

FACT SHEET

Providing Translational Physical Therapy Services from the Neonatal Intensive Care Unit to Early Intervention

INTRODUCTION

This fact sheet provides information to improve the transition of infant's and families from the NICU to the early intervention setting. Physical therapists practicing in both settings should be well-informed about best practices in both the NICU and in EI. Please refer to the APPT fact sheets included in the resource list at the end of this document for more in-depth information about best practices in these settings.

Collaboration between families and pediatric physical therapists is essential to achieve the most favorable developmental outcomes of high risk infants.^{1,2} Physical therapists working with infants and their families have an important role in supporting parent-infant interaction to promote bonding, caregiving, feeding, and the acquisition of developmental skills both in NICU settings and in home and community environments.²⁻⁴ While we know that early, intentional focus on caregiver education and family-centered services improve child outcomes, the transition from the NICU to a family's home environment can be challenging even in the best of circumstances.⁵ Promoting physical therapy services on both sides of this transition will help to ensure that families receive seamless support for transitioning from the hospital NICU setting to the home environment.

Physical therapists working in the NICU and EI settings should be aware of state, program, and hospital system referral procedures for optimal communication and continuity of care.

NICU ENVIRONMENT

The focus of neonatal physical therapy is on developing an individualized family-centered care plan for the infant with complex needs that promotes positive neurodevelopmental outcomes.^{2,3,5} Neonatal physical therapists provide developmental support and information to the family regarding the infant during their NICU stay.⁶

EARLY INTERVENTION ENVIRONMENT

Early intervention services are provided as Part C of the Individuals with Disabilities Education Act (IDEA).⁷ The focus of EI physical therapy is to enhance the development of infants and toddlers with disabilities through age 2 years. Services are family-centered, occur in the context of a family's natural environments and routines, and implemented in accordance with the Individualized Family Service Plan (IFSP).⁷

COMMUNICATION BETWEEN THE NEONATAL AND EI PHYSICAL THERAPIST

Communication is helpful for the continuity of developmental care of the high risk infant from the hospital to the home setting. EI therapists benefit from learning information provided to the family regarding developmental care specific to the infant and family during their stay in the NICU.

The Division for Early Childhood (DEC) Recommended Practices¹ includes recommended practices specific to the transition of families and young children from one setting to another - including from the NICU to EI. These practices are as follows:

- *Practitioners who refer and receive clients from a NICU should exchange information before, during, and after transition about practices most likely to support the child’s successful adjustment and positive outcomes.*
- *Practitioners use a variety of planned and timely strategies with the child and family before, during, and after the transition to support successful adjustment and positive outcomes for both the child and family.*

From these recommendations, we see that practitioners must consider how to best support children and families **before**, **during**, and **after** any major transition.

BEFORE: RECOMMENDATIONS FOR PREPARING FOR A SMOOTH TRANSITION	
NICU and EI providers must connect.	Become familiar with the NICU and EI programs in your area, including an understanding of which children may be preparing for a transition out of the NICU and how the EI team in that region is prepared to respond.
Provide information to families on the transition process.	EI and NICU therapists should work together to provide information on the timelines, paperwork, evaluations, and other tasks that must be completed for a successful transition.
Team members in NICU and EI should work together with the family to plan and implement supports and services to meet the unique needs of the child and family.	Families should begin discussing discharge with both NICU providers and community agencies early in their NICU stay.
DURING: TIPS FOR NICU AND EI PRACTITIONERS AT PART C REFERRAL	
Provide education throughout the NICU admission addressing cultural and language needs	Ensure that families will continue to receive services in their preferred language and are anticipating calls and other communication from EI providers.
Promote bonding, reading of infant cues, positioning, and hands-on interventions across settings.	Become familiar with the techniques frequently used in settings other than your own and be prepared to help families identify strategies that will carry over.
Provide a variety of written, verbal, web, and other resources to support families during the transition	Information on the local EI providers should be provided in such a way that families know what follow-up to expect and who to contact with concerns.
Ensure that equipment and materials are in place prior to discharge	Support families in accessing medical and developmental equipment, as well as nutritional and community resource support, before they leave the NICU and follow up on these resources early in the EI referral process.

Discuss “what happens next” in terms of developmental follow-up after discharge.	NICU therapists, caregivers, and EI therapists should all have a clear understanding of expected follow-ups, such as follow-up physical therapy settings available and including how the family will get to any follow-up appointments.
Plan for communication	All NICU therapists, caregivers, and EI therapists should have access to preferred methods of contact for one another and a plan for what follow-up conversations will occur.
AFTER: TIPS FOR COLLABORATION BETWEEN EI AND NICU FOLLOW-UP PRACTITIONERS	
IFSP and NICU teams must communicate about progress toward current outcomes.	The IFSP should clearly indicate what services are provided at what frequency, as well as any barriers to progress.
	IFSPs containing a clear plan of care and describes the team practices used in individual EI programs that support families and clearly explain the services children are receiving.
IFSP and NICU teams must focus on family priorities.	Families are always in control of what services they receive, at what frequency, and should be provided with the information they need to make informed decisions about children’s care.

