The Neonatology Special Interest Group, Academy of Pediatrics, American Physical Therapy Association: http://www.pediatricapta.org/special-interest-groups/neonatology/index.cfm has developed a resource guide for individuals interested in learning about physical therapy practice with neonates.

This resource list is a starting point before working with a mentor in the specialized area of neonatal physical therapy practice. The resources alone are not sufficient to prepare a therapist for practice in the Neonatal Intensive Care Unit. Additional experience and mentorships are recommended before working in the neonatal intensive care unit.

**PHYSICAL THERAPY NEONATOLOGY FELLOWSHIP PROGRAMS**

- **Nationwide Children's Hospital Neonatology Fellowship**
  - RF-PTCAS Participant: Program Profile
  - 700 Children’s Drive
  - C4973
  - Columbus, OH 43205
  - Contact: Maria Damore PT, DPT
  - Phone: 614/722-6642
  - Email: maria.damore@nationwidechildrens.org

- **Rocky Mountain University of Health Professions & Seattle Children's Hospital Neonatology Fellowship**
  - 122 East 1700 South
  - Provo, UT 84606
  - Contact: Jane Sweeney PT, PhD
  - Phone: 253/861-9764
  - Email: jsweeney@rmuohp.edu

- **The Children's Hospital of Philadelphia Neonatology Fellowship**
  - RF-PTCAS Participant: Program Profile
  - 34th & Civic Center Blvd.
  - Philadelphia, PA 19104
  - Contact: Diane Versaw-Barnes PT, DPT
  - Phone: 267/426-5002
  - Fax: 215/590-6162
  - Email: versaw@email.chop.edu

APTA Online Directory of Fellowship Programs
[http://www.abpтрфе.org/FellowshipPrograms/ProgramsDirectory/](http://www.abpтрфе.org/FellowshipPrograms/ProgramsDirectory/)
CONFERENCES, ASSOCIATIONS, AND WEB RESOURCES

- **Annual Gravens Conference on the Physical and Developmental Environment of the High Risk Infant**
  - The Gravens Conference is a 4-day medical education conference designed to bring the latest evidence-based information to a multidisciplinary audience of clinicians. The conference design is a day of science, a day for themed tracks, a day of abstracts and workshops, and a final 1/2 day for exploring spirituality in the NICU, and a continuation of the Family Support theme.

- **APTA/Academy of Pediatric Physical Therapy Annual Conference (APPTAC)**
  - APPTAC features the more than 50 educational tracks in 8 pediatric specialty areas focused on pediatric physical therapy. In addition to fabulous programming, APPTAC features an Exhibit Hall, a Practice Fair, Poster Presentations, exercise initiatives, leadership events, and social events. APPTAC is a great chance to network with colleagues across the country and around the world and may be a helpful part of PCS prep.

- **APTA/Combined Sections Meeting**
  - CSM is the largest physical therapy conference in the country with programming designed by all 18 of APTA's specialty sections. The Academy of Pediatric Physical Therapy hosts various meetings during this event including one by the NICU SIG.
  - [www.apta.org/CSM/](http://www.apta.org/CSM/)

- **Caring Essentials Collaborative**
  - Caring Essentials informs to transform the neonatal patient experience of care - bringing the latest evidence-based research to your clinical practice in the NICU.
  - [https://www.caringessentials.net](https://www.caringessentials.net)

- **Creative Therapy Consultants**
  - Online education, hands-on training, advanced level certification, workshops, lectures, and DVDs designed for all staff in the NICU or Special Care Nursery.
  - [https://www.creativetherapyconsultants.com/our-company/](https://www.creativetherapyconsultants.com/our-company/)

- **Dandle Lion Medical**
  - Dandle-LION Medical webinars are recorded and can be viewed live, with an opportunity to ask questions, or as a recording. Both ways offer free CEUs.
  - [www.dandlelion-webinars.com](http://www.dandlelion-webinars.com)

- **Education Resources**
  - Provides NICU education via face to face seminars by a variety of instructors.
  - [www.educationresourcesinc.comvis](http://www.educationresourcesinc.comvis)

- **Infant Driven Feeding**
  - Infant-Driven Feeding® (IDF) provides education related to oral feeding practice for neonatal caregivers worldwide.
  - [http://www.infantdrivenfeeding.com](http://www.infantdrivenfeeding.com)

- **Infant Health Foundation**
  - The purpose of the Infant Health Foundation is to improve the care of babies and infants by developing and publishing evidence-based protocols, best practices and standards. Over time the Foundation intends to develop into a collecting point for information and education about the care of babies and infants from many sources.
  - [https://babosys.wordpress.com](https://babosys.wordpress.com)

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● March of Dimes
  ○ Provides information on risk factors for a premature birth, common conditions treated in the NICU, terminology and equipment, prematurity, genetic disorders birth defects, and resources for families.
  ○ [http://www.marchofdimes.com](http://www.marchofdimes.com)

● National Association of Neonatal Nurses (NANN)
  ○ The Developmental Care Specialist designation (intended for all neonatal healthcare professionals, including, but not limited to, nurses and therapists) offers clinicians with developmental care experience an opportunity to apply and assess their knowledge through the completion of a 100-item test. The test includes both cognitive assessment questions and scenario-based cases.

