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School of Occupational Therapy

Myofascial Release as a Treatment Option for Tongue Ties and Other Congenital Issues

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A capstone project submitted in partial fulfillment for the requirements of the Doctor of Occupational Therapy degree from the University of Indianapolis, School of Occupational Therapy.

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Abstract

This doctoral capstone project focuses on tight fascia as a secondary concern to tongue ties, torticollis, and other congenital issues and the benefits of utilizing myofascial release (MFR) to treat these populations. IU North's Outpatient (OP) Clinic expressed interest in learning more about MFR to gain referrals and meet the needs of these populations. The researcher utilized a cost-benefit ratio and acceptability-perception survey to identify the need for and benefits of utilizing MFR in the OP clinic. The cost-benefit analysis results indicated that the benefit of utilizing MFR would outweigh the costs of training needed to practice in this area. The acceptability perception survey results indicated that the occupational and physical therapists were "very likely" to utilize MFR if given the appropriate training and patient population. Through this doctoral capstone project, IU North's Outpatient Clinic gained several resources and further knowledge on tongue ties, tight fascia, and myofascial release.

Keywords: tongue tie, ankyloglossia, myofascial release, outpatient therapy

Introduction

The Indiana University (IU) Health North Outpatient (OP) Pediatric Clinic, located in Carmel, IN strives “to ensure that the highest quality of individualized, developmentally supportive, and family-centered care is provided for all patients” (H. Krodel, personal communication, February 23, 2021). Common diagnoses within the outpatient pediatric clinic include, but are not limited to, autism spectrum disorder (ASD), down syndrome, neonatal abstinence syndrome (NAS), developmental delay, cerebral palsy (CP), sensory processing disorder, chromosomal abnormalities, and other genetic disorders (H. Krodel, personal communication, February 23, 2022). Occupational therapists utilize a holistic approach and work collaboratively with speech-language pathologists, physical therapists, and families to provide specialized care to every patient (Krodel, 2021). Occupational therapy practitioners play a crucial role as developmental specialists in addressing skills needed to achieve developmental milestones in self-care, play, leisure, and social participation (AOTA, 2016).

This doctoral capstone project focuses on myofascial release (MFR) as a treatment option for tight fascia secondary to tongue ties, torticollis, and other congenital issues. According to H. Krodel (personal communication, January 20, 2022), several previous babies discharged from the NICU return to the OP clinic as toddlers with concerns often associated with congenital issues. This raised the initial question, “why are we not catching these issues sooner?” According to K. Thomas (personal communication, January 27, 2022), lactation consultants often refer babies to OP pediatric therapy services to address tight fascia secondary to tongue tie, torticollis, and other congenital issues. However, IU North’s OP Pediatric clinic has not received many, if any, of these referrals. This raised additional questions: what training is needed to address these issues, and how can IU North become a referral source for these patients? This paper addresses

secondary concerns associated with congenital issues, treatment options to address these issues, reason(s) for referrals to occupational therapy services by lactation specialists, and the cost-benefit ratio of implementing MFR to address tight fascia secondary to tongue tie, torticollis, and other congenital issues.

Background

When picturing the tongue, and the role it plays within the human body, many think of the oral cavity, chewing, swallowing, breathing, and speaking (Bordoni et al., 2018). However, according to Bordoni et al. (2018), the tongue interacts with the entire body and even plays a role in muscle strength and posture. The omohyoid muscle and anterior belly of the digastric muscle allow movement between the tongue and neck when flexing, extending, and rotating the neck and cervical tract. Furthermore, the fascia involved with the tongue connects to the sternocleidomastoid muscle and musculature within the thoracic outlet. Bordoni et al. (2018) state that muscles, whether in direct or indirect contact with the tongue, produce contractile tonus to allow the tongue to work effectively via the central and peripheral nervous system.

