

This Lyrical Life: Music Therapy in Oncology



You have likely heard this saying before, but by the end of this article we hope you will have a deeper understanding of what it means: music heals. In early human evolution, dance, rhythm, and singing preceded language. Shamans sang—and continue to sing—songs to heal. You may even get chills when you hear a specific song at the right moment. As we know, music soothes and restores.

Music is built into our daily lives—mothers sing to babies, adolescents blast their stereos in self-expression, people work out to music for motivation, a couple chooses a song for their first dance, and a son sings to his dying mother, not only to comfort her but to soothe himself as she did for him as a baby. Music is something people connect with deeply. This understanding of music as a healing tool is one of the many reasons why music therapy is widely used in healthcare and other settings.

In the United States, music therapists are board certified and carry the MT-BC credential. This credential means that the therapist has at least a bachelor's degree in Music Therapy, has completed at least 1,200 hours of supervised clinical work, and has passed the board certification exam. Music therapists work in many different medical and educational settings, all of which use music in clinical ways to help people overcome or accept their psychological, physical, cognitive, and social challenges. This article discusses the benefits of music and music therapy in cancer care and specifically at my institution, Atrium Health Levine Cancer Institute.

Music therapy is an evidence-based treatment modality supported by a substantial body of quantitative and qualitative research. The effects of music therapy are easily measurable, and progress is documented in patients' medical charts.

Music Therapy at Levine Cancer Institute

Our Department of Supportive Oncology consists of nine sections working together to help mitigate the symptoms and side effects of cancer and cancer treatment. Within the department, the section of integrative oncology uses evidence-based complementary and integrative interventions to support patients and care partners at all stages of their cancer journey. Music therapy is part of that section, along with acupuncture, Healing Touch therapy, meditation, oncology massage, a physician consult clinic, spiritual care, Tai Chi, therapeutic art, yoga, and other integrative supportive services.

FACTS VERSUS FICTION

COMMON MISCONCEPTIONS OF MUSIC THERAPY¹



FICTION

The patient must have musical ability to benefit from music therapy.

One specific style or genre of music is more therapeutic than the rest.

Playing recorded music for someone (or myself) to help them feel better is music therapy.

Music therapists are for entertainment.



FACTS

Music therapists are trained to tailor treatment for the individual no matter their level of music ability.

Research in music therapy shows that live, patient-preferred music is best. Types of music used are determined in the assessment process.

Music therapy is a systematic and clinical process through which the music therapist, the patient, and the music work together toward targeted goals.

Although music therapy can have entertaining moments, the purpose of music therapy is to use music to treat nonmusical goals.

The music therapy position at Levine Cancer Institute was funded originally through a grant from the Livestrong Foundation (livestrong.org) in September 2014. This funding enabled the cancer institute to hire a part-time music therapist to provide services to the outpatient infusion area and on occasion in the bone marrow transplant inpatient unit. Within six years, the position expanded to full time, and the cancer institute is now hosting a full-time music therapy intern as of January 2021.

As music therapy services expanded, in addition to the above, the music therapist now provides treatment to the acute inpatient hematology unit, to the pre- and post-surgical solid tumor inpatient unit, and to bone marrow biopsy procedural support. There is a monthly group drumming, various groups using songwriting and relaxation techniques, and a YouTube channel with livestream music therapy weekly.

What is Music Therapy?

Music therapy is an evidence-based treatment modality supported by a substantial body of quantitative and qualitative research. The effects of music therapy are easily measurable, and progress is documented in patients' medical charts. The American Music Therapy Association defines music therapy as "the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional (MT-BC) who has completed an approved music therapy program."¹ The goals of music therapy in oncology include, but are not limited to:^{2,3}

- Symptom reduction of pain, nausea, or sleep disturbance
- Procedural support
- Emotional validation, support, and release
- Improved coping
- Better familial cohesion
- Greater physical ability
- Distraction from the cancer treatment process or life with cancer.

Music therapy treatments are grounded in peer-reviewed and evidence-based research. The process involves ongoing assessment of clinical needs and progress toward established individual goals. Though most music therapy is not standardized, it follows clinical and systematic processes. This allows for maximum individualized care. While often viewed as a "feel good" therapy, music therapy does not always feel good for the patient—the music therapist will sometimes challenge difficult emotions within patients and help them work through their emotional processes. We allow for vulnerability in these moments with music to support and engage processing. The experience of listening to and creating music can bypass patients' thinking and go straight to their emotional and feeling states.⁴ Therefore, the music therapist engages patients and effects change.