● National Association of Neonatal Therapists
  ○ An organization of neonatal therapists composed of OT’s PT’s and SLP’s. The organization hosts an annual conference. The objective of the conference is to present evidence-based practices in the NICU. Training opportunities are provided through online webinars and through the purchase of training materials.
  ○ [http://neonataltherapists.com](http://neonataltherapists.com)

● Neonatal Developmental Care
  ○ Six Developmental Care Trainings in DVDs or CD format designed for the bedside health-care staff, and includes evidence and research supporting developmental care practices, photo and video demonstrations.
  ○ [www.neonataldevelopmentalcare.com](http://www.neonataldevelopmentalcare.com)

● Pediatric Continuing Education Summer Institute
  ○ Rocky Mountain University of Health Professions continuing education programs annual interdisciplinary training in NICU Science & Practice. Content includes neonatal examination, neonatal therapy intervention procedures, feeding overview for medically compromised infants, and transition to home. Periodically certification is provided in neonatal and infant outcome measures in addition to specific training opportunities in taping, splinting, and feeding of high-risk infants.
  ○ [https://rmuohp.edu/academics/continuing-education](https://rmuohp.edu/academics/continuing-education)

● Quantum Caring
  ○ A blog about the neonatal intensive care unit, its patients, their families, and the clinicians who serve them.
  ○ [https://quantumcaring.blogspot.com/?view=classic](https://quantumcaring.blogspot.com/?view=classic)
  ○ Annual Conferences brings together leading international scientists, researchers, clinicians and educators to translate advances in evidence-based practice in trauma-informed, neuroprotective care of the critically ill newborn, infant, and family across all healthcare settings.
  ○ [https://www.caringessentials.net/the-conference/](https://www.caringessentials.net/the-conference/)
Essential Readings: Critical for the Physical Therapist Providing Care in the NICU

  - [https://doi.org/10.3109/01942638.2012.754827](https://doi.org/10.3109/01942638.2012.754827)
- Patient’s Bill of Rights:
  - For example see: [www.chop.edu/about/our-philosophy-of-care/patients-bill-of-rights.htm](http://www.chop.edu/about/our-philosophy-of-care/patients-bill-of-rights.htm)
  - [http://www.nature.com/jp/journal/vaop/ncurrent/full/jp2017108a.html?WT.feed_name=subjects_medical-research&foxtrotcallback=true](http://www.nature.com/jp/journal/vaop/ncurrent/full/jp2017108a.html?WT.feed_name=subjects_medical-research&foxtrotcallback=true)

Theoretical Principles that Guide Physical Therapy Practice in the NICU

Family-Centered Care

- Patient’s Bill of Rights:
  - For example see: [www.chop.edu/about/our-philosophy-of-care/patients-bill-of-rights.htm](http://www.chop.edu/about/our-philosophy-of-care/patients-bill-of-rights.htm)
  - [http://www.nature.com/jp/journal/vaop/ncurrent/full/jp2017108a.html?WT.feed_name=subjects_medical-research&foxtrotcallback=true](http://www.nature.com/jp/journal/vaop/ncurrent/full/jp2017108a.html?WT.feed_name=subjects_medical-research&foxtrotcallback=true)
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Synactive Theory of Development
  - DOI: 10.3109/09593985.2015.1010243
  - https://www.tandfonline.com/doi/abs/10.1080/J006v06n03_02?src=recrecsys

Dynamic Systems Theory and Theory of Neuronal Group Selection

Neuroplasticity
  - https://doi.org/10.1016/j.ejpn.2016.07.007

International Classification of Functioning, Disability and Health (ICF)
  - https://evolve.elsevier.com/cs/product/9780323390187

Trauma Informed Care
  - http://dx.doi.org/10.1891/0730-0832.35.6.359

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Developmental Care

  o https://doi.org/10.1177/0844562117706882
  o https://doi.org/10.1177/0844562117708126
  o https://www.amazon.com/Developmental-Care-Newborns-Infants-Professionals/dp/0323024432
- On-Line Training Modules: NANN Developmental Care Modules.

Typical Development

Central Nervous System and Musculoskeletal System

  o https://evolve.elsevier.com/cs/product/9780323390187
  o https://evolve.elsevier.com/cs/product/9780323390187

Sensory Development

  o https://doi.org/10.1016/j.pcl.2014.11.003

Behavioral State Regulation and Behavioral Stress Cues

  o https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2765199/

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Motor and Sensory Motor Skills
  - https://evolve.elsevier.com/cs/product/9780323390187
  - https://evolve.elsevier.com/cs/product/9780323390187
- Pathways Awareness Foundation. Educational videos with topics included: sensory, motor and communication development of infants; typical and atypical infant development at 2 and 6 months; and videos of infants in therapy sessions.
  - http://www.pathways.org

