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Telepractice implementation experiences during the COVID-19 pandemic, a qualitative exploration of Australian disability allied health providers: A diamond in the rough

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Abstract

Telepractice has existed for decades, but as a result of the COVID-19 pandemic, it gained value and increased desirability across the disability service and health sectors, as a mitigation strategy for the viral transmission risk. The increased desirability of telepractice encouraged organisations to invest and correspondingly enhance access to services delivered remotely via digital technology including allied health therapy interventions. The investment and uptake of telepractice provided greater learning opportunities and ability to investigate telepractice implementation in specific contexts such as disability services, enabling service providers the ability to tailor to specific population needs.

Methods: This study investigated the experience of telepractice implementation during the COVID-19 pandemic from 13 allied health clinicians and managers of disability organisations across Australia between November 2021 and February 2022. A contextualist and critical realist theory was applied through the study, with reflective thematic analysis used as the data analysis method and findings described using a metaphor method centring on diamond formation. The method selection aimed to produce findings grounded in qualitative methodology and methods while remaining accessible to the disability community.

Results: An exploration and analysis of the data by the authors identified six themes addressing the experiences of participants and used the metaphor of diamond formation to describe changes in allied health clinicians and disability organisations during the COVID-19 influenced telepractice implementation.

Conclusion: The allied health clinicians and managers who participated in this study demonstrated an overall sense of hope that telepractice would be a viable and sustainable delivery pathway for services in the future. This article endorses the integration of a planned telepractice delivery pathway that capitalises on the momentum created by the COVID-19 pandemic in a purposeful and accessible way that looks to enhance rather than replace current practices.

Keywords

Telemedicine, telepractice, implementation, telehealth, COVID-19, allied health, disabled persons, disability, Australia

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Introduction

The COVID-19 pandemic necessitated a rapid transition to remote delivery of services via videocall across a plethora of industries including health (Telehealth) and allied health services to people with disability (Telepractice). Introduction of an innovation such as telepractice within disability services does not occur without impacts from

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external factors. The implementation interacts with the internal and external contexts of each allied health service provider, the clients with disability engaging in the service being delivered, the organisation as a whole and wider societal situations such as the COVID-19 pandemic.

Internationally the systemic motivation of nations and capability of organisations to provide services via telepractice increased exponentially following the onset of the COVID-19 pandemic. A Camden and Silva[1] study of international paediatric rehabilitation therapists showed an increase in uptake of telepractice within their workplace from 4% to 70% between August 2019 and May 2020. In European nations such as Turkey, allied health professional bodies including the Turkish Association of Speech Language Therapists advised the temporary decommissioning of in-person services due to risk of viral transmission.[2] South East Asian countries were particularly focused on transition to telepractice during the onset of the COVID-19 pandemic due to improving access to smart phones, lower than recommended doctor to patient ratios and high risk aging populations.[3]

In response to these rapid changes and telepractice implementation, a large number of COVID-19 related publications were produced, including those which describe allied health therapy provision and services accessed by people with disability. Multiple large survey studies have assessed the early experiences of specific clinical professions such as Boey and Lefevere[4] and Fong, Tsai[5] in speech pathology, by Abbott-Gaffney, Gafni-Lachter[6] in occupational therapy and Malliaras, Merolli[7] in physiotherapy. A series of articles by Lawford et al.[8,9] explored the wider population level uptake of telepractice by people with disability accessing services in Australia, and subsequently in those who experienced poor outcomes what factors may have contributed. In addition to the wider scope studies, a number of publications have endeavoured to describe single site and or discipline experience in an attempt to improve preparedness levels for the future and investigate sustainability of COVID-19 implemented services.[10–13] There would be perceived benefit in comparing experiences in an in-depth format, across a wider scope of allied health professions and organisational sites, to establish which implementation strategies may have produced more successful integration of telepractice.

In the Australian context, the Federalised system of government meant funding and responsibilities for public and social services are split between different levels, including public health and emergency responses (state) and disability support services (federal).[14] The National Disability Insurance Scheme (NDIS) is publicly funded to provide support to Australian residents who are deemed to have a permanent and significant disability.[15] The NDIS provides goal-based funding packages to eligible participants offering them choice of supports and services to enable them to participate in community, workplace and social activities.[16] Quasi-market schemes, that mimic commercial markets within a closed system, similar to the NDIS, exist internationally in countries such as the Netherlands, Norway and Germany (Carey, Malbon et al. 2017). NDIS participants receive a fixed term (e.g. yearly) individual tailored plan which outlines available billable hours of service in categories for specified supports; each service (e.g. nursing care) is allocated a charging rate at which the NDIS would reimburse a provider.[17]

A national reference body of independent not-for-profit organisations under the NDIS is the Ability First Australia (AFA), which consists of 14 separate disability specific service providers across Australia.[18] The AFA was the source of participant recruitment for the study. The consortium was selected as a sample of convenience representing the full scope in size and location of not-for-profit organisations in Australia who predominantly provide services to people with disability.

People with disability who wish to experience effective participation in society, may seek to address specific functional goals through accessing services such as allied health interventions. These interventions can be provided by practitioners in areas such as physiotherapy, occupational therapy, speech pathology, dietetics, behaviour support, and exercise physiology. Traditionally allied health services are provided in-person by a practitioner directly to the recipient or their support network (e.g. parent, sibling, support worker, teachers aid etc.) at a suitable venue such as a clinic, home or school visit.

