# Case Studies in Pediatric Music Therapy During COVID-19

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ABSTRACT: The COVID-19 pandemic changed the lives of very nearly every person in the world. For the music therapy profession and those populations that can benefit from its application, the ramifications are no less palpable, though they have been changing on a day-today basis. During the initial phase of the pandemic, the expressive therapy team, including the music therapists at Primary Children's Hospital in Salt Lake City, was directed to work remotely using virtual platforms to facilitate services. Several studies conducted both prior to the pandemic and since its arrival in the United States demonstrate the delivery of expressive therapies via remote, web-based platforms. However, there is a general lack of literature on the subject. This article brings forward 3 case examples in order to illustrate the methods of achieving goals and objectives in distanced music therapy: a 5-year-old girl needing a heart transplant, an 11-year-old girl requiring tri-weekly hemodialysis for end-stage renal disease, and 2 brothers whose sister died of rhabdomyosarcoma and who was treated at Primary Children's Hospital. These case stories offer perspective on both the challenges and positive responses that occurred throughout the process, with a focus on the adaptation to virtual music therapy services during the COVID-19 pandemic.

Keywords: music therapy, pediatrics, technology, COVID-19, virtual delivery, telehealth

### Introduction

On March 17, 2020, as COVID-19 became an increasingly obvious threat to American society and the health of the world, the expressive therapies team at Primary Children's Hospital, including Tom (a music therapy intern) and Katie (an employed MT-BC), was designated "non-essential" and thus directed to continue administering care in a socially distanced manner from home. This designation was appropriate to limit exposure and enforce safety precautions; however, it left the

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team with many questions and concerns regarding how to effectively provide music therapy services to children and families in need. Thankfully, the autonomous nature and effective leadership of the expressive therapies team and available technology at the hospital allowed for flexibility in delivering services. The team was forced to draw upon their creative intuition and use technology to the best of their ability in order to offer telehealth.

The U.S. Department of Health and Human Services (2017, as cited in Knott & Block, 2020) defined telehealth as the "use of electronic information and telecommunications technologies to support long-distance health-care, patient and professional health-related education, public health and health administration" (p.151). Vaudreuil et al. (2020) defined telehealth as "the delivery of healthcare services, where distance is a critical barrier prohibiting access to care" (p. 1). In the case of the present studies, distance was indeed a critical barrier, not because of untraversable distance between the therapists and their patients but because of the necessity of maintaining social distance and keeping the hospital as free as possible from transmission of COVID-19. The expressive therapies team was forced to give a whole new meaning to Ruth Bright's concept of coping with change. Bright (2006, p. 64) wrote, "The interventions facilitate both the resolution of painful emotional aspects of change, and the adaptation to the new circumstances." The change in question was all-inclusive as well as ongoing, which rendered the idea of "resolution" inapplicable but underscored both the painful emotional aspects and the necessity for adaptation to new circumstances for everyone involved, not just the patients.

In an interview in May 2020 examining the impact of COVID-19 on telehealth, Jay Backstrom, a leader in the telehealth industry, said, "More has happened in the past few weeks with telehealth than in the past 20 years. [...] But Covid-19 will create a new normal, and telehealth will be a big part of that [...]" (Hagland, 2020, p. 9). This was apparent to the team as they began to familiarize themselves with the platform they used to provide care. The specific software endorsed by the facility was Cisco Webex, a virtual platform offering increased security similar to others used by healthcare providers around the United States, including Doxy.me, MDlive, and HIPAA Zoom (Turner & DeMuro, 2020). As Wiederhold (2018) points out, online security and confidentiality are fundamentally important matters that must be taken into account when offering any kind of telehealth. While ethically imperative, added security contributes to connectivity and other real-time problems that make the facilitation of traditional music therapy experiences very difficult if not impossible.

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<sup>&</sup>lt;sup>1</sup>At the time of this article writing, Zoom did not have the necessary security but has since been updated. Along with security updates, audio updates have improved the experience as well, though latency issues still remain. Conflicts of interest: None declared.

