# **NEUROLOGIC MUSIC THERAPY**



**GOAL AREA: SENSORIMOTOR** 

## What is Neurologic Music Therapy?

Neurologic Music Therapy (NMT) is defined as the therapeutic application of music to cognitive, sensory, and motor dysfunctions due to neurologic disease of the human nervous system. NMT is based on a neuroscience model of music perception and production, and the influence of music on function changes in nonmusical brain and behavioural functions.

NMT is recognized by the World Federation of Neurologic Rehabilitation, the European Federation of Neurorehabilitation Societies, and the International Society for Clinical Neuromusicology.

#### **NMT and Motor Goals**

NMT interventions are standardized and evidence-based. They can support rehab goals related to coordination, range-of-motion, balance, strength, endurance, and activities of daily living. Clinical populations include acquired brain injury, Alzheimer's and dementia, Autism, brain tumour, cerebral palsy, stroke, Huntington's, Parkinson's and other neurological diseases (e.g. multiple sclerosis, muscular dystrophy)

### How does NMT help?

Cue and Support Movement: Using the musical elements of melody, rhythm, and dynamics, NMT interventions may be used to cue and support movement or to improve the individual's perception of the target movement.

Quality of Movement: Precise parameters and the spatial and temporal aspects of the movement represented by musical elements increases the quality of the target movement, allowing for increased rehabilitation potential.

*Practice of Purposeful Movement:* The clinical use of instrument playing can target and encourage specific movements. The use of instruments also provides an auditory feedback cue, supporting the feedforward-feedback loop in movement execution.

## **For More Information**

To gain a more detailed understanding of NMT, access the latest research information or to find an NMT in your area please visit https://nmtacademy.co/