Telepractice is the delivery of services by digital communication technology by a clinician to a client[19] with the services provided in this study specifically referring to synchronous sessions where the clinician and client (or support person) are connected in real time via videocall. Delivery of services by clinical departments of organisations such as those in the AFA utilised telepractice to provide continuity of care to their customers during the initial response COVID-19.

The division of responsibility combined with the diverse geographical and population characteristics of each state, uniquely positions Australia as a national case study of within country differences to managing telepractice implementation during the COVID-19 pandemic.[20] Each state in Australia experienced the progression of COVID-19 in vastly different ways, including Victoria where the capital city Melbourne spent the longest period of time in lockdown worldwide (n = 290 days),[21] compared to Western Australia with 12 days in lockdown but two years of extensive domestic border restrictions.[22] The number of days spent in public health mandated lockdowns for the remaining states included New South Wales (n = 107),[23] Queensland (n = 17),[24,25] South Australia (n = 13),[26,27]

and Tasmania (n = 3),[28] which limited in-person service delivery.

This study looked to capitalise on the significant differences in experience across allied health professions and government jurisdictions, 18 months in to the COVID-19 pandemic, in an attempt to derive potentially successful future paths towards sustained telepractice integration. The main question addressed through this study is 'How do allied health clinicians and managers describe their experience of telepractice and its implementation, in the context of providing ongoing future sustainable services to people with disability following the onset of COVID-19?'

Methodology & methods

Study design

The study is a qualitative review of experiences collected between November 2021 and February 2022 from the allied health manager and clinician of disability organisations across Australia. Approval to conduct the study was obtained from the Curtin Human Research Ethics Committee (ID# HRE2021-0731). The reporting of this study is completed in compliance with the Standards for Reporting Qualitative Research.[29]

Theoretical underpinning

A contextualist epistemological position[30,31] is engaged by the study, which assumes the co-production of meaning by the participants and researchers that cannot be separated. Knowledge is viewed as a contextual representation of truth grounded in participant accounts, while acknowledging the role of the researcher.[32,33]

The ontological stance taken by this study is a form of critical realism which assumes a singular reality and retains the concept of truth, however, assumes an embedded influence of language and culture in each human experience, resulting in multiple perspectives and interpretations of this reality.[34] Situated realities of participants are analysed by the researcher as findings which are located within their own subjective view of reality.[33] The theoretical position aligns with the study aim as it enabled researchers to place the lived experience of participants centrally while considering the contextual and structural underpinnings of these accounts.[33]

Person-first language conventions are utilised within the study text in deference to the preference of experts with lived experience who contributed to this research project, in order to respect and affirm their identity. However, we respect the right to choose by participants and the potential for the alternate preference of identity-first language by members of the disability community (People with Disability Australia, 2021).

Methods of data collection

Data collection consisted of a demographic survey questionnaire hosted on Qualtrics and semi- structured interview via MS teams conducted and recorded by first author CB who is a registered physiotherapist with Masters level qualifications. She is currently completing her PhD with a focus on telepractice use for Allied Health professions, through an embedded researcher role at the industry partner with no previous roles within a disability service provider. The approach enabled in-depth exploration of experiences across a wide geographical and jurisdictional area, within the context of travel limitations.

The questions in the interview schedule were aligned to the salient constructs of the Consolidated Framework of Implementation Research (CFIR),[35] selected and agreed to by a Steering Committee of staff and customers from the industry partner. The process was completed to ensure the questions and focus of the study was relevant to clients and service providers of the industry partner and the wider disability community. The demographic survey questionnaire formation was based on a consolidated version of the demographic characteristics collected by Lawford et al.[8] and internally pilot tested by the research team prior to distribution. A copy of the interview schedule (Appendix 1), salient CIFR constructs (Appendix 2) and demographic survey questionnaire (Appendix 3) are provided as Supplementary material. The semi-structured interviews were transcribed verbatim, each participant was given a copy of the full transcript via email with the opportunity to confirm their validity and provide comment, four participants provided additional comment which were included in the analysis.

Data analysis methods

Rationale

Reflexive thematic analysis. Data analysis was conducted primarily by the first author (CB) who engaged with the methodology of reflective thematic analysis[36] as it aligned with the goals of drawing patterns across the data set, with a critical realist orientation and flexibility to describe core aspects within the data. Reflexive Thematic Analysis provided flexibility to integrate a metaphor method element to the naming of themes and description of findings.

Metaphor analysis. Metaphors are used by humans as a way of structuring understanding of experiences,[37] therefore can be utilised as a method of expanding understanding through linking familiar experiences to those less familiar or more complex. A metaphor is defined as a figure of speech replacing one idea or object with another to suggest an analogous relationship.[37] Metaphors have been described in published qualitative research as a strategy

used to aid data analysis and reporting of findings.[37,38] Recent examples of metaphor use in qualitative health research include an article by Colak (2022)[39] to understand the COVID-19 pandemic through data created by social media users. The rationale to incorporate metaphor into the description of findings linked to the goal of improving accessibility of academic research outputs for the target audience. The use of metaphor improves the understanding of complex topics[37] and has been described with the use of symbols from the natural world forming an effective tool for creating and conveying meaning.[40]