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In most cases, when approaching an unfamiliar style of service delivery, therapists consult the literature to inform themselves about the best way to offer evidence-based practice. Given the novelty of the pandemic, the severity of the necessary social-distancing measures, and the limited number of relevant studies, the idea of informing ourselves of evidence was only marginally applicable. We were able to find several studies directly related to virtual delivery of expressive therapies via telehealth platforms, most of them pertaining to military and veteran populations. While these articles discuss relevant positive aspects such as screen-sharing images and negative aspects such as connectivity (Spooner et al., 2019), very little is available describing specific interventions and troubleshooting or adapting to the platform. The lack of available literature presented the need for continuous supervision to support the growth and competency of telehealth delivery.

### Background

In their article examining the use of distance technology in delivering creative arts therapy, Spooner et al. (2019) acknowledged the importance of embracing telehealth in the field of expressive therapies. Referencing the scarcity of literature on the topic, they recommend broadening one's scope, writing, "Because this is a relatively new area of practice, professional associations may have few guidelines specific to telehealth, requiring therapists to look to related disciplines such as counseling or psychology for additional guidance" (p. 17). We took this advice and searched related fields, where we found peripheral subjects of use, but still very little by way of concrete, specific detail. We were trying to find answers to the conundrum of how to engage with our patients in new and effective ways via telehealth. An article on the mental health consequences of COVID-19 remarked that the pandemic necessitates the advancement of telehealth services to all populations for "psychological first aid and mental health care" (Galea et al., 2020), stating that "scaling up treatment in the midst of crises will take creative thinking," but the article similarly fails to offer examples of this creative thinking. On July 7, 2020, the American Music Therapy Association (AMTA) posted an article on their website addressing the issue. However, the organization failed to provide practical solutions or adaptations to offering music therapy services, writing, "[I]f you have always provided improvised live music with clients, that may not be possible now. Taking time to research and explore literature on other methods of music therapy may be helpful" (Wagner & DiMaio, 2020). Gaddy et al. (2020) provide a thorough examination of the pandemic's impact on music therapists in an analysis of a survey they administered in April 2020. The authors offered insight into many aspects of the changes music therapists have dealt with as well as their feelings of stress and hope, but they provide little specific individual detail, as that was not their purpose.

### **Music Therapy and Online Songwriting**

An article by Krout et al. (2010) about a pilot study with music therapy students using a telehealth platform to facilitate collaborative songwriting offered several insights. The authors acknowledged upfront the barriers that latency causes, quoting several of the students remarking upon their inability to truly play together. They also stated that the communication issues inherent in telehealth sessions may inhibit the rapport-building process. However, the study is useful in its highlighting of the opportunities that arise during online song-writing sessions, reporting, "Auditory delay during Skype encouraged clarity and succinctness" (p. 83) and noting that the reciprocal nature of collaborative songwriting can accentuate the importance of taking turns and listening to each other, especially online. It also mentioned the potential for future improvements, stating that software allowing for better real-time connection would increase the efficacy of telehealth music therapy. It is interesting that this article was published in 2010, as the profession seems to be struggling with the same issues in 2020 and 2021.

## **Online Expressive Therapies With Military Populations**

Another study focused on telehealth and military populations, published in July of 2020, was candid about the difficulties that connectivity and latency issues add to telehealth sessions (Vaudreuil et al., 2020). As with the pilot study with students, however, it offers helpful and encouraging perspective on the opportunities that the same online sessions can offer, stating that some of these inconveniences can catalyze creative adaptations and foster problem solving, planning, and patience. One of the particularly positive aspects that telehealth can present, the authors found, is the ability to offer sessions to patients in the comfort of their own home. The authors stated, "Although telehealth may lack the immediacy that occurs during in-person treatment, it is likely to have advantages such as reinforcing adherence and practice in the patients' actual living environments" (p. 8). The authors concluded, as did Spooner et al. (2019), that music therapy delivered via telehealth can ultimately offer the same therapeutic potential that in-person sessions can. Online sessions inevitably present more facets than in-person sessions, and they require increased competence on the part of the therapist. However, they can also present increased therapeutic potential. Knott and Block (2020) offered insight into the increased competence required, particularly with technology.

