extend the understanding as to why frequent immediate feedback is desirable, particularly, the ability to implement feedback in real-time, and in the telehealth setting, without disrupting the client interaction.

A limitation of this current research is the demographics of the sample, as all participants were located within Queensland, with all student participants being from one university, and student participants having varied levels of exposure to telehealth. The composition and small size of the sample from each allied health discipline may limit the transferability of the results to broader contexts. Furthermore, the recruitment method of snowballing through professional contacts of the research team may limit the transferability of the results given that potential participants outside the networks of the authors were not included.

CONCLUSION

In this pilot study allied health students undertaking telehealth service delivery during WIL with established and ongoing telehealth services were found to have unique support needs to adapt both their clinical skills and their approach to professional practice in tasks such as directing other staff, managing workloads, and communication. Telehealth was perceived positively by allied health students and educators due to the unique features of telehealth that facilitated effective feedback and real-time support. Telehealth was perceived to progress student learning in a manner equal to in-person health service delivery and was viewed to be equally valuable. However, the requirement to direct other professional staff via telehealth, and the preparation workload associated with telehealth therapy were perceived to challenge students. Further research is required to establish the consistency of these findings amongst larger samples of students, and in other allied health cohorts.

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