Analytic process. Data analysis commenced through building an understanding and familiarity while editing the initial transcripts produced by MS teams to ensure accuracy with the interview recordings and uploading to NVivo software for analysis. The initial codes were informed by the theoretical framework of the CFIR[35] as it encouraged the first author (CB) to frame the initial allocation of data coding into aspects of telepractice implementation. The salient codes/constructs of the CIFR used in the reflexive thematic analysis, which were described in the current study, were External Policy & Incentives, Implementation Climate, Individual Stage of Change, Skill Development, Adaptability and Culture. The broad codes produced using the CFIR framework were repeatedly read and an inductive process of generating patterns was used to narrow down themes and describe both semantic and latent meaning derived from the codes.[33]

While reviewing themes the first author discussed with the second reviewer (JD) to understand how the themes fit together to address core ideas; namely as the thematic analysis process produced multiple concurrent tangential aspects of the experience of telepractice implementation. Through this discourse the authors reflected that the analysis, while representing a cohesive whole set of experiences, could be delineated into three specific core ideas that formed research questions under which the themes of the data analysis resided. One of the core ideas revolved around the COVID-19 impact on experience (the current study), with the remaining two addressing practical considerations (meeting clinician needs, and telepractice functioning for service recipients) to be discussed in a future publication.

The phases of refining, defining and naming themes and subsequent writing were completed concurrently in a series of drafts, which looked to incorporate the use of metaphor to best create a coherent story. The first draft described findings purely through themes of the reflexive thematic analysis, which subsequently were used by the first author in describing to people within their network unfamiliar with the study to trial the use of different metaphors. This established the metaphor which situated most comfortably within the findings and resonated most clearly with people outside the research group.

Participant recruitment

Each individual organisation that is a member of the Ability First Australia Consortium were offered the opportunity to participate in the study, with eight of the 14 member organisations providing an expressions of interest, utilised to assess the feasibility prior to ethical approval. The inclusion criteria for the study for each eligible AFA organisation was one manager who was involved in the design and implementation of telepractice and one therapist who delivered services to clients via telepractice. With the exclusion criteria set as staff whose role did not include providing direct therapy to people with disability or management of therapy staff. A key informant sampling strategy, with the addition of snowball sampling within organisations, was implemented through the recruitment of both clinician and management positions, which aimed to provide a variety of viewpoints and potentially identify differences in experiences based on location and between roles and level of service provision. The study offered participants the option to select a pseudonym for quotations within the published study, with all names replaced to safeguard anonymity.

Demographic characteristics. Invitations to participate were provided to AFA member organisations (n = 14), eight organisations provided initial consent, participants volunteered from seven of the organisations and completed at least one interview (n = 13 interviews) with one organisation unable to provide a management volunteer. All participants were currently employed by an AFA member organisation, able to speak English, and provided written informed consent prior to completing a one off 60-minute one-on-one interview with the first author (CB). Demographic characteristics of interview participants included an all-female cohort with an age range of 29–64 years, with professions including behaviour support (1), nurse (1), occupational therapists (3), physiotherapists (3), speech pathologists (4) and one participant who selected the 'other' described themselves as a Dual Diagnosis Clinician (alternate options included dietician and social worker). The geographic location of our sample was inclusive of all states of Australia (exclusive of Territories). Three participants identified working across two states and one participant identified working from one state servicing participants in a different state, as both had moved interstate during the past year. Services were provided via telepractice prior to the COVID-19 pandemic in a small-scale capacity for rural clients in two of the organisations, with the remaining five providing no telepractice services prior. The thematic analysis method used does not support the concept of reaching saturation, however the key identifier of richness of the data set within the study was linked to distribution of participant organisations across Australia, which was achieved.[33]

Results

The exploration and analysis of interview data by the authors resulted in identification of six themes from the experiences of participants. The six themes were derived from the common experiences and perspectives expressed by the participants. From the metaphors proposed by the research team, the formation of a diamond was selected by lay responders as most clearly aligning with the findings and resonated most clearly. This metaphor was subsequently used to assist the description of the change in clinicians and disability organisations during the COVID-19 influenced telepractice implementation. These themes include (1) diamonds are forged under pressure, (2) not all carbon crystallises into diamond, (3) diamonds are naturally formed, and human made, (4) creating diamonds takes time, (5) creating something beautiful and (6) diamonds are forever, but not for everything.

Diamonds are forged under pressure

The theme 'Diamonds are forged under pressure' explores the idea that external pressure can have the power to generate change. This idea was expressed in various ways in relation to the impact of the COVID-19 pandemic on telepractice implementation. An analogous link is drawn between the COVID-19 related pressure that participants described as transforming how allied health interventions were delivered, and the pressure of the earth causing carbon to crystallise into diamond.

The pressure of the COVID-19 pandemic and associated health mandates was viewed by participants explicitly as a motivating factor for the implementation of telepractice; with clinician Eliza reflecting 'we never used it before the pandemic, so I guess that pushed us into using it' and manager Jemma delving further into comparing motivations to pre pandemic:

> [Jemma] it was the sole reason why we started using it and the sole reason why we went back to using it as our main form of service delivery during the lockdown in 2021, without those our use of telehealth would be very limited if at all.

When the world was plunged into uncertainty by the rapid spread of the SARS COV2 virus, the circumstances provided increased difficulty to the already challenging process of introducing a new method of delivering services. A manager reflected feeling 'one out of ten, not very prepared [Jemma]' at the time of the pandemic starting and the roll out of telepractice. The intention to roll out telepractice in the future, or to upscale small regional telepractice services was noted, with one clinician indicating 'I think they're always intending we eventually go down the route of Teletherapy [Eliza]'. Those intentions were replaced with a reality where a rapid transition to an unfamiliar method of delivering services collided with an already heightened state of anxiety across both clinicians and customers, participants' personal and professional lives.