In the three brief individual case studies below, both the increased challenges and opportunities will be explored. Some of the specific issues we experienced that demanded adaptation in a distanced context were:

- latency, as lag made music sessions feel awkward and prohibitive toward interventions such as improvising, singing in time together, and cueing/prompting with subtle musical techniques;
- repeated phone calls and scheduling difficulties with patients needing technology and assistance from their parents or nursing staff;
- occasional severe connectivity failure resulting in no video or audio, or participants being dropped from the session altogether;
- the absence of physicality and nonverbal communication; and
- communication in general, as even in everyday verbal communication, online meetings make it harder to understand and easier to misunderstand each other.

These difficulties were profound enough and the learning curve steep enough that Tom initially believed that postponing his internship was the best course of action. However, as the potential magnitude and duration of the pandemic became clear, and in light of the knowledge that patients could still benefit immensely from music therapy, he made the decision to persevere and adapt. As a result, several unexpected positive outcomes and opportunities began to emerge. Among those were:

- the normalcy of remote, web-based interaction for many pediatric patients;
- the potential to structure sessions in new and effective ways, emphasizing turn-taking and leaving more space for response;
- the ability to share visuals on screen via slideshows or related media; and
- the potential for online restrictions to actually foster new intervention styles and broaden the therapist's as well as the patient's perspective on what music therapy can be.

More positive outcomes and new opportunities will be discussed in the context of the three case examples examined.

### **Case Examples**

Three case examples are presented here to demonstrate the challenges, learning moments, and overall experiences of music therapy services delivered during the COVID-19 pandemic. Written consent was obtained by each patient's guardian, following facility IRB guidelines and policies.

## Case Example 1: Pediatric Cardiology, Patient R, and In-Person versus Telehealth Sessions

R was a 5-year-old girl in need of a heart transplant who had her first music therapy session in the hospital in February of 2020. Tom's initial assessment of her on March 2, 2020, was of a shy girl whose introversion was accentuated by the stress and anxiety of her diagnosis and being in the hospital. R would make eye contact and smile a little occasionally but was reticent to engage in play or interact verbally. The strongest indication of music therapy's beneficial impact on her came from her father's feedback, which was given outside of her sessions. He told Tom and R's other music therapist (MT-BC, while Tom was still an intern, or MTI) that she loved the sessions, and he requested that she receive as much as possible in terms of music therapy. Given this positive feedback as well as R's diagnosis and presenting behavior, the MT-BC and intern's (hereafter referred collectively to as MTs) therapeutic goals for R were to normalize her environment, increase social interaction, provide opportunity for choice and control, increase emotional expression and support, provide opportunity for developmental play, and decrease anxiety and fear.

**Inpatient, in-person sessions.** In the third of the three in-person sessions co-facilitated before telehealth sessions began in March, R participated in a two-patient session with another preschool-aged girl in need of a heart transplant. The session took place within the hospital, in the music therapy department's music studio, Sophie's Place. Sophie's Place provides access to numerous instruments, including a piano and drums, and audio performance equipment such as microphones and speakers. This provided for a very broad range of intervention styles, and the two main interventions that emerged were re-creative sing-alongs to Disney songs and an extended group improvisation. While the two patients had met before and were friendly with each other, R was considerably more withdrawn than the other patient, and she exhibited signs of anxiety during the session such as asking for her mother and engaging with the music in very limited capacity. She also exhibited a lack of eye contact, limited verbal responses, muscular tension, and reticence to engage with anyone in the room.

