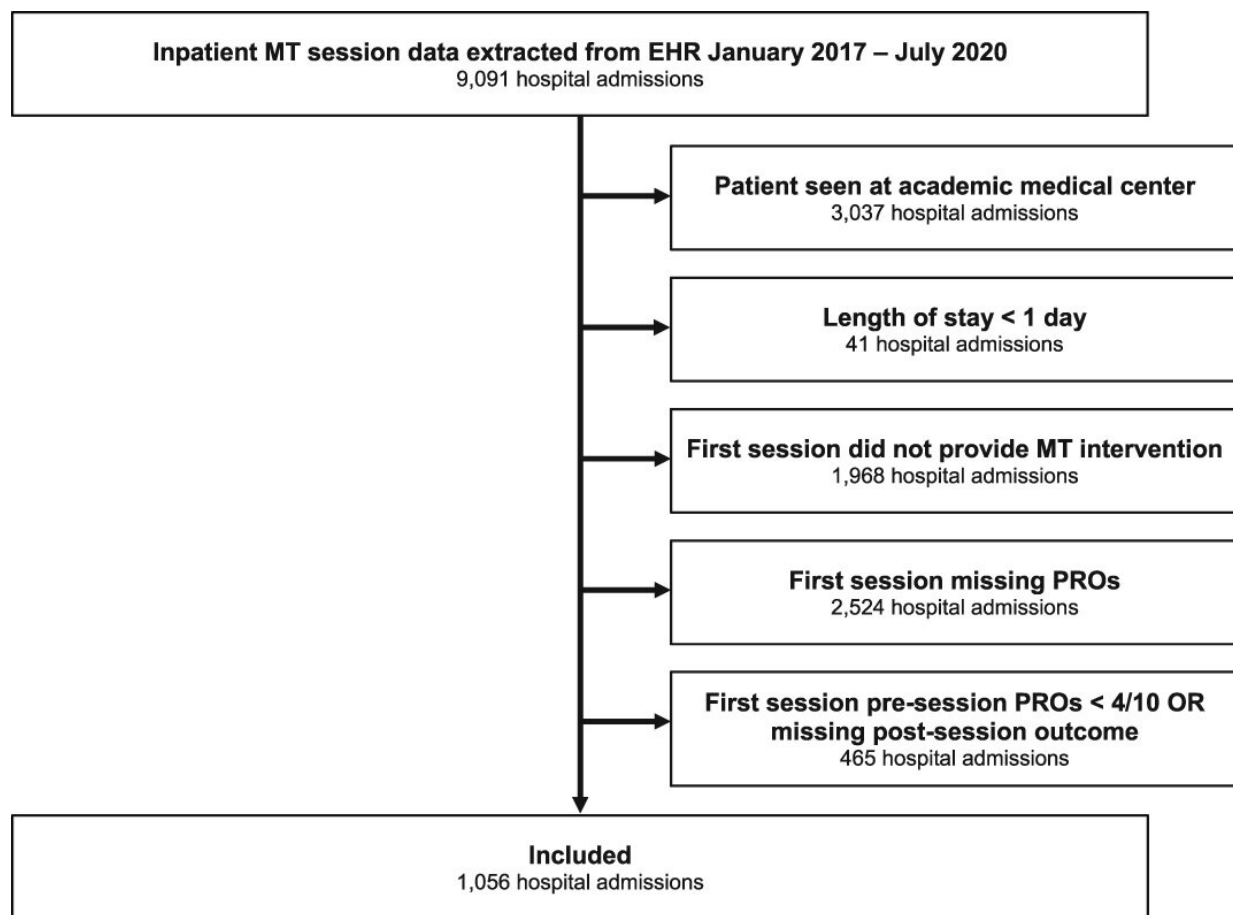


Music therapy found to significantly reduce pain, stress and anxiety in community hospitals

April 26 2023



Flow diagram of study participants. EHR, electronic health record; MT, music therapy; PROs, patient-reported outcomes. Credit: *PAIN Reports* (2023). DOI: 10.1097/PR9.0000000000001074

A new study from University Hospitals (UH) Connor Whole Health found patients with moderate-to-severe pain, stress, or anxiety treated at UH community hospitals reported clinically significant reductions in pain, stress, and anxiety in response to a single session of music therapy.

Furthermore, the clinically significant effect on [pain](#) was not influenced by patients' demographic or clinical characteristics, suggesting that [music therapy](#) can be effective for acute pain management across various inpatient adult populations. The findings from this study were recently published in the journal *Pain Reports*.