Multiple refrains of 'everyone just freaked [Samantha]' and 'it was a bit overwhelming [Amina]' reflected on the anxiety of the situation during the initial roll out of telepractice. Potentially exacerbating this heightened anxiety was the added COVID-19 responsibility for managers, an example of which was discussed by Danielle the manager of clinical services for her disability organisation:

> [Danielle] people like me and others at a similar level to me in the organization were spending a lot of time having to think about how the organization as a whole was managing COVID and the risks associated with it.

The lack of opportunity to weigh up relative merits prior to preparing for telepractice implementation is likely to be representative of time pressures felt by clinicians and manager to react to the COVID-19 pandemic. The lack of preparation prior to using telepractice is present throughout all interviews in terms used to describe the change such as 'didn't have a choice, needed to adapt' [Danielle], 'they had to pivot quickly'[Samantha], 'snap lockdowns'[Natasha] and 'all of a sudden'[Amina]. However, the fact that the external pressures were unilateral, meant the lack of time to prepare was not specific to telepractice, with one manager reflecting:

> [Danielle] but it helps that we're in the middle of a pandemic and so using zoom or team wasn't such a big deal because they then went home and that's how they were talking to their kids on the other side of the world or on the mainland. So once again just lots more practice and everybody was doing.

This COVID-19 pandemic pressure point created a starting point for all telepractice delivery paths, as a catalyst for change.

Not all carbon crystallises into diamond

The theme 'not all carbon crystallises into diamond' denotes that although there may be a common starting point, or the same ingredients, variation in conditions and experiences can cause separation of paths and differing results. The onset of the COVID-19 pandemic served as a starting point, variations in geographical location, virus prevalence and lockdown mandates caused experiences to diverge. This links to the diamond metaphor in that carbon is a fundamental and incredibly common element, much like the human experience of the initial onset of the COVID-19 pandemic. A specific set of conditions and circumstances causes carbon to crystallise into diamond, and

similarly specific conditions and circumstances enabled successful uptake of telepractice by a subset of clinicians and organisations while others reverted to their original state.

> [Ella] I think we definitely had to use it more Melbourne because by the 2nd lockdown people were like, well, I'm not going to use my NDIS funding, I'm going to have to do it. Whereas in Perth because the mandates are so short that people tend to decline, would prefer and wait and save their hours for face to face. So yeah, I think their hands are being forced to be more of East, whereas it's still not really the norm here in WA.

The paths taken by participants were broadly delineated based on geographic location and associated time spent under public health mandated lockdowns. These threads weave throughout the participant accounts of experience and were split during analysis into those who achieved sustained telepractice use (crystallised into diamond) and those who returned to the previous path of face-to-face delivery (carbon stasis). The sustained use of telepractice compared to those who reverted to in-person were not viewed as positive or negative judgement of either outcome, but predominantly as a method of identifying what factors and conditions enabled some clinicians to progress towards sustained telepractice use.

The participants who lived in states with short lockdowns (avg. < 1 week per lockdown, total lockdown days <2 weeks) described a lack of long-term engagement in telepractice which was engendered by a stop/start uptake of telepractice before reverting to in-person delivery.

> [Natasha] Certainly when we've gone into lockdown restrictions, that it goes up or what we've found because of our short-term ones rather than it being telepractice the customers ask the therapist to do all their indirect work for them.

Clinicians on this path reflected it felt more like something that was picked up and put down repeatedly rather than continuously integrated into service delivery, resulting in the perception that telepractice was only available during lockdowns even though [Shona] 'realistically, they've always been there.' These views contrast to those who spent more than 100 days in lockdown, where telepractice was viewed as the only service delivery model available for extended periods of time, and therefore customers and clinicians engaged.

> [Megan] From my personal clients I only had maybe two who didn't end up choosing to do telepractice and they did wait for face to face…but large majority did transition it was just a matter of when they wanted to.

Both pathways noted a delay in the initial uptake of telepractice with Ella describing 'I didn't really get that uptake of telehealth until a month or two in', however the lack of end date described as 'the foreseeable future' and 'the new normal' meant customers and clinicians under longer term lockdowns felt they lacked any other viable option. These conditions created a context for long term engagement in telepractice and corresponding skill development and self-efficacy in delivering and engaging in therapy sessions via telepractice, creating the diamond group.

The significant variation in circumstances and paths of telepractice implementation created a significant challenge for the NDIS regulatory body, the National Disability Insurance Agency (NDIA) in relation to how it guided organisations and funded telepractice in response to the COVID-19 pandemic. One participant reflected that as a national scheme the NDIA was purposefully vague and not prescriptive in its response in order to navigate the vast differences between COVID-19 prevalence rates and state government implemented health mandates across different parts of Australia.

> [Danielle] from an NDIS point of view it being national, that not having regulations did allow us to just make a decision about what was going to work for our organization.

The flexibility and autonomy provided to organisations resulted in mixed views from participants, with some feeling very strongly that the NDIA could have done more, and others feeling sufficiently supported.

> [Natasha] it did confuse our customers a little bit down the track though, because then they didn't understand the difference between why NDIS funded things back in those first few months and now why they won't.