SUMMARY AND CONCLUSIONS

While the NICU and early intervention teams often support the same families, these settings do not always have a smooth transition process. Therapists in both settings should facilitate the transition from NICU to EI, prioritizing frequent and clear communication. This will enhance the relationships between NICUs and EI agencies and ensure that families receive the support they need quickly and efficiently.

REFERENCES

1. Division for Early Childhood. DEC Recommended practices in early intervention/early childhood special education 2014. Retrieved from www.dec-sped.org/recommendedpractices.
2. Sweeney JK, Heriza HB, Blanchard Y, Dusing S: Neonatal physical therapy. Part II: practice frameworks and evidence-based practice guidelines, *Pediatr Phys Ther.* 2010;2(1):2-16.
3. Sweeney JK, Heriza HB, Blanchard Y. Neonatal physical therapy: clinical competencies and NICU clinical training models. Part I, *Pediatr Phys Ther.* 2009;21(4):296-307.
4. Chiarello L, Effgen S. Updated competencies for physical therapists working in early intervention. *Pediatr Phys Ther.* 2006;18(2):148-158.
5. Byrne EM, Garber JB. Physical therapy intervention in the NICU. *Phys Occup Ther Pediatr.* 2013;33(1):75-110.
6. Goldstein LA. Family support and education. *Phys Occup Ther Pediatr.* 2013;33(1):139-161.

7. Public L No. 108-446. *Individuals with Disabilities Education Improvement Act of 2004*. www.sites.ed.gov/idea/regs/c. Accessed September 27, 2019.

NICU ADDITIONAL RESOURCES

- American Physical Therapy Association Academy of Pediatrics (APTA Pediatrics): Neonatal Physical Therapy Practice: Roles and Training Fact Sheet: <https://pediatricapta.org/fact-sheets/>
- Neonatology Special Interest Group, APTA Pediatrics: www.pediatricapta.org/special-interest-groups/neonatology/index.cfm
- Neonatology Special Interest Group Resource Guide for Physical Therapy Practice in the NICU [www.pediatricapta.org/special-interest-groups/NN/pdfs/Neonatal Didactic Training Resource list.pdf](http://www.pediatricapta.org/special-interest-groups/NN/pdfs/Neonatal_Didactic_Training_Resource_list.pdf)

EARLY INTERVENTION ADDITIONAL RESOURCES

- Early Childhood Technical Assistance Center, State Part C. Available at: www.ectacenter.org/contact/contacturl.asp?gc=101
- Early Childhood Technical Assistance Center, Workgroup on Principles and Practices in Natural Environments: Part C Settings, Seven Key Principles. Available at: www.ectacenter.org/~pdfs/topics/families/Principles_LooksLike_DoesntLookLike3_11_08.pdf
- Early Intervention Special Interest Group, APTA Pediatrics. Available at: www.pediatricapta.org/special-interest-groups/sigs.cfm?sig=EI
- Early Intervention Physical Therapy: IDEA Part C. Fact Sheet. Available at: <https://pediatricapta.org/fact-sheets/>
- Team-based Service Delivery Approaches in Pediatric Practice. Fact Sheet: Available at: <https://pediatricapta.org/fact-sheets/>
- Natural Environments in Early Intervention Services. Fact Sheet: Available at: <https://pediatricapta.org/fact-sheets/>
- Using a Primary Service Provider Approach to Teaming. Fact Sheet: Available at: <https://pediatricapta.org/fact-sheets/>

©2020 by the APTA Academy of Pediatric Physical Therapy, 1020 N Fairfax St, Suite 400, Alexandria, VA 22314-1488, www.pediatricapta.org

Developed by the Neonatology and Early Intervention Special Interest Groups of APTA Pediatrics. Special thanks to Jamie Holloway, PT, DPT, PhD; Michele Hyams, PT, DPT; Jennifer James, PT, DPT; and Audrey Wood, PT, MS, DPT for their contributions to the previous version of this fact sheet. Supported by the Fact Sheet Committee of APTA Pediatrics.

The APTA Academy of Pediatric Physical Therapy provides access to these member-produced fact sheets and resources for informational purposes only. They are not intended to represent the position of APTA Pediatrics or of the American Physical Therapy Association.