

HOUSE PROFESSIONAL LICENSURE COMMITTEE
INFORMATIONAL MEETING ON HOUSE BILL 1356
AUGUST 8, 2023

TESTIMONY: Kory Antonacci, MEd, LPC, MT-BC, NICU-MT

Chairman Burns, Chairman Metzger, and members of the PA House Licensure Committee:

My name is Kory Antonacci, and I have the great pleasure of serving as the Creative & Expressive Arts Therapy manager at UPMC Children's Hospital of Pittsburgh, ranked nationally as a top 10 children's hospital in the United States. As manager of the creative arts therapy team, I get to wear many hats as I oversee the clinical music and art therapy services at Children's, but perhaps my favorite hat to wear is the one where I get to practice as a clinical music therapist serving our youngest babies through our young adults in every division of medicine the hospital offers, including neonatology, hematology/oncology, adolescent medicine, pediatric and cardiac intensive care, trauma, and solid organ transplant, just to name a few. We are a consult-based service prescribed by the medical team for children and their families facing illness and treatment for various curveballs life has thrown their way.

While nobody chooses to become sick or be hospitalized, something I firmly believe makes a difference in a child's treatment and experience is the sacred and effective therapeutic work they do with a music therapist. It is the one time a child can express themselves and their feelings that come along with illness- fear, anxiety, depression, uncertainty, and several others- in a safe and therapeutic environment with a trained professional that uses music to reach non-musical goals- whether that be gait training and taking their first steps alongside the music therapist in rehab after a motor vehicle accident, learning to speak again after a brain tumor resection using familiar songs for singing to regain speech, or working with a teen to write an original song after a new cancer diagnosis that has turned life upside down, causing them to miss every teenage milestone, including the prom, graduation, and being with friends.

While there are several helping professions and resources available to our patients and families at the hospital, there is something unique and quite special about the approach a music therapist takes. We don't enter the room and ask a patient to process their feelings immediately, talk about why they might feel sad, or why this situation is hard. Our driving force and tool is the music- a much less threatening presentation to build rapport, learn about a person's interests, what they may be feeling, and offers a beautiful and raw form of self-expression for people to connect.

An area where our music therapists provide constant and much needed support at our Children's Hospital is in our level 3 and 4 Neonatal Intensive Care Unit. Being a level

3/4 NICU, this means we care for babies with the highest level of medical needs - including being born as young as 22 weeks, born weighing sometimes less than 2 pounds, and those requiring respiratory support including mechanical oxygen and surgical needs. Our music therapists are trained to implement support to not only the babies, but also their families. It is key that trained professionals, music therapists, are the only individuals present providing the support in the hospital setting and NICU, and not just musicians that like to play music and volunteer their time. If stimulation from music is implemented in the NICU by a non-trained clinician, it can actually have the opposite desired effect and cause harm to a preterm infant.

Music therapists are trained to assess a neonate's response, both from a physical and psychological perspective, tracking their physical movements and vital signs, including HR, RR, and O2 to ensure the intervention is not overstimulating and unmanageable for their small, underdeveloped brain and body. A music therapist assesses and then manipulates the manner in which the music is being conducted to support infant brain development and promote healthy physical response. This is another reason licensure for music therapists in our state is key - it allows for the state to regulate who is going into hospital systems to provide music and care, and ensures it will protect the patients and clients from unnecessary harm.

It is not uncommon for music therapists to support mothers with Postpartum Depression in the NICU, helping to facilitate bonding and family centered care in ways other professionals simply cannot. It is writing a song with a mother and father that portrays a message of hope for their baby. It is supporting the baby who is intubated, and parents can't quite hold just yet, but the music therapist provides neurologic developmental support through soothing and controlled music - it is music as medicine. Science at its finest, evidence-based research.

The research of the benefits music therapy has on infants in the NICU has been conducted for decades - and it proves it works. Music therapy has proven to help preterm infants develop through an intervention known as multimodal neurological enhancement- where a music therapist implements vocals, rocking, and touch to promote growth and development for infants in a stressful hospital environment. Using the rhythm of music to help babies learn non-nutritive suck to then be transferred to bottle feeding has proven to assist with infant weight gain, which in turn, can shorten a baby's length of stay in the NICU.

You may be wondering why a baby would need to learn the simple mechanism of learning to suck. Consider the babies admitted to our NICU - may have been born with such varying degrees of medical complexity that they have often been tube - fed since birth, never having the need or opportunity to learn to breastfeed or drink from a bottle.

Music therapists use music in the NICU to reinforce teaching a baby to learn to suck. A way in which this is done is a device called the Pacifier Activated Lullaby (PAL) or through implementing music when a baby demonstrates the suck reflex. The music plays when the baby sucks, the music stops when the baby stops sucking. Music activates dopamine in the brain, or a feel-good or reward-based hormone. This biology leads the baby to want to suck again and music is played. Eventually, this non-musical skill is transferred to bottle feeding, in which I have done countless collaborations with speech language pathologists in our NICU to support feeding efforts of neonates.

As music therapists, we get to witness and support families on the best days of their lives- when they finally graduate from the NICU and get to take their baby home. In another breath, we are there to support on the hardest days of a family's life. As a music therapist, I support patients and their families in the NICU to provide bereavement support when difficult decisions are made. As a music therapist, I can record a patient's heartbeat via a stethoscope and mix it with music on my guitar to create a heartbeat recording of a song that holds significance that the family will always have to treasure. While I will never be able to truly fathom what it is like to enter the hospital with your baby and leave without them, as a music therapist I can preserve a piece of legacy to honor the patient and their family that they will have forever.

When you consider the medical environment - tubes, wires, leads, testing, fear of the unknown, and pain - I'd like to end by sharing something I experienced just 2 weeks ago in our NICU. I was consulted to see a baby born prematurely with several medical complexities and a long road of treatment ahead of him. The consult for music therapy was placed by the medical team as this infant was presenting with agitation, a high heart rate, and irritability. As I approached his nurse, she informed me he was currently in this state, but welcomed me to implement my interventions. When I arrived, the infant's heart was presenting at 180 bpm (beats per minute). I began to implement a soft, soothing, and steady strum pattern on my guitar and hummed a lullaby- to an outsider, it surely looked as though I was just playing sweet music for this baby. What the outsider would not know is that I was implementing the music therapy intervention entrainment, slowing the baby's breathing to mimic the rhythm on my guitar. After 14 minutes of intervention, the infant's heart rate presented at 147, a 33 bpm decrease. As I exited the room, the nurse stood in disbelief. "It worked" she whispered. "He hasn't been that calm all day." Yes, it did work.

Music therapy provided this baby a positive medical experience to be calmed and lulled to sleep by the music, our non-pharmacological form of medicine used daily in our hospital by the music therapy team. As a music therapist, I will never be able to control the medical outcome of a child, but I will always be able to support the journey, for

better or worse. As a music therapist, it is my job to support patients and their families through therapeutic goals and interventions, and it is my greatest honor to do so. My ask is that you would please consider the importance of licensure for music therapists in the state of Pennsylvania, and take action to see this carried out, to ensure that every child and adult needing support in our state for medical, mental health, behavioral, and so many other needs can receive the services that will transform their health and well-being and provide them protection that their services are being conducted and carried out by a trained and qualified professional. Thank you for your time.

Kory Antonacci, M.S. Ed, LPC, MT-BC, NICU-MT
Creative & Expressive Arts Therapy Manager at UPMC Children's Hospital of Pittsburgh
CEAT Program Manager, Child Life Department
UPMC Children's Hospital of Pittsburgh
4401 Penn Avenue
Pittsburgh, PA 15224