Mills et al. (2019) describes that lingual frenulum as “a dynamic structure formed by a central fold of fascia that spans the floor of mouth and together with the overlying oral mucosa it forms the “roof” of the sublingual space.” Ankyloglossia, or tongue-tie, involves this part of the tongue. Kotlow (2004) describes the four classes of tongue tie as: (Class IV) *mild*: 10-12 mm, (Class III) *moderate*: 7-9 mm, (Class II) *severe*: 4-6 mm, and (Class I) *complete*: 0-3 mm. According to Birch et al. (2021), tongue ties affect up to 11% of infants, with males typically affected more than females. However, a limited number of trained professionals exist to address tongue ties, causing difficulty for this population to access services (Birch et al., 2021).

According to H. Krodel (personal communication, February 23, 2021), IU North's outpatient pediatric therapists noticed several infants born at IU North Hospital returning to the outpatient clinic as toddlers with issues associated with tongue ties and other congenital issues. Some common issues noted during assessment of these toddlers included abnormal body postures, delayed gross motor skills, poor tolerance of prone positioning, and delayed mobility due to tightness or rigidity. This raised the question: why is this concern not caught sooner, and how can we catch this concern sooner?

One possible solution to address these concerns sooner involves referrals from lactation specialists. Lactation specialists play an important role in addressing breastfeeding concerns related to tongue ties (Birch et al., 2021; K. Thomas, personal communication, January 27, 2022). In speaking with IU North's lactation coordinator, she mentioned that common issues associated with tongue ties include, but are not limited to: "reflux, swallowing difficulties, jaw development, tightness, fatigue when nursing, fussiness and arching away from the breast, and easily falling asleep at the breast" (K. Thomas, personal communication, January 27, 2022). Lactation specialists offer specialized services to address these concerns and often refer infants for frenotomies depending on the severity of the tongue tie. Despite the frenotomy procedure and receiving specialized care from lactation specialists, some infants continue to experience issues associated with the tongue tie.

Several infants with moderate to severe tongue ties experience tight fascia that often causes tightness or rigidity elsewhere in the body (K. Thomas, personal communication, January 27, 2022). According to K. Thomas (personal communication, January 27, 2022) myofascial release targets tight fascia within the body and helps to alleviate postural issues. Freed & Coulter-O'Berry (2006) and Park et al., (2006) also found MFR to be an effective treatment

option for infants with torticollis. According to Barnes (n.d.), myofascial release is defined as, “a safe and very effective hands-on technique that involves applying gentle sustained pressure into the myofascial connective tissue restrictions to eliminate pain and restore motion.” Watts & Lagouros (2020) report that an infant’s tightness often releases quickly with little force applied. Myofascial release for infants typically focuses on the thoracic inlet. The MFR technique to address this population consists of the following steps: (1) “reach over the top of the infant's shoulders and places fingertips on the chest wall over the upper ribs with the thumbs lying overtop the shoulder blade,” (2) “engage the superficial layers of skin and fasciae and move hands gently toward the infant's head, then feet, then to the left, and to the right,” (3) “feel for areas of restriction,” and (4) “rotate the fasciae into a position of ease or of greatest laxity, gently moving the tissue until that familiar release is felt” (Watts & Lagouros, 2020). The two main goals of this MFR technique include: (1) loosening tissue surrounding the lymphatic duct and (2) reducing mechanical strain to improve breathing, sucking, and swallowing when breast or bottle feeding.

Currently, little to no peer-reviewed research articles focus on the role occupational and physical therapists play in utilizing MFR to address issues associated with tongue ties. IU North’s lactation coordinator refers approximately fifteen infants suffering from issues associated with tongue ties to an MFR therapist each month (personal communication, January 27, 2022). Approximately 90% of Thomas’ patients referred to this therapist saw improvements post treatment (K. Thomas, personal communication, January 27, 2022; L. Lafuze, personal communication, February 8, 2022). Given the high number of referrals and long waitlists, the lactation coordinator expressed the need for more therapists to utilize MRF in treating issues associated with tongue ties (K. Thomas, personal communication, January 27, 2022). The goal of

this project is to gather enough evidence to support the use of myofascial release to gain referrals and treat issues associated with tongue ties and other congenital issues early on at IU North's OP Pediatric Clinic.