Participants acknowledged the initial confusion responding to the COVID-19 pandemic was understandable, the NDIA did enable service recipients to purchase iPads and laptops to facilitate telepractice. However, all other telepractice related supports and infrastructure for clinicians and customers fell under the remit of each individual organisation. With this lack of structure or guidance from the regulatory body, managers and clinicians were responsible for sourcing their own resources and formulating policy guidelines, which enabled a multitude of telepractice implementation paths.

These variations mirror the diamond creation metaphor in that some experiences described continued sustained use (crystallised into diamond) and the remaining reverted back to in-person delivery (carbon stasis).

Diamonds are naturally formed, and human made

The creation of naturally formed diamond is relatively rare, with natural conditions in specific regions required to forge diamond. As scientific knowledge has developed, humans have learnt how to facilitate the intentional creation of diamond to increase the frequency and reliability of successful diamond formation. The intent of the theme 'diamonds are naturally formed, and human made' is to highlight the need to identify what conditions are required to replicate the path of sustained telepractice use, in a controlled, intentional and repeatable way. The declaration of the COVID-19 pandemic and associated worldwide impact has prompted significant investment into understanding how to improving preparedness and prevent a reoccurrence.[41] Therefore, repetition of previous events cannot be relied upon for natural formation of telepractice delivery pathways that has occurred with the COVID-19 pandemic; it does provide an excellent opportunity to learn and potentially manufacture intentional telepractice delivery pathways.

The impression given by the frantic implementation of telepractice during a time of heightened anxiety, seemed to be one of telepractice as a crisis management tool rather than a long-term delivery model, which appears to have impacted on clinician perceptions of its longevity and usefulness.

> [Eliza] I feel like it was probably quite rushed in that I feel like we were just being quite reactive. We needed teletherapy because COVID had happened.

Clinicians cited the need to complete billable hours in order to make money and retain their roles, not really having a clear idea of how long telepractice would be used as a solution to therapy access during the COVID-19 pandemic and implying its implementation was perceived as more of a temporary fix rather than a long-term delivery method.

> [Emma] It was still always marketed as a COVID tool and despite, I think COVID being great to have brought it; helped us fast track it, I think we suffer a bit from that. We're not you know in lockdown, so why should I do telepractice?

The COVID-19 pandemic provided the motivation to implement which Danielle admitted they had previously 'always put in the too hard basket', it simultaneously identified significant weaknesses in their digital infrastructure and capabilities. Four of the managers reflected upon a lack of preparation heavily impacting the organisations due to underinvestment in digital technologies and infrastructure in the preceding years.

> [Emma] We didn't even have laptops, some of them [clinicians]. The majority didn't have laptops actually.

Managers tended to be more optimistic regarding the positive intent and success of the integration of telepractice delivery than clinicians. They either currently believe more services are provided by telepractice or that the clinicians feel more confident in providing services than the clinicians indicated. Mangers tended to see the potential of the delivery mode more than clinicians. This sentiment was displayed most prominently by three pairs of managers and clinicians from the carbon stasis pathway.

> [Natasha] You know, we can provide therapy on land in the water in an equipment clinic or via teletherapy like it's just actually part of our being now.

Those in the carbon stasis pathway, both in the management and clinician cohorts, reflect that the consistent use of telepractice was an anomaly, with the reality being that most clinicians and customers had reverted to face-to-face delivery. The majority of people who engaged in telepractice had not maintained the change, with Liz one of the managers commenting 'I would say probably I would say high 80 s to 90% reverted back to face-to-face'. Additionally, two therapists specified they didn't believe therapists were still offering telepractice as a delivery pathway for therapy.

> [Ella] And it's still not something I would say that most therapists would regularly offer.

Clinicians who describe themselves as less confident in using telepractice also noted that the support for telepractice was only present during the height of the COVID-19 pandemic lockdowns, and it was not ongoing.

> [Eliza] I feel like the bulk of the COVID kind of was over and then they were like 'Oh well. Don't worry about you teletherapy' even though some of our customers still wanted it and there's not really seemingly that support around us and how best to implement it.

Those on the diamond crystallisation pathway had not returned to near exclusive face-to-face delivery, which could be inferred a high level of skill development and self-efficacy and indicated potential for a sustained telepractice delivery pathway.

Creating diamond takes time

Over time a diamond grows larger as it forms within the Earth's crust, or with an intentionally created diamond, time is required in the trial-and-error process to improve the quality of the diamond produced. The theme 'creating diamond takes time' expresses the idea that producing

quality requires time and investment. To create quality delivery pathways, it is not sufficient to provide the base level conditions as described in the previous theme, but to invest in the time needed to integrate telepractice. The time afforded to the diamond pathway through the extended periods in lockdown was perceived as both a blessing and a curse. Manager Jemma reflected the length of time in lockdown and instances when the end of public health mandates was unknown significantly impacted uptake by recipients; and they were more likely to consider telepractice when the alternative was unknown or extended for periods without access to services:

> [Jemma] So the one that lasted for four months, If it had only lasted for the two weeks as was originally announced then there would have been lots of people who would have just put it off. But then as soon as that two-week mark ticked over, people realize that it was going to be for the long haul and they didn't want to miss out on services for an unspecified amount of time.