Listening to music alone can effect positive change, too, though it is different than music therapy. Music therapists are trained and highly skilled in creating music with clinical intention for and with patients. The music created with the patient is goal driven. A stranger playing Bach in a lobby or other public space may have a calming effect, but this music is not driven by a clinical

process or individualized goals. Though there is great value in volunteer musicians playing in public spaces for patients and staff, volunteers should not create music with or for patients in a clinical capacity.

Music therapists follow a treatment process like related treatment modalities. On referral, every patient receiving music therapy has an initial assessment session (or period) to determine how and if music therapy can be used to help treat their needs. The process will vary depending on the patient's need(s); however, the following always remains true:

- The music therapist is board certified (MT-BC). Only those with the MT-BC credential may practice music therapy and can call themselves music therapists in the United States. Canadians hold the music therapist accredited (MTA) credential.
- Needs are assessed by the therapist, and goals and objectives are developed with the patient.
- The relationship between the therapist, the patient, and music is equilateral. None outweigh the others in importance.

Music Therapy in Treatment

Music therapists facilitate many clinical interventions that are either active or receptive methods. Live, patient-preferred music is typically used, which research shows is most effective.

Active Interventions⁴

Patients do not have to be musicians or have any musical experience to fully participate in and benefit from music therapy. Non-musicians can sometimes be intimidated by the notion of playing on strange instruments, some of which they may have never seen before. Music therapists are trained to support patients' music no matter their musical ability. It is through the act of creating music that a music therapist can help patients progress.

Receptive Interventions⁵

It is common to think of music therapy as a tool for relaxation when listening to specific music. Treatment often includes methods for mood modification, relaxation, or for uplifting and can be adjusted as the situation demands. Music-assisted relaxation techniques are used to address multiple symptoms while the patient engages in minimal physical involvement (other than listening to live music and responding to prompts). Since the intervention does not rely on a recording, this affords the music therapist the opportunity to adjust based on patients' response in real time. For example, a music therapist will slow the music's tempo down to reflect a slowing respiratory rate. Table 1 (page 20) and Table 2 (page 20) provide examples of music therapy interventions for oncology along with the symptoms typically treated. Note that this list does not include all interventions, but those that are most frequently used in the oncology setting.

Treatment Goals

Typical goals in music therapy are:^{2,3}

- *Pain management.* This could include music therapy (active or receptive) to decrease pain perception and efforts to target decreased opioid use.

(Continued on page 21)



A patient and wife singing and recording their original song.



Group Drumming event for the LCI Healing Arts Celebration 2018.



Overhead view of Quick's telehealth set up in his personal studio.

Table 1. Common Active Music Therapy Interventions

Active Music Therapy		Symptoms				
Intervention	Descriptions	Pain	Nausea	Sleep	Fatigue	Mental Health
Dyadic music making	Music created between the patient and one other person, usually a family member or care partner or the music therapist. The music serves as means of bonding, communication, meaning making, and self-expression.	X			X	X
Exploratory music making ⁶	Music created evokes emotional responses that will be discussed, analyzed, and sometimes interpreted with the music therapist.	X			X	X
Symbolism and existentialism ⁷	Identification of symbols in patient-created music (or the music they listen to) to determine if it holds meaning to the patient's experience.				X	X

Table 2. Common Receptive Music Therapy Interventions

Receptive Music Therapy		Symptoms				
Intervention	Descriptions	Pain	Nausea	Sleep	Fatigue	Mental Health
Progressive muscle relaxation	A systematic process to guide patients through tensing and releasing muscles in every large muscle group in tempo with the live music from the music therapist.	X		X		X
Autogenic relaxation	The music therapist creates music congruent with the patient's current emotional state (if they want that to change) and guides them through breathing, light and color imagery, or focused attention on the body. The music therapist gives broad guidance, but it is up to the patient to decide the level at which they engage in the process.	X	X	X		X
Music and imagery	Typically, patients are led in a scripted experience with personal imagery chosen beforehand. The music therapist chooses music to enhance and guide the imagery. Recorded music is frequent.	X	X	X	X	X

(Continued from page 19)

- *Nausea control.* This treatment typically uses receptive methods.
- *A strategy to help patients process emotions and explore feelings evoked by the music used or discussed in the treatment.*⁸ This can include improved patient outlook on their treatment progress and mood modification.
- *A process to help patients create meaning.* This could include creating recordings, songwriting, or experiences that validate patients' experiences in life.
- *Strategies to support sleep health.* For example, receptive music therapy interventions combined with typical relaxation methods can target insomnia due to medication(s) or other psychological reasons.

Digital Music Instruments and Mobile Recording Studios

With the greater availability of professional recording studio software, most music therapists now use digital instruments. This use is not just to recreate or create music for the younger generation or to meet their desire for electronic sounds; digital instruments produce a high-quality sound sometimes indistinguishable from acoustic instruments. As technology advances, so do music therapists' instrument carts as they become fully digital. Though you will always find acoustic instruments, instrument carts now look like mobile recording studios.