The Ecology of Human Performance (EHP) model helped guide the student's doctoral capstone experience. This model describes dysfunction as the disruption between the person, context, and tasks (Cole & Tufano, 2008). Dysfunction leads to flawed human performance. If the infant or toddler's personal factors do not support their participation in feeding, social bonding, and play, there will be flaws in their performance. The EHP model helped identify how tight fascia may hinder the infant's participation in everyday occupations such as feeding and play.

The biomechanical frame of reference (FOR) also guided the student's doctoral capstone experience. This FOR addresses deficits with range of motion (ROM), strength, and endurance (Cole & Tufano, 2008). Dysfunction occurs when restriction in ROM, strength, or endurance impacts the individual's participation in everyday occupations (Cole & Tufano, 2008). Utilization of this FOR helped the student understand how tight fascia limits participation in one's occupations due to restricted ROM and endurance. The student utilized the biomechanical FOR and collaborated with IU North's OP team to identify techniques for improving ROM and endurance in patients that suffer from tight fascia secondary to tongue tie, torticollis, and other congenital issues.

Project Design and Implementation

Development of this project consisted of identifying the need, completing extensive research on the need, identifying ways to address the need, determining outcome measures, and meeting with the lactation specialist, myofascial release therapist, site mentor, faculty mentor,

and professor of the DCE class. According to L. Lafuze (personal communication, February 08, 2022) and K. Thomas (personal communication, January 27, 2022), several infants with moderate to severe tongue tie and torticollis experience secondary concerns such as feeding dysfunction, reflux, irritability, poor endurance, arching, and tightness. Despite these additional concerns, IU North's OP Pediatric Clinic receives little to no referrals on this population until later in the child's life. Singh & Anekar (2018) discuss the importance of intervening earlier in a child's life to enhance their cognitive, physical, social, and emotional skills needed to meet developmental milestones. This identified the need for IU North's OP Pediatric Clinic to investigate the reasoning for the lack of referrals and answer the question, "How can we see this population sooner?"

Lactation specialists often work with infants with tongue ties to address breastfeeding concerns (Birch et al., 2021). If the infant's deficits exceed the lactation specialist's scope of practice, the lactation specialists often refer the infant to outpatient therapies such as occupational therapy, physical therapy, or speech therapy (University of Michigan, 2016). The student set up a meeting with the lactation coordinator at IU North Hospital to gain more information on this population. The lactation coordinator offered a wealth of information regarding the population she serves, common concerns noted among this population, and the treatment options available. She reported referring several infants with secondary concerns related to tongue-tie to myofascial release services each month and mentioned the desire for IU North's OP pediatric clinic to begin utilizing this type of treatment (K. Thomas, personal communication, January 27, 2022).

After meeting with the lactation coordinator, the student reached out to the physical therapist that receives referrals for this population and asked to discuss her method of treating

this population. This physical therapist owns a non-affiliated private practice and solely utilizes myofascial release to treat tight fascia secondary to congenital issues. She provided detailed examples on the purpose of using myofascial release to treat infants with tight fascia and described the referral process, billing codes, typical goals, and average number of MFR sessions needed to treat this population. To further the students' knowledge on myofascial release, the physical therapist allowed the student to observe three sessions and receive myofascial release herself.

After meeting with the lactation coordinator and physical therapist, the researcher gained pertinent information to help guide development of the cost-benefit analysis and acceptability perception survey. The researcher also used this information to locate and identify appropriate MFR resources to provide to the outpatient pediatric therapists during dissemination. The researcher was unable to meet with any additional lactation specialists and myofascial release therapists due to limited time and a limited number of healthcare professionals interested in using myofascial release for tongue-tie related issues.