Inpatient telehealth sessions. In their first telehealth session on March 26, 2020, however, less than 2 weeks after the in-person group session, R presented as an almost totally different girl. She smiled and maintained a bright affect throughout, talked, played "found instruments" in her patient room (including a cup, spoons and bowls), and sang along intermittently. This was very surprising for the music therapists working with her. While they were distracted and struggling with the issues inherent to the telehealth platform, R was more outgoing and engaged in the process than either of them had previously seen. Discussing the session afterward, the MTs realized that the change observed must have occurred because R was already used to interacting with technology and with people through technology, giving a whole new meaning to the goal of "normalizing the environment." For R, who was introverted, anxious about her experience as a patient, and uncomfortable with all the new people on her treatment team, the interface of an iPad and telehealth sessions added a layer of normalcy and security. This was a revelation in terms of music therapy treatment goals. While many of the methods had to be adapted to the new format, the outcomes were stronger and more observable.

Adaptations and outcomes. Examples of adapting methods to facilitate outcomes with R are as follows. In facilitating improvised instrument play on found instruments such as a bowl as a drum and spoons for drumsticks, Tom left longer spaces for responses from R. Tom might sing lyrics such as "R feels good "cause she's drummin." R feels good "cause she's drummin." She's got her spoons and a bowl, and they sound like this: ...," then wait longer for a response than if they had been in person together. If R did not respond or stopped playing, Tom could give a verbal prompt such as "fast or slow?" or "loud or soft?" and make sure to enunciate. If they were improvising together on similar instruments such as drums, a turn-based, back-and-forth style worked well, as it gave both time to listen and then react. A similar adaptation occurred naturally when creating song-stories with R. By the third session, R enjoyed showing the MTs new toys she had gotten or new instruments she was going to play. In the exploration process of incorporating these objects into a song, what would have been a real-time process with a steady pulse turned into looser, more rubato-style chordal accompaniment and lyrical phrasing. This not only compensated for the latency but allowed more time for R to engage with the song, suggesting lyrics and/or pantomiming the actions that were being sung. Other methods that were adapted from in-person sessions were re-creative experiences, in which Tom sang a patient-preferred song and encouraged and prompted her to sing along, often singing the song slower than he would in person, again leaving more sonic space and time for R to engage. In some of her more receptive moments, when R appeared content to just listen to the song, Tom could approach real-time delivery. It should be noted that an element of ignoring or disregarding the latency was almost always present in Tom's delivery.

Outpatient telehealth sessions and outcomes. Throughout April and May, what started as two or three weekly telehealth sessions with R settled into once-a-week sessions. During this time, R moved out of the hospital room and into a temporary apartment with her family. Therapy in the comfort of the patient's home without physical intrusion proved to be another very positive potential element of telehealth music therapy sessions. This was true for R to the extent that, on one occasion, an accident occurred. During a re-creative and receptive experience, R was dancing along to the presentation of a preferred song, and she began twirling, coming in and out of Tom's camera view. R lost her balance when off-camera, landing on her nose and causing a nosebleed. Due to the bloodthinning medication that R's condition required, any bleeding was cause for emergency. Thus, the session ended abruptly, and her parents rushed her to the emergency room. R's mother called later that day and said that while it was scary, R was fine and looking forward to continued music therapy sessions. At the beginning of their next weekly session, on May 11, R had a bright affect and stated with a smile that she was all better, but that she had "learned [her] lesson" about being careful during music therapy. Following this, due to a combination of R's reported increased coping skills and decreased interest in music therapy, as well as the socio-economic stressors on her family of living in an apartment that was not home, R's sessions became sporadic. She often missed weeks of sessions, and her final telehealth session was on June 17, 2020.

## Case Example 2: Pediatric Dialysis, Patient L, and In-Person versus Telehealth Sessions

At the time of her first music therapy session in February 2020, L was an 11-year-old girl with end-stage renal disease requiring hemodialysis three times per week. She was also being assessed for a kidney transplant. L responded positively to music therapy from her first session. When shown a ukulele, L expressed an interest in lessons, mentioning that both her grandmother and sister had played ukulele before passing away, a quite personal and vulnerable disclosure. Despite this initial somber tone, L exhibited an easy-going sense of humor and playful creativity toward music and musical instruments.