In this retrospective study conducted between January 2017 and July 2020, researchers from UH Connor Whole Health examined the first music therapy interventions provided to 1,056 adults receiving inpatient [medical care](#) who reported pre-session pain, anxiety, and/or stress scores greater than or equal to 4 on the 0 to 10 numeric rating scale.

Unlike prior studies of music therapy, which have primarily been conducted at [academic medical centers](#), this is the first and largest investigation of the real-world effectiveness of music therapy within community medical centers.

"The music therapists at UH Connor Whole Health offer non-pharmacological frontline treatment throughout our medical system while addressing issues of stress, pain, and anxiety. Greater Cleveland residents may receive these services during hospitalizations at UH as a clinical service line offering direct evidence-based community benefit," said Seneca Block, The Lauren Rich Fine Endowed Director of Expressive Therapies at UH Connor Whole Health.

UH Connor Whole Health manages the largest health system-based music therapy program in the US with 11 board-certified music therapists who collaborate with providers across the system to help

patients and their families manage the physical and emotional toll of an illness or hospitalization. Additionally, UH Connor Whole Health provides a diverse offering of integrative health and medicine modalities, including acupuncture, chiropractic, and integrative medicine consults, that are centered on patients' entire well-being.

In "Effectiveness of Music Therapy within Community Hospitals: An EMMPIRE Retrospective Study," researchers examined the real-world effectiveness of music therapy at eight UH community medical centers and explored variables associated with pain reduction of greater than or equal to 2 units on a 0 to 10 unit numeric rating scale.

Music therapists provided interventions including live music listening, music-assisted relaxation and imagery, and active music making to address patients' needs including pain management, coping, stress reduction, and anxiety reduction. As part of clinical care, the music therapists assessed patients' self-reported pain, stress, and anxiety on a 0 to 10 scale at the beginning and end of each session and documented their sessions in the electronic health record.

"What makes this research novel is our ability to streamline [data collection](#) from music therapy [clinical practice](#) to the electronic health record. We can then use these data to understand the real-world impact of music therapy throughout multiple medical centers and how best to tailor music therapy interventions to meet patients' needs," said Sam Rodgers-Melnick, a music therapist, first author of the study, and a co-investigator on the EMMPIRE project (Effectiveness of Medical Music Therapy Practice: Integrative Research using the Electronic Health Record).

Said Dusek, "Routine collection of patient-reported outcomes from clinical practice (also called practice-based research) is becoming increasingly common as a patient-centered quality of care measure."

Prior research has demonstrated that reductions of at least 1.3 units on the numeric rating scale for pain are clinically significant for patients with non-cancer pain, meaning that the symptom reduction represents a meaningful difference for patients with moderate-to-severe symptoms. Reductions of at least 2 units in stress and anxiety are also considered clinically significant.

In this study, patients reported clinically significant mean reductions in pain (2.04 units), anxiety (2.80 units), and stress (3.48 units) in response to music therapy, with all changes exceeding clinically significant thresholds. Additionally, of the patients reporting a pain score greater than or equal to 4, 14% fell asleep during music therapy sessions, an important observation given the sleep challenges patients with moderate-to-severe pain face during hospitalization.

Additionally, after adjusting for demographic, clinical, and operational characteristics, patients receiving a music therapy session in which pain management was a goal were 4.32 times more likely to report pain reduction greater than or equal to 2 units than patients receiving a music therapy session in which pain management was not a session goal.

Said Rodgers-Melnick, "this finding raises important questions regarding how music therapists tailor their interventions to address pain when that is the goal of the session, and we will be examining these specific features of [music](#) therapy interventions in future research."

"Music therapy provides an alternative but very effective mechanism for managing a patient's discomfort," explained Donald DeCarlo, MD, MBA, Chief Medical Officer of UH East Market.

More information: Samuel N. Rodgers-Melnick et al, Effectiveness of music therapy within community hospitals: an EMMPIRE retrospective study, *PAIN Reports* (2023). [DOI](#):

[10.1097/PR9.0000000000001074](https://doi.org/10.1097/PR9.0000000000001074)

Provided by University Hospitals Cleveland Medical Center

Citation: Music therapy found to significantly reduce pain, stress and anxiety in community hospitals (2023, April 26) retrieved 24 June 2024 from

<https://medicalxpress.com/news/2023-04-music-therapy-significantly-pain-stress.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.