Project Outcomes

Assessment Tools

After identifying the need, completing extensive research, and determining how to address the need via conversations with the site mentor and faculty mentor, the researcher chose a cost-benefit analysis (Misuraca, 2014) and acceptability perception survey (Proctor et al., 2011) to measure the project's outcomes. The cost-benefit analysis determines if the benefit(s) of a service outweigh the cost(s) to implement that service (Misuraca, 2014). Therefore, the researcher chose the cost-benefit analysis to show the OP staff and rehabilitation manager(s) the

benefits of utilizing myofascial release as a treatment option compared to the costs of training OP staff to implement this service.

The acceptability perception survey addresses a specific intervention within a particular setting to determine the agreeability, palatability, or satisfactory of implementing that intervention (Proctor et al., 2011). Therefore, the researcher created an acceptability perception survey for IU North's OP pediatric therapists to determine the agreeability and palatability of implementing myofascial release as a treatment option into the outpatient pediatric clinic.

Cost-Benefit Analysis

The researcher planned to take the *average hourly OP therapist rate (X) average number of referrals (X) average number of visits (X) cost of training* and compare this number to the *average number of referrals (X) average number of visits (X) insurance reimbursement rate* to determine the cost-benefit ratio. Despite great efforts, the researcher was unable to gather information on insurance reimbursement rates and the average hourly OP therapist rate from IU North's clinic. Therefore, the measurability of the cost-benefit analysis changed from quantitative to qualitative due to this missing information.

The researcher decided to include the following information on the cost-benefit spreadsheet: MFR training courses recommended for the pediatric population, cost of each training, benefit of the training, number of referrals made each month for this population, and CPT codes used for MFR treatment (see Appendix B). Although the researcher could not provide a dollar amount for the cost-benefit ratio, the outpatient therapists indicated that their team was less worried about the cost and more worried about the benefits of the service and number of potential referrals. Appendix B provides the breakdown of the cost-benefit analysis provided to the outpatient pediatric therapy team.

The results show that approximately fifteen referrals are made to MFR therapy each month due to tongue-tie related issues, and an average of four visits are typically required to resolve these issues. (K. Thomas, personal communication, January 27, 2022; L. Lafuze, personal communication, February 07, 2022). IU North's OP therapy manager indicated that the hospital has an education fund that often covers training courses for therapists. Therefore, the profit gained from using MFR to treat infants with tight fascia secondary to congenital issues would outweigh the cost of training.

Acceptability Perception Survey

Four of the five outpatient pediatric therapists responded to the myofascial release acceptability perception survey. Of the respondents, results indicated that 100% of the therapists were "very likely" to utilize myofascial release techniques if given the appropriate training and patient population. When asked what percentage of their caseload could benefit from myofascial release, three therapists responded 46-60% and one therapist responded +91%. Three of the outpatient therapists reported "yes" to currently using myofascial release techniques in some of their treatment sessions.

Figure 1

Percentage of IU North OP therapists' current caseload that could benefit from myofascial