Before the March 17 order to transition to telehealth, Tom co-facilitated two sessions in person which were spent in active instrument play and exploration on percussion, therapeutic instrument instruction on the ukulele, and developmental games combining language and rhythm. These methods were aimed at the clinical goals of increasing social interaction, providing opportunity for choice and control, increasing emotional expression and support (particularly due to her mention of losing a grandmother and sister), normalizing her environment, providing opportunity for cognitive development, and developing coping skills. Just before the expressive therapies team was directed to work from home, L requested music therapy services more than once per week.

**Inpatient telehealth sessions and outcomes.** Unfortunately, Tom and the supervising MT-BC co-treating L were not able to honor her request for increased sessions, as offering telehealth sessions to L on the dialysis unit introduced even more complications than the team experienced with other hospital patients. This was primarily due to access and facilitation difficulties, as L was always unaccompanied by an adult and lacked access to a device supporting telehealth sessions. The MT team problem-solved by collaborating with a Certified Child Life Specialist and the nursing team to provide L with an iPad, to help connect her to the session, and to assist with placement of the iPad so that L and the MTs could see and hear each other. They also relied on those care members present to assist with providing instruments; a ukulele and percussion instruments were available on the unit. Needless to say, this did not always happen smoothly; during the first few telehealth sessions, L was frequently stuck with the iPad in her hands, unable to play any instruments, or with a ukulele that was broken or out of tune. These problems introduced attention span and concentration issues. Without the physical presence of an MT, L quickly lost her focus on the experience, often digressing to taking the MTs on a playful, visual journey around the unit with the iPad, or hiding the device under a pillow or covering the camera with her finger, leaving the MTs unable to see anything. Tom made repeated attempts to turn these digressions into musical experiences, singing about flying through outer space or swimming in the ocean; however, it was difficult to facilitate the play in a therapeutically productive manner while not physically present. While her attention span did not exclude L from telehealth sessions, it indeed made them difficult to facilitate without a caregiver present in person.

Adaptations and outcomes. Because of connectivity issues in his supervisor's device, Tom ended up leading one session on his own. It was during this session that he inadvertently discovered the potential for collaborative songwriting with L. She was playing a chord progression on the ukulele that she had composed on her own, and to encourage her and praise her for her playing, Tom suggested writing lyrics to it. L said she liked that idea, and the two began talking about subjects. After L decided upon the silly subject of a pet cat who ate Cheez-Its, Tom realized that the aspect of turn-taking and leaving space for collaboration inherent in songwriting fit the telehealth platform perfectly. Tom's supervising MT-BC built upon his discovery; upon hearing L and Tom sing their song together via telehealth, she suggested that they add images to the song to make a songbook. Utilizing screen-sharing capabilities, the three were able to brainstorm, choose and create images, and add these images to the song narrative. This combination of songwriting and visual elements successfully targeted the goals of providing choice and control, increasing emotional expression, normalizing the environment, and providing developmental and cognitive play in a natural and effective way.

**Return to in-person therapy outcomes and mementos.** The creation of the songbook began on May 15, 2020 and continued with marginal progress over the course of two more weekly online sessions. Tom then returned to working in person with L on June 5, 2020, with his supervising MT-BC present via Webex and iPad. The three had a great time picking images and creating the songbook, with L playing a drum intermittently while smiling and laughing and exhibiting general enjoyment of the process. After several sessions together which included other intervention styles including improvisation and therapeutic instrument instruction, L finished

her song and accompanying songbook and was able to record it with the help of the co-facilitating MTs. Throughout this process, the aforementioned goals and others were addressed. At the conclusion of their sessions, L was left with an artifact, a memento of their time together.

## Case Example 3: Sibling Grief Work, Telehealth Sessions

B (15) and D (17) were siblings of a 16-year-old female, M, who had passed away from leukemia in June 2020. As an inpatient, M had worked with the music therapy team throughout her treatment. She had reached out to Katie in May through her psychosocial team, requesting virtual music therapy sessions focusing on legacy songwriting. However, once the sessions were arranged, M was too ill to engage in them. After she passed, M's mother contacted Katie to request support for M's siblings. Prior to the pandemic, this is something the music therapy team would have facilitated in Sophie's Place, the music studio in the hospital, in a single session focused on creating a legacy product for the family to take home. Due to the visitor restrictions in the hospital during the pandemic, however, it was not possible to conduct in-person sessions. Having used the telehealth platform with patients in the hospital for several months, Katie suggested it for the siblings, and their mother agreed.