There were instances where clinicians had experienced the pandemic in multiple Australian states; where their experience created a comparison on the impact on telepractice implementation:

> [Megan] It definitely sped up the adapting. So now I'm in Queensland and telepractice is still not moving yet and you're like. OK, well people are now getting locked down and we need to get the ball rolling, but it hasn't happened yet because it hasn't hit, I guess the same climax that Victoria did a couple of years ago.

Some clinicians did not have sufficient opportunity to practice and upskill with the provision of telepractice sessions remaining difficult two years after the initial implementation, these views were more predominant on the carbon pathway.

> [Shona] I think at the moment if we're having a telehealth session our therapist and needing quite a lot of time to prepare for those sessions both physically and like setting up the technology but also mentally prepare for I'm doing this.

However another participant on the diamond pathway described having attended university 20 years or more ago, with zero previous experience with telepractice and reflected on her progress towards learning to use telepractice.

> [Amina] it was a bit overwhelming when it first happened … Then actually it kind of fell into place. Gradually, it did take time, so I would say now it's much easier looking back today two years post COVID.

The time allocated to developing the skills utilised in telepractice was more obviously condensed under the public health mandated lockdowns enforced on some. Other participants acknowledge they understood the basics but had not attained full mastery of the skill. When prompted regarding requiring additional supports or training to develop her skill level, one participant replied:

> [Adele] No. No, it's more me getting my head around what it can do and me investing in those skills and time to do that.

Two participants noted purposefully taking time to plan and commit to ongoing use. These participants were identified as being on the diamond pathway. Jemma who assumed a management role in the telepractice rollout described the preparation phase to be occurring concurrently with the initial implementation and 'A formal rollout didn't actually happen until well after the first lockdown ended. The way that we used it initially was like with a bit of a free trial.' However she went on to note that the number of people across customers and clinicians who trialled telepractice was viewed as much higher than would have been without the time of long term lockdowns which meant some customers who were initially hesitant, eventually agreed:

> [Jemma] And some refused in that first lockdown. But then yes, second lockdown. People just picked up on it immediately and just said yes, let's go straight to telehealth. Even ones that said no in the first lockdown.

Whereas Amina, one of the clinicians, described encouraging other staff members to continue to introduce telepractice with customers to prepare for future potential lockdowns.

> [Amina] I said look, let's just maybe give it a try because Sydney may have to go into lockdown… So I'm also trying to now like get people prepared. So that way when we do transition, if we do actually go into lockout, it's not that boom boom.

Creating something beautiful

The theme 'creating something beautiful' encapsulates the unexpected positives of telepractice implementation, despite the hard times and stressful beginnings. The process of creating a diamond is not easy at this point in time; but is nevertheless one worth pursuing. The participant data consistently portrayed that telepractice was a beautiful outcome that was surprisingly useful and worth continuing. Multiple therapists acknowledged telepractice was unexpected, perceived negatively prior to implementation and potentially the silver lining of the pandemic.

> [Jemma] Yeah, unless you're forced to try something that you have a preconceived notion about like you're never going too. That notion is never going get tested, and so yeah. Is that a silver lining?

Service recipients who were initially hesitant and then subsequently agreed to a trial, were described as being surprised by the level of success telepractice had in delivering services. Danielle, whose organisation provides services to many regional areas through outreach clinics, described this as a great advantage.

> [Danielle] We might only go once a month, but it would mean that they could use telehealth in the meantime to access services and I think for lots of families, they'd never wanted to try it because, they didn't think it would work … but then because they kind of had to, they can now kind of see this does actually work.

Not only were there a wide variety of new customers introduced to telepractice delivery pathways, a number of different types of services were delivered via telepractice. These included group exercise classes, group social skills classes and telepractice augmented assisted communication support sessions.

> [Samantha] They then started coming up with some ideas about how to run some social skills groups for adolescents with autism, and they put in place this program running social skills groups by telehealth and that worked really, really well.

Clinicians who feel comfortable using telepractice viewed themselves as using it as a part of their practice, with four participants identifying different reasons why they feel it improves the scope of the services they can deliver. Through savings in travel, increased access and improved ability to provide coaching based therapy strategies, they felt telepractice is part of how the world looks moving into the future.

> [Megan] No, I can't see myself not continuing the telepractice. I think it just works well, in terms of the flexibility of it… after COVID it is going to just be a thing that's just going to be a lot more accessible in terms of, you're not going to have to drive into the city to a centre to see a therapist you can go home and do it from the couch. It's just going to be more functionally accessible to people.

Some clinicians aspired to reaching a point where they could comfortably integrate telepractice delivery pathways, hoping to create a diamond, requiring additional training and support to achieve these goals:

> [Shona] So if we got to a place where we all felt really confident in our skills as clinicians to delivering intervention via telehealth, that would be something that would happen more easily.

With others indicating the future is now and they viewed telepractice as an additional tool which enhanced their capabilities as clinicians:

> [Margaret] I love, I love it. Absolutely love it. I engage with (my customer), I can observe my customer. For example is for a customer I can observe while he's cooking a meal with his support staff. I could just be watching from an iPad, just set up on the bench.

Diamonds are forever, but not for everything

The theme 'diamonds are forever, but not for everything' turns to the future and makes meaning of intentions to integrate telepractice as a delivery pathway without using it to replace current delivery pathways. Diamonds are durable, long lasting and synonymous with serious investment; however, they are generally not perceived as useful in isolation but integrated into a jewellery setting and worn with an outfit. Similarly, telepractice delivery pathways are considered a valuable addition to face-to-face delivery, and best utilised in hybrid models as opposed to exclusively used regardless of context.