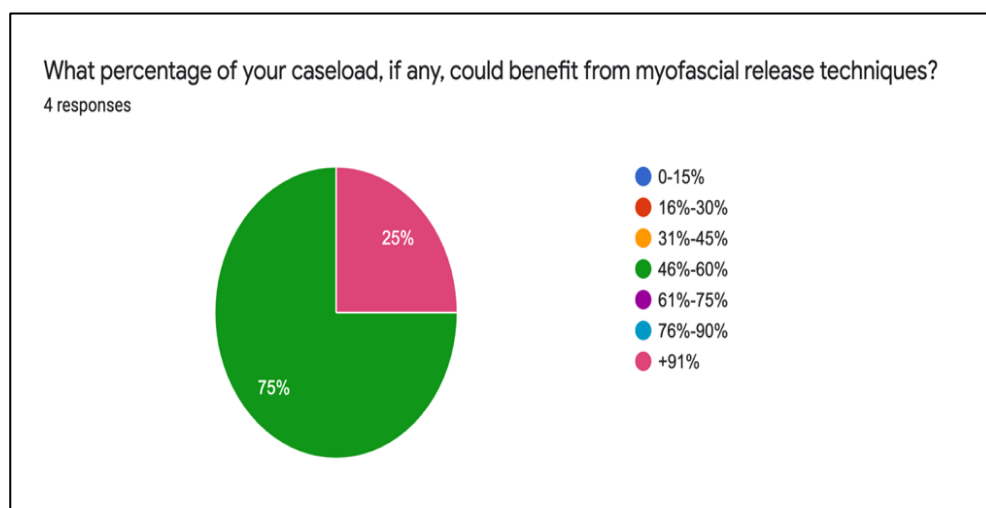
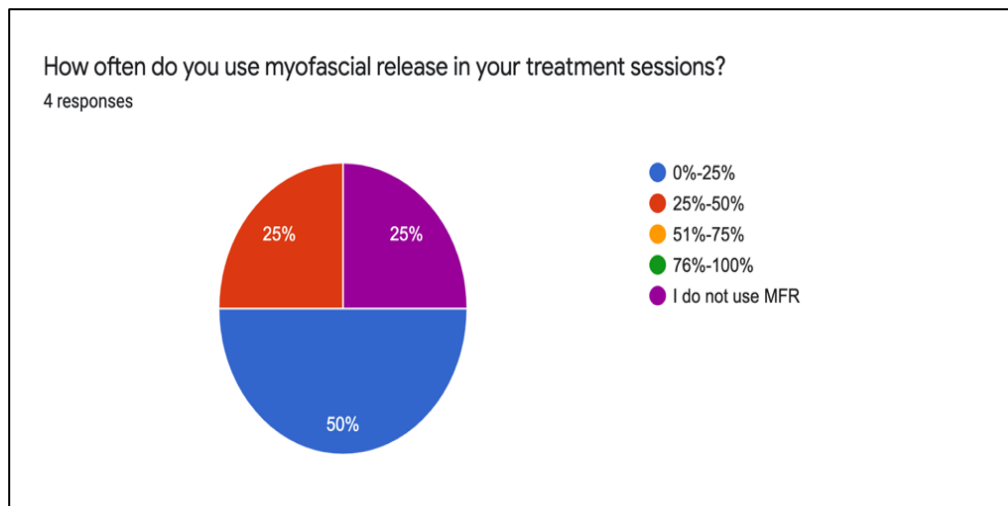


Figure 2

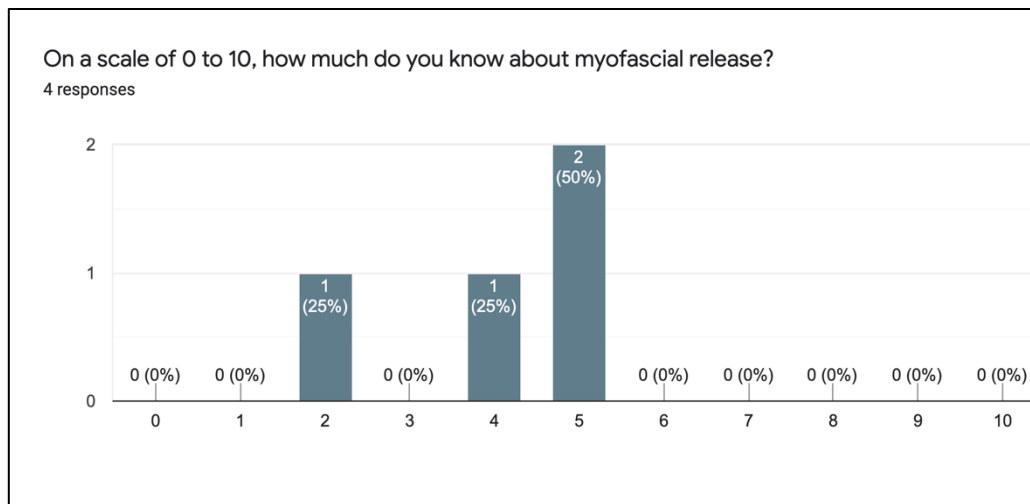
Percentage of IU North OP Pediatric Therapists' Current Caseload Receiving Myofascial Release



When asked, “On a scale of 0 to 10 (1= nothing at all and 10= everything there is to know), how much do you know about myofascial release,” the therapists reported 50% of less. Given these results, the therapist compiled several MFR resources including, but not limited to, articles, websites, FAQ sheets, and therapist-specific information for using myofascial release within their treatment sessions. Several of these resources directly relate to the pediatric population suffering from fascial restrictions secondary to tongue tie, torticollis, and other congenital issues.