There were a few failed attempts and scheduling problems before the first successful telehealth session via WebEx took place on September 2, 2020. Katie had anticipated and planned some interventions for this session, particularly songwriting for bereavement support. However, it quickly became apparent that these interventions were not appropriate. B was tearful the majority of the session, to the extent that he was not able to talk much, and D repeatedly told Katie how sad it made his brother to talk about their deceased sister. Despite Katie's attempts to redirect to a music intervention, the boys were not ready to engage in a legacy project at this time, and Katie realized that the effort would take many more sessions than traditionally would have taken place in person. The overwhelmingly emotional response to the first session could have had many contributing factors, including grief complicated by the impacts of the pandemic (e.g., isolation, death in the media, unavailability of mental health services). Thankfully, the telehealth platform made it possible to continue these outpatient sessions, something that was not typically done or possible to do in person at the hospital. The boys began attending telehealth sessions regularly, after school each Wednesday. Katie was working from home on Wednesdays during the expressive therapies team's phased transition back to the hospital and was able to dedicate an hour to this family through telehealth each week. The treatment goals were strengthening coping skills, increasing emotional expression, and grief/ legacy support.

**Telehealth sessions and adaptations.** As the weekly sessions progressed, both B and D opened up about their struggles with grief and with life in general. They developed coping strategies, learned communication techniques, and supported each other through the difficulties of losing a sibling. One unique aspect of their therapy was that they quickly developed a pattern themselves, wherein the brothers alternated their roles weekly; one brother would spend the majority of the session working with the MT-BC while the other

brother acted as a support person. This support became a very important part of their therapy. Another important element occurred when Katie realized that the telehealth platform did not allow for her to provide appropriate physical touch when the brothers became tearful or spoke about challenging feelings. She was then able to facilitate that physical touch and support between the brothers. This was a practice that could also be used outside of music therapy sessions.

In addition to verbal processing, which was successful through the telehealth platform, another primary intervention was therapeutic instrument instruction. B and D wanted to learn to play the guitar as a coping skill and to continue connecting with their sister, who had played music. Facilitating therapeutic instrument instruction brought its own unique challenges in the virtual setting, between the difficulty in demonstrating skills through the video platform, the lag when playing together, and the poor audio quality when listening and giving feedback. Katie identified these problems and thought creatively about how to continue to facilitate this intervention in a way that would leave the boys feeling successful. A few solutions presented themselves: making videos and sending them for use outside of session, screen-sharing videos and music during sessions, and referring the brothers to resources and materials to continue practicing on their own outside of session. This left their time in session to be used primarily for consultation, wherein they could ask and answer questions about guitar skills they had been working on outside of session. As of the time of writing this paper, Katie continues to work with these brothers, and they are moving toward readiness to engage in legacy interventions, hoping to combine the emotional expression they have demonstrated through verbal processing and the guitar skills they have obtained through therapeutic instrument instruction into a songwriting experience to honor their relationship with their sister and its loss.

### Discussion

We understand that children are more easily able to cope with stress when their environment is normalized and they are able to engage within it (Dun, 2013). The question is how music therapy may provide opportunity for active engagement and independence in patients when telehealth sessions must occasionally take the place of in-person sessions. After all, it is widely acknowledged that, while the safety precautions and social distancing necessitated by COVID-19 will probably pass, the manner in which people interact with each other, from everyday run-ins to therapeutic services, has been changed forever. Healthcare continues to move toward telehealth services and we believe that it is not only natural but necessary and inevitable to include the creative arts in this evolution. As this case study illustrates, while flexibility and adaptation are necessary to the process of offering telehealth music therapy sessions, we concur with previous literature that most, if not all, clinical goals and objectives can still be met (Knott & Block, 2020; Spooner et al., 2019; Vaudreuil et al., 2020).