Social Development and Infant/Parent Interaction
- www.zerotothree.org
- Infant/parent interaction: Hope empowerment model
  - http://pediatrics.aappublications.org/content/118/5/e1414.long?sso=1&sso_redirect_count=1&nfstatus=401&nfstatusdescription=ERROR%3a+No+local+token

Early Cognitive Development and Learning Opportunities in Infancy
  - https://doi.org/10.1016/j.neubiorev.2017.06.009
- www.zerotothree.org

Outcomes of Neonates at Risk/Atypical Development

Infants Born Preterm (Social/Developmental)

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Infants with Neonatal Abstinence Syndrome & infants with exposure to morphine for pain control
  - https://www.bmj.com/content/bmj/358/bmj.j3448.full.pdf
  - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4801883/

Infants with Genetic Conditions

Infants with Cardiovascular and Pulmonary Conditions
  - https://evolve.elsevier.com/cs/product/9780323390187

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  - https://evolve.elsevier.com/cs/product/9780323390187

Infants with Neonatal Brain Injury

Infants with Neuromuscular Injury
  - https://evolve.elsevier.com/cs/product/9780323390187

Infants Born Late Preterm
  - https://doi.org/10.1111/dmcn.13297
  - https://doi.org/10.1111/dmcn.13301

Infants Born Preterm
  - http://dx.doi.org/10.1111/dmcn.13380
  - https://dx.doi.org/10.1001/jamapediatrics.2016.1210

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Examination and Evaluation

Examination procedures for neonates: Determining physiologic and behavioral readiness for neonatal physical therapy examination. Monitoring autonomic, behavioral state, and motor stability throughout an examination. Conducting observational examination techniques. Administering minimal contact examination techniques. Determining when standardized assessment is safe to perform and clinically warranted. Providing standardized assessments developed for neonates born preterm or at term gestation.

  - http://www.ajnr.org/content/38/1/162
  - http://ac.els-cdn.com/S0021755716000516/1-s2.0-S0021755716000516-main.pdf?_tid=0f28061e-9729-11e7-be49-00000aabf2f6&acdnat=1505159006_039a27f61f660223f938fba2f378063c
  - https://doi.org/10.1080/01942638.2016.1185501
  - https://doi.org/10.1016/j.earlhumdev.2016.02.002

Neonatal Test and Measures

**Hammersmith Infant Neurological Examination (HINE) (Impairment Measure)**

*Purpose:* Prognostic information regarding motor outcome, identify infants who may benefit from therapy. Optimality score for the neurologic examination of the infant at 12 and 18 months of age.

*Age Range:* 2-24 months

*Areas Tested:* 26 items assessing cranial nerve function, posture, quality, and quantity of movements, muscle tone, and reflexes and reactions.

*Training required:* Nationwide Children’s Hospital

*Score sheet available:* http://dx.doi.org/10.1016/j.pediatrneurol.2016.09.010

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**Neonatal Individualized Developmental Care and Assessment Program (NIDCAP) (Impairment Measure/Activity Measure)**
(www.nidcap.org)
Provides training and information on developmentally appropriate care for the preterm and term infants. Information on NIDCAP certification and certification in NONB.
**Purpose:** Used to determine the infant’s physiological and behavioral responses to the environment to assist parents and caregivers.
**Age Range:** Neonates to 4-weeks post-term
**Areas Tested:** Criterion-referenced assessment of physiological and behavioral responses in the areas of autonomic, motor and attention.
**Training required:** 1-2 years.

**The Newborn Behavioral Observation (NBO) (Participation Measure)**
**Purpose:** not an assessment tool per se but a relationship-building tool designed to help clinicians sensitize parents to their child’s competencies, uniqueness, and support the development of positive parent-infant and clinician-parent relationships. It consists of a structured set of 18 neurobehavioral items observed with the parents as partners. Professionals guide the observation, discuss the baby’s abilities and behaviors with parents, encourage parent insights and questions, and suggest specific ways to support the child’s development. (Appropriate use of the NBO tool in clinical practice requires training through the NBO training program.)
**Age Range:** Birth to 3 months
**Areas Tested:** Structured set of 18 observations for infants from birth to approximately 3 months.
**Training required:** Two days
  - http://www.childrenshospital.org/Research/Centers-Departmental-Programs/brazelton-institute


**NICU Neonatal Network Scale (NNNS) (Impairment Measure)**
**Purpose:** examines the neurobehavioral organization, neurological reflexes, motor development - active and passive tone, and signs of stress and withdrawal of the at-risk and drug-exposed infant. Designed to provide a comprehensive assessment of both neurological integrity and behavioral function.
**Age Range:** 34 weeks-45 weeks
**Areas Tested:** The examination includes 3 parts:
1) neurologic items that assess active and passive tone and primitive reflexes as well as items that reflect CNS integrity
2) behavioral items including state and sensory and interactive responses
3) stress/abstinence items particularly appropriate for high-risk infants.

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Training required: Training seminars are structured to meet the specific needs of those being trained. Training is intensive, didactic and hands-on. The preferred approach is to arrange two training sessions several weeks apart to allow for a period of time between sessions during which the trainee(s) can practice administering and scoring the exam. However, with