Figure 3

IU North OP Pediatric Therapists' Current Knowledge on MFR

**Figure 4**

Descriptive Analysis of IU North's OP Therapists' Current Knowledge on MFR Techniques (scale 0-10).

Current knowledge on MFR techniques (scale 0-10)	
Mean	4
Standard Error	0.707106781
Median	4.5
Mode	5
Standard Deviation	1.414213562
Sample Variance	2
Kurtosis	1.5
Skewness	-1.414213562
Range	3
Minimum	2
Maximum	5
Sum	16
Count	4

Summary

In this doctoral capstone project, I investigated the cost-benefit analysis of utilizing myofascial release as a treatment option for tight fascia secondary to congenital issues and determined the OP therapists' agreeability to utilizing this type of treatment. Birch et al. (2021), found that approximately eleven percent of infants have tongue tie(s). Tongue tie consists of a short lingual frenulum, and depending on the severity, limits the tongue's mobility (Fernando, 1998; Rowan-Legg 2015). Severity of a tongue tie depends on the distance of the lingual frenulum between the tongue and floor of the mouth. Infants with moderate to severe tongue tie are often referred to lactation consultants due to breastfeeding concerns (Ricke et al., 2005; Rowan-Legg, 2015). In meeting with IU North's lactation coordinator, I learned that several babies are referred each month to myofascial release therapy to treat tight fascia secondary to tongue tie. She mentioned one referral source, a physical therapist at a non-affiliated clinic, that utilizes MFR as her primary treatment option for this population. The physical therapist invited me to observe three sessions, receive MFR treatment myself, and ask thorough questions to better understand the details of using MFR for this population.

Through extensive research and meeting with the lactation coordinator and physical therapist, I determined that implementation of MFR into IU North's Pediatric OP clinic would help gain referrals to treat this population at an early age. Appendix B highlights the results of the cost-benefit analysis and suggests that the benefits of implementing MFR into IU North's OP clinic outweigh the costs of the training courses. The acceptability-perception survey results indicated that the pediatric OP therapy team was "very likely" to utilize MFR as a treatment option if given the appropriate training and patient population. The therapists also mentioned that

MFR training would help advance their skills as a clinician and at least 46-60% of their current caseload could benefit from MFR.

Conclusions

I collaborated with IU North's OP pediatric occupational and physical therapists to identify MFR as a beneficial treatment option to utilize with babies with tight fascia secondary to tongue tie, torticollis, and other congenital issues. Through this doctoral capstone project, IU North's Outpatient Clinic gained several resources and further knowledge on tongue ties, tight fascia, and myofascial release. The occupational and physical therapists can utilize this information to gain referrals and enhance their clinical skills to appropriately treat these populations. Limitations within this project exist. I did not complete a pre/post survey. Therefore, the participant's perspective on the benefits of utilizing myofascial release to address tight fascia secondary to tongue tie, torticollis, and other congenital issues may be skewed secondary to limited knowledge on myofascial release. Only four of the five OP pediatric occupational and physical therapists responded to the acceptability perception. Of those four, 100% reported a 5 or less on a scale of 0-10 on perceived knowledge on MFR. However, 100% of the participations responded "very likely" to utilize MFR if given the proper training and patient population. Despite these limitations, I identified implications for future practice. IU North's OP Pediatric Clinic would benefit from further research to determine a combination of treatment techniques to utilize with babies with tight fascia secondary to congenital issues. The clinic would also benefit from further knowledge on how MFR can benefit other patient populations to add to the types of treatment options offered at IU North.