In the case of R, goals that are commonly addressed in music therapy for pediatric cardiac patients were still addressed via telehealth services. Hanser (2014) described these cardiac patients experiencing anxious vulnerability, as R demonstrated in her shyness and fear upon meeting the music therapy team. Hanser wrote "for patients with coronary heart disease, music therapy interventions are intended to enhance physical, psychological, and spiritual well-being through providing coping strategies, expressive outlets, and emotional support" (p. 39). Music therapy provided these opportunities for R both in person and through telehealth as evidenced by her increased engagement and enthusiasm for music therapy services as the treatment plan progressed. Additionally, the increased comfort of receiving telehealth services from home as was observed in the case of R was noted by Spooner et al. (2019) as a benefit to telehealth delivery.

In the case of L, goals that are commonly addressed in music therapy for patients receiving dialysis were still addressed in telehealth services. Chand et al. (2016) described music therapy goals with patients receiving dialysis, writing "They can help design coping strategies for medical procedures and assist with addressing psychosocial issues such as anxiety, stress, adjustment disorders, and depression" (p. 281). L's music therapy treatment plan continued addressing these goals via telehealth through continuity of intervention used in person such as instrument play utilizing the ukulele and percussion, as well as new interventions like songwriting that were introduced in telehealth services. Songwriting has been found to lend well in telehealth services and L's case validated that conclusion (Krout et al., 2010). Additionally, the songwriting intervention developed into an artifact, something that Dun (2013) wrote "can assist in decreasing anxiety and increase positive coping" (p. 313) which are consistent with the goals above found to be helpful with dialysis patients. L's difficulties in maintaining attention during telehealth services was consistent with Vaudreil et al.'s (2020) findings in their summary of creative arts telehealth delivery. However, Tom and the supervising MT-BC were able to think creatively to engage L to maintain the treatment plan and meet goals.

In the case of B and D, songwriting interventions used to support bereavement care also were found easily adaptable to telehealth (Heath & Lings, 2012; Krout et al., 2010). However, the difficulty in scheduling with B and D was noted in Spooner et al. (2019) as a common challenge of telehealth delivery.

Overall, the methods and interventions used to achieve therapeutic goals are also similar to those used in person, albeit adapted to fit the medium. A summary of the adaptations and changes that we made to traditional, in-person intervention styles for use in telehealth with the case study patients is presented in Table 1.

### **Opportunities Found in Telehealth**

One of the major opportunities that we perceive in the use of telehealth sessions regards the potential to introduce different styles of music therapy. After the team's phased return to the hospital, it occurred that patients would not feel well enough for a session, which is a common occurrence in the hospital setting. This elicited in us a desire to expand on music therapy experiences, such as by offering simple receptive experiences, music and imagery, or music and relaxation-style interventions. We suspect that re-introducing occasional telehealth sessions, with all their inherent limitations, might facilitate both the patient and MT-BC to gain a broader understanding of music therapy's potential for acutely ill patients. Such patients may elect to affirm less demanding, slower-paced sessions even when they are not feeling well. Allowing for telehealth sessions thus could help break ruts or inform patients of the broad variety of ways that music therapy can be offered. The adaptation and flexibility required for telehealth sessions also present an opportunity for new styles and broaden both the MT-BC's and the patient's understanding of what music therapy can be.

We found that telehealth therapy improved many aspects of our patients' experiences, from offering them a sense of security in their home environment to encouraging them to support each other in ways the remote therapist could not. Another benefit of telehealth therapy during the pandemic is the elimination of the need to wear masks. With the ongoing safety precautions put in place to prevent COVID-19 from spreading, individuals in healthcare of all types are required to wear masks when meeting patients in person. Wearing a mask and a face-shield, as we were required to do, presented problems in communication including unintelligibility, the patient not being able to see our mouths, and our uncertainty as to the appropriateness of our volume. Telehealth sessions eliminate these problems, especially regarding the visibility of the therapist's mouth during sessions in which lip-reading is important and/or speech rehabilitation is a goal.