At Levine Cancer Institute, the shift to digital music therapy was of necessity to protect those who wanted to sleep (or deferred music therapy) during their infusions. Most infusion suites are relatively public with chairs next to each other, sometimes separated with a full or half wall for patient privacy. Often, patients receiving music therapy are near others. Because of these spatial considerations, the cancer institute saw a need to increase patient privacy. The music therapist also has an ethical responsibility to respect patients who indicate that they do not want music during their treatment or who are sleeping. Though digital music making requires more preparation than acoustic instruments, the benefits of individualizing treatment within a shared space are important.

Headphones protect patients from external sounds. Additionally, headphones also keep music at the individual level, while not disturbing others close by. Headphones help to change the environment of sound for patients. For some, the noises of machines beeping and the bustling noises on a hospital floor can create anxiety that music therapy with headphones may alleviate. Even with no musical experience, and with the help of the music therapist, patients can design soundscapes to use in the moment (or at home) to address symptoms such as anxiety, nausea, pain, and sleep challenges.

Digital instruments also improve accessibility for those with physical limitations. Many, such as keyboards and electronic drums, have sizable silicone pads that can be programmed or assigned virtually any sound imaginable. For example, because of the flexibility of digital instruments, someone with neuropathy affecting their hands could benefit from music therapy. They might not be able to strike the keys of a typical keyboard, but they can strike a larger silicone pad assigned a sound of their



Quick and a patient engaged in dyadic music-making.

choosing when using digital music. This flexibility allows them to create a similar experience of playing hand drums, but with different and more comfortable hand motions.

Music Therapy During COVID-19

With the onset of the COVID-19 pandemic, all remote sessions now rely on equipment from a mobile recording studio to deliver an experience like an in-person session, but one that practices safe distancing. This has opened the opportunity to see patients at home and target symptoms from cancer treatment that typically occur within 24 to 48 hours after treatment. Patients unable to participate in music therapy due to distance (or fear of COVID-19) can participate in virtual group and individual sessions.

Although there are key differences in virtual music therapy compared to in-person sessions, the increased access has been beneficial. Challenges of music therapy in the virtual setting include delayed audio and difficulty seeing a patient's breathing pattern. Several technical considerations keep the music therapist and patient from truly creating music together. Audio delay and syncing issues make it difficult and unreliable to create music over an Internet connection. During in-person treatments, the music therapist often adjusts the music tempo to match the

In one 45-minute treatment session, a music therapist can treat pain, validate and engage patients to understand a depressed mood, and work to improve their fine motor skills. Music therapy is non-threatening and engaging, especially when patients seek answers and ways to process their experiences.

respiratory or heart rate of the patient. Because of the inability to move camera angles in some computer or phone setups, the music therapist may be unable to see a patient's breathing pattern. This limits traditional music therapy in a virtual environment.

Overall, the experience of virtual music therapy treatment during the pandemic has been positive and appreciated by patients and other clinicians. The obstacles that bar virtual care from being identical to in-person care have created opportunities for growth and sometimes new ways for patients to find comfort.

Why Use Music Therapy?

Music therapy can be fun and can distract patients and their caregivers from cancer treatment. It is a clinically relevant and effective treatment modality with lasting, impactful positive change in patients' lives. Cancer programs understand that the whole individual—and their family—is affected by cancer. Modalities like music therapy address these holistic concerns with few, if any, side effects.


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Another value of music therapy to healthcare settings is better patient satisfaction scores for those who employ a music therapist (MT-BC).⁹ We effect positive clinical change for patients at all stages of their disease. Music therapists are board-certified professionals and should be an integral part of the interdisciplinary team. Patients respond positively to music therapy with less use of opioids, improved outlook on treatment and life, shorter length of stay in the hospital, and lower anxiety—just to name a few clinical benefits.^{2,3}

Music therapists are professionals, not volunteers. The lobby and other public places in your institution are well suited for

volunteer musicians. Music therapists work alongside other medical professionals in treatment settings throughout the hospital.

Music therapy is valued not only by the patients at Levine Cancer Institute, but by our colleagues as well. Working in groups and teams with a music therapist can improve morale, foster team building, and ease compassion fatigue and burnout. A music therapist can change the environment at your facility in many positive ways—just as music can be a positive influence in your personal life. It is the hope of these authors that you can now listen more intently to the music in your life, that you will sing with a loved one and laugh when you hit a “wrong” note, and that ultimately you will see the value of the music all around you. Experiences in music are transformative and they heal.

To find a MT-BC near you to assist with that journey, visit CBMT.org. 

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