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Appendix A

Acceptability Perception Survey Questions

1. On a scale of 0 to 10, how much do you know about myofascial release?
2. Have you had any formal training on myofascial release?
3. If yes to question 2, please list your myofascial release training courses.
4. Do you currently use myofascial release in any of your treatment sessions?
5. If yes to question 4, how often do you use myofascial release techniques in your treatment sessions?
6. What percentage of your caseload, if any, could benefit from myofascial release?
7. On a scale of 0-10, how beneficial do you think myofascial release training would be in advancing your skills as a clinician?
8. If given the appropriate training and patient population, how likely are you to utilize myofascial release techniques?

Appendix B

Cost-Benefit Analysis Spreadsheet

MFR Training (John F Barnes)	COST	BENEFIT
Myofascial Release I	\$750.00	Myofascial Release I will provide the therapists with whole-body techniques to add to their existing treatment regimen, greatly enhancing their therapeutic effectiveness. This training will provide them with the tools to identify and address fascial restrictions secondary to tongue tie, torticollis, and other congenital issues to produce positive structural outcomes.
Myofascial Release II	\$750.00	The intermediate Myofascial Release II seminar will build off of Myofascial Release I to greatly enhance the therapist's vital "feel" via development of the tactile and proprioceptive senses, allowing them to achieve a higher level of expertise. This course will also provide the therapists with confidence in performing advanced cranial techniques to assess and treat neuromotor disorders.
Myofascial Unwinding	\$750.00	The Myofascial Unwinding seminar will improve the therapist's mental clarity, focus, and sensitivity of touch to help achieve consistent results when working with fascial restrictions secondary to tongue tie, torticollis, and other congenital issues. This course will help the therapists analyze facilitation techniques designed to improve mobility and decrease pain for clients suffering from fascia restrictions secondary to tongue tie, torticollis, and other congenital issues. This course allows the therapists to discuss proprioceptive awareness and how to improve handling skills when treating patients.
Pediatric Myofascial Release Workshop	\$450.00	This introductory workshop is designed for therapists whose primary focus is on the pediatric population. This workshop will focus on the evaluation and treatment of fascial restrictions secondary to head injuries, cerebral palsy, birth trauma, scoliosis, movement dysfunction, neurological dysfunction, trauma, pain and headaches. The overall goal is to maximize the child's functioning in all activities of daily living. Therapists will learn how MFR compliments NDT, sensory integration, and other pediatric techniques. This workshop will also help the therapist identify techniques to assist in normalizing tone and improving the quality and quantity of movement of the pediatric patient.

****The courses listed above were recommended by a physical therapist who regularly treats fascial restrictions secondary to tongue tie, torticollis, and other congenital issues using MFR techniques. The physical therapist recommends completing the training in the following order: Begin with Myofascial Release I and Pediatric Myofascial Release Workshop. These two courses will provide the therapists with confidence in utilizing MFR techniques to treat the pediatric population. Then, after a few months of implementing these techniques, take the remaining two courses for skill advancement and increased knowledge. The remaining two courses were recommended as supplemental after the therapist becomes comfortable implementing MFR techniques.****

	TOTAL	NOTES
AVERAGE REFERRALS MADE EACH MONTH (by Kathy Thomas, BSN, IBCLC-RLC)	15	Kathy Thomas (BSN, IBCLC-RLC) is the Lactation Coordinator at IU North. She refers babies with fascial restrictions secondary to tongue tie, torticollis, and other congenital issues to MFR therapy.
AVERAGE # OF MFR SESSIONS PER CHILD	4 visits	The number of MFR treatment sessions varies between 2 to 12 depending on severity but most cases require 4 visits total.