The COVID-19 pandemic created a significant shift from one end of the spectrum, predominantly in-person, to all services potentially being delivered via telepractice. The extreme shift in delivery pathways was not initially viewed by participants as their organisation implementing a long-term change, but purely as a targeted response to the COVID-19 pandemic. Negative consequences were highlighted by this unexpected shift, which centred around the concept of work life and home life separation. One clinician, Ella specifically mentioned 'I think that's also one of the hardest things when you are working permanently from home… that blurred line between work and home is hard.' Those in professional caring roles such as allied health therapists created a significant emotional load for the clinicians and Ella continued her thoughts by discussing this mental load.

> [Ella] it's been hard to switch off because you're working in your own space. And I think with the work that we do can be quite gruelling in terms, if you take on a lot of the worries at the family… and when you then take that into your own house I think it's harder to switch off, which I think it can be a challenge for telehealth.

Working from home and delivering services via telepractice exclusively, created challenges not only in setting boundaries, but additionally in ensuring appropriate rest breaks. The

learning process of shifting to a new delivery mode and location took time to adjust and understand how best to navigate a healthy balance, with two managers acknowledging this challenge in guiding their staff, one describing:

> [Natasha] therapists because they can work from home, they often work longer than they should and then customers get that impression that they can. What I've noticed, though, is that therapists are reining that back in again cause they're going 'I let that go too much'.

An alternate opinion was present with participants describing delivering services via telepractice and its facilitation of working from was a positive development. One clinician described the full shift to telepractice enabled her temporary relocation out of state, while continuing to provide services:

> [Megan] September last year that I chose to do it, we were in lockdown again and I decided that I wanted to move up to Queensland. Be closer to family and things like that. I'm lucky that it was just a discussion with the team leader and management and they were happy to transition to just stay with Telepractice.

On a smaller scale, the ability to transition exclusively to telepractice enabled short-term continuity of care in response to periods of staff or client mandated COVID-19 isolation periods:

> [Danielle] It has been helpful particularly during COVID in terms of when people have had to isolate or you know when people have had COVID and can't be at work or close contacts it reinforced that they can actually work from home and do their client work from home as well.

One clinician reflecting she felt safer using telepractice in periods of high transmission of COVID-19 and that it was a protective mechanism for her in her personal and professional life. In the years post the declaration of the COVID-19 pandemic, the fluctuation of transmission rates, circulation of vaccinations and changes to public health mandates has shifted the delivery of interventions by allied health clinicians from exclusively telepractice or face-to-face, to a point where interventions were delivered using both modalities dependent on circumstance.

> [Samantha] They started to adjust their management of their caseload and it ended up they could manage when they stayed in and did telehealth and manage when they went out so they were able to adjust their balance.

The value was found not in exclusive use of telepractice, but in its ability to enhance service delivery through increased flexibility and options for therapy, while clinicians continue to prioritise good clinical judgment and client choice in selecting appropriate delivery pathways.

Discussion

The current study of clinician and managers around Australia explored experiences of telepractice implementation during the onset of the COVID-19 pandemic and found that, while circumstances necessitating introduction were not optimal the overall impression of the potential for telepractice use into the future was positive. Participants acknowledge it was unlikely they would have initiated telepractice use without COVID-19 but were hopeful for the future of telepractice now they had gained experience. Telepractice was viewed as an addition to face-to-face care in a hybrid, flexible model which can respond to specific client, therapy and wider contextual requirements. Increasing the probability of sustained telepractice use may require intentionally designed delivery pathways with a strategic implementation and ongoing support for clinicians and service recipients, as purchasing of hardware has been demonstrated as insufficient to garner sustained telepractice use. An example of a framework to guide such sustained implementation was described by Thomas, Taylor[12] within the context of health care based allied health services and reiterated the need for supporting clinicians and service recipients as well as systems-based planning which builds from what occurred during the COVID-19 pandemic period.

In terms of why now is different, in literature published prior to 2020, Cole et al.[42] described the preconceived notion of participants living in Colorado, USA, regarding unachievable nature of telepractice as a fundamental barrier to uptake. These sentiments were echoed by clinicians who participated in research studies conducted at the onset of the COVID-19 pandemic.[4–6,12,13] Similar views of the unachievable nature of telepractice existed in this study participant cohort and dissipated under pressure of the COVID-19 pandemic. With the pandemic acting as the catalyst to trial telepractice in the theme 'diamonds are forged under pressure', clinicians gained experience. The experience increased baseline awareness and reduced a fear of the unknown, which in pre COVID-19 pandemic literature was often described as a barrier to offering telepractice.[43,44] As a public awareness strategy for telepractice as suggested Cole et al.,[42] the COVID-19 pandemic could not have been more successful, however negative experiences and sporadic uptake described in the theme 'not all carbon crystallises into diamond' may have a long-term impact on sustained use. The rapid uptake and haphazard nature of telepractice during the period of COVID-19, highlighted the importance of adhering to guiding principles such as to 'digitise with purpose'.[45] The time pressure and wide variability of sustained results described in the

first two themes, demonstrated that a catalyst for widespread uptake does not appear sufficient for long-term sustained use. Similar barriers of forced telepractice adoption were described by Thomas, Lee[46] as justification for the creation of an allied health specific implementation framework and Campbell, Theodoros[47] identifying a lack of implementation framework or plan across current literature.