Finally, it is important to call attention to one of the largest positive outcomes of offering telehealth music therapy sessions, the opportunity to offer sessions on an outpatient basis. This helped our patients transition out of the hospital more smoothly and provided the family support in a way that had not been available prior to the pandemic.

### **Personal Reflections and Improvements**

Though we will almost certainly always prefer in-person sessions, we recognize the necessity and inevitability of

Music therapy method	Adaptation	
Instrumental improvisation	Ignore latency; use turn-based style	
Song-stories	Use rubato, out-of-time, flexible pulse	
Songwriting	Use turn-taking, back-and-forth process; create one musical	
	element at a time; add visual element such as songbook	
Receptive methods	Create audio/visual recordings to engage with outside of session	
Therapeutic instrument	Create audio/visual recordings to engage with outside of session;	
instruction	utilize screen-sharing capabilities to share music, instruction, etc.	

Table 1. Music Therapy Intervention Adaptations in Telehealth Delivery

telehealth music therapy sessions as well as the opportunities inherent in them. Just as music therapists offer assistance in coping with change, they must also demonstrate their own ability to cope with change. We concur with previous literature that telehealth will likely be embedded in the overall practice of healthcare and that healthcare workers must be proficient in using the medium (Bates, 2014; Hagland, 2020). Not only is it important to acknowledge a new standard of competence, but it is also worth discussing potential improvements to the capabilities that telehealth sessions can offer and the implications for future research.

Tom's background in and connections to the world of music performance offer him some insight into what is needed to improve the telehealth experience. Tom knows many musicians who would otherwise be out of work during this time but who are able to collaborate in real time through platforms such as Jamkazam, a website that offers musicians the capability to play live together, in-sync, from different locations, with high quality audio and video. The most important tool in real-time telehealth music therapy collaboration is the Ethernet cable; if parties have their routers connected directly into their interface via Ethernet cable, the latency in their interaction is nullified for all practical purposes. The only remaining problem for music therapists seeking to play music in real time with their patients is with providing necessary privacy. As mentioned above, most online platforms, such as Zoom, FaceTime, and Skype, do not have the necessary security software to keep third parties from listening and/or watching.<sup>1</sup> Adding this security may introduce latency and connectivity issues, as exhibited by the numerous problems that our team experienced throughout the online sessions we provided through Webex. Hence, the expressive therapies professions have an ethical imperative to advocate for upgraded software and platforms that can not only offer secure telehealth sessions, but offer them with as little latency as possible. As Krout et al. (2010, p. 84) indicated in the conclusion of their study, "[t]hese might include software that allows for better real-time music making [...] including simultaneous instrument playing and singing." This was written in 2010. The time is now.

### **Conclusion and Recommendations**

Krout et al. (2010) also wrote, "One focus for future research might be examining how a protocol for therapist/client interaction might be modified for an on-line rather than face to face environment, and how such insights might actually change the face to face protocols themselves" (p. 84). That was the intention and purpose of these studies, and we acknowledge that much more work remains to be done. A mixed-methods study to compare the perception and efficacy of telehealth versus in-person sessions is warranted. Such a study could include three to four in-person and three to four telehealth sessions with a variety of patients and measure anxiety, satisfaction, communication, and perceived effectiveness from the perspective of both the music therapists and the participants.

Whatever the research and how it is performed, it is clear that the world of health and health services has been revolutionized by the effects of COVID-19. Its effects are contemporary and ongoing. Therefore, it is an ethical imperative for the expressive arts therapies to keep up with these changes. This is all the more important in music therapy, given its real-time, audio/visual nature. The adaptations and outcomes described in this paper will help in the process of adapting to modern needs, but it is also important to remain optimistic about and open-minded to the opportunities that this revolution may present. Gaddy et al. (2020) found that the majority of respondents to their survey viewed the pandemic as undeniably stressful, but they viewed it nonetheless with hope. Many reported seeing it as a potential source of growth for music therapy, for the adaptability and resilience of MT-BCs, and for the development of telehealth in the profession. In our presentation of these three case studies, we have attempted to offer specific and pragmatic examples of that hope and growth.

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