****The *average number of MFR sessions per child* is based on an interview completed with a physical therapist, located in Indianapolis Northside, who regularly treats this population in using MFR techniques.****

CPT CODES for MFR
97110: Therapeutic Activity
97112: Neuromuscular Re-education
97140: Manual Therapy
97530: Therapeutic Exercise

Appendix C

DCE Weekly Planning Guide

Week	DCE Stage	Weekly Goal	Objectives	Tasks	Date Completed
1	Orientation	Complete orientation and onboarding process by the end of the week.	- Meet the team (OT, PT, ST, RT, Nursing staff, dietitians, lactations specialists, and physicians). - Introduce myself and DCE plans. - Address supervision plan and MOU with site mentor - Familiarize myself with the hospital environment and their policies/procedures	- Introduce self to staff and build rapport with the team. - Set up meetings with essential personnel - Create a short “elevator speech” regarding my project - Finalize MOU	01/12/22 01/28/22 01/26/22 01/21/22
	Screening/ Evaluation	Finish needs assessment by end of the week	Finalize the need for my project	Ensure I’ve completed the onboarding process and am fully ready to begin my project.	01/26/22
2	Screening/ Evaluation	Complete additional literature search for program evaluation measurements Complete referral meeting Create MFR acceptability perception survey	- Establish outcome assessment - Address referrals for babies with tongue ties - Determine the agreeability and palatability of implementing myofascial release as a treatment option into the	- Review and discuss outcome assessments with the site mentor and faculty mentor - Meet with lactation specialists to discuss referrals for tongue-tie related issues - Administer survey to OT/PTs in OP clinic regarding their confidence in addressing the target population	01/28/22 01/27/22 03/01/22

			outpatient pediatric clinic		
3	Screening/ Evaluation	Complete data on referral sources	Understand how, where, and why babies are referred for issues associated with tongue ties	Review and compile referral information into document	02/27/22
4	Implementation	Complete observation and exploration of sites currently receiving referrals related to tongue ties	Gain insight into best practices for addressing tongue-tie related issues	- Visit sites to observe and explore their OP clinic - Research sites that currently receive tongue tie referrals - Explore MFR and its effectiveness in treating target population	02/09/22 03/04/22 02/08/22
5	Implementation	Identify MFR trainings and cost to attend Understand MFR mechanisms and techniques utilized during treatment sessions	- Identify MFR training that are most relevant to treating targeted population - Meet with MFR therapist to gain knowledge and receive treatment	- Research and gather additional information on MFR trainings, their cost, and CEU credits - Understand MFR on a deeper level by being treated myself	03/14/22 02/18/22
6	Implementation	Complete outline for best training protocols/programs for OT/PT using MFR to target tight fascia secondary to congenital issues Complete data collection from OT/PT acceptability perception survey	- Provide staff with MFR training opportunities - Understand OT/PTs perspectives on implementing MFR	- Create a document/pamphlet/excel sheet with detailed explanation of trainings offered for therapists interested in treating this population - Review and compile survey results into document	03/18/22 03/11/22

7	Implementation	Locate and identify helpful MFR resources	Filter through websites, research articles, helpful tips, and other MFR resources	Determine which resources are most beneficial and related to the targeted population	03/11/22
8	Implementation	Finalize cost-benefit analysis	Receive feedback from site mentor on cost-benefit analysis	Make changes to cost-benefit analysis as appropriate	03/15/22
9	Implementation	Create dissemination plans draft	Determine best options for dissemination	Meet with site mentor to discuss ideas for dissemination	03/22/22
10	Implementation	Finalize helpful MFR resources	Compile and organize resources by topic	Create a website to compile and organize gathered MFR resources	03/25/22
11	Implementation	Finalize dissemination plans	Create dissemination planning guide	- Send out poll to OP therapy team to determine date and time to meet for dissemination - Create handout summarize results	04/01/22 04/01/22
12	Discontinuation	Complete project	Wrap up project and tie up all loose ends	Meet with site mentor to discuss dissemination and final weeks	04/03/22
13	Dissemination	Disseminate project	Meet with outpatient therapy team	- Provide team with project results - Provide team with handout summarizing project and results	04/06/22
14	Dissemination	Receive and provide feedback from end users and dissemination partners	Schedule dates and times to meet with therapy team members	Meet with therapy team members to receive and give feedback	04/14/22