Once the peak pressure and external incentives for telepractice uptake caused by the COVID-19 pandemic had dissipated, a significant proportion of therapy delivery reverted to traditional in-person pathways; indicating the potential need for more targeted incentives tied to meeting individual needs and providing greater value through telepractice.[45] Abbott-Gaffney, Gafni-Lachter[6] identified similar predisposition to return to in-person services following COVID-19 implementations of telepractice and highlighted educational support and learning opportunities to enhance clinician confidence to support ongoing telepractice utilisation. Temporary resolutions of systemic access barriers were implemented by the NDIS to support telepractice uptake (theme: Not all carbon crystallises into diamond); however it is evident that a lack of clarity and long-term planning created increased difficulty for individuals navigating the system. Similar difficulties were identified by Murphy et al.[48] in the context of the United States disability support system during the COVID-19 pandemic, and implied that system level changes are required in multiple countries internationally to support sustainable digitised service delivery.

Resourcing and upskilling were major investments into telepractice undertaken by study participant organisations following the onset of COVID-19 and was also mirrored across other frontline services.[1,11] The desire for ongoing upskilling and education is understandable in the context of findings described by Abbott-Gaffney, Gafni-Lachter[6] that 92% of occupational therapists surveyed had no experience using telepractice prior to the COVID-19 pandemic and 99% of respondents adopting it due to the pandemic, most with only days between planning and utilisation. As discussed in the theme 'diamonds are naturally formed and human made', while management may consider access to telepractice capabilities such as hardware and initial education sufficient in enabling service delivery, clinicians described significant ongoing support is needed for both themselves and service recipients. These sentiments parallel the two aspects of telepractice experience described in a scoping review by Benz et al.,[49] with managers focused on organisational requirements without adequately supporting the variability and individuality of participant considerations described by clinicians, displaying mismatched expectations and outcomes.

Indications of successful and sustained use described by some participants implies that the telepractice delivery pathway is possible. The utilisation of change management processes were endorsed by multiple articles across the available literature[43,50,51]; with themes of 'diamonds are naturally formed and human made' and 'Creating diamond takes time' similarly endorsing the need for planned change to increase the potential for sustained success.

As a silver lining of a pandemic, participants viewed telepractice positively even when describing the need for further support to achieve better integration. Ideas described in 'creating something beautiful' magnify the results from previous studies which described positive impressions of telepractice use,[51] choosing continued use[50,52] and the appetite for telepractice in metropolitan areas.[53] The description of telepractice enabling better integration of therapy into everyday environments of service recipients in the scoping review completed prior to the study[49] are supported by the findings described in this study's final two themes.

The concept of hybrid models of care which incorporate a flexible integration of both telepractice and in-person delivery pathways was described by participants as both the current and future preferred state of telepractice implementation (theme: diamonds are forever, but not for everything). This hybrid service utilisation enables benefits of both delivery pathways and is supported in the literature by articles specific to the experience of people with disability and their service providers[50,52] and more broadly[54] in the paediatric rehabilitation space and across cohorts of clinicians.[4] With the Consumer Health Forum[45] endorsing the principles of 'not digital only, enhance not replace', the implication is telepractice in its current iteration is unlikely to supersede the delivery of face-to-face therapy, but is viewed as a valued addition.

Strengths and limitations

There is a possibility those who volunteered to complete the interview were more likely to be stronger and more frequent telepractice users. This however could be seen as a consistent trend across organisations; therefore geographical nuances could be considered representative, however the overall confidence of the whole cohort would be assumed to be lower than that demonstrated by interview participants.

The study is relatively over representative participants who identify as female; however, the gender bias is indicative of the over representation of females in the industry. The analysis describes a snapshot of time and perspectives of participants who were reflecting on past and present experiences with telepractice, with the COVID-19 pandemic occurring ongoing during the interviews and participants completing interviews over a four-month period. Timing of each interview and the order completed may have impacted on the reflections of each participant at the time. The challenges of completing research during a global event such as a pandemic created uncertainty, but

additionally depict the reality of the experiences of participants in their context and associated challenges.

Selection of reflective thematic analysis as the method supports the descriptive framing of experiences of participants when explored through interviews with the first author (CB). The transferability[55] of findings specific to experiences of participants and study context may be limited in direct comparison to alternate locations, contexts and times, however the reader may find opportunities to extrapolate the findings to guide future telepractice policy, implementation or investigations.

Future directions

In line with the diamond metaphor, there is an excellent opportunity to further support the growth of quality telepractice, to shine as options for people with disability to access therapy. Further investigation is required into specific support needs service recipients and the wider workforce desire to integrate telepractice into therapy service delivery. Working with people with disability to utilise their agency in deciding when, where and how telepractice should be offered to them could provide a platform for sustained and successful telepractice use; and subsequently supporting clinicians and organisations to implement and evaluate telepractice delivery pathways.

Conclusion

Clinicians and managers who participated in this study demonstrated an overall sense of hope that telepractice would be a viable and sustainable delivery pathway for therapy services in the future. This article endorses the integration of a planned telepractice delivery pathway that capitalises on momentum created by the COVID-19 pandemic in a purposeful and accessible way that enhances rather than replace current in-person practices. Learning from the past, embracing telepractice now, and empowering organisations to proactively embed digital capabilities and has the potential to improve service delivery for people with disability, in addition to increased preparedness in the event of future local, national and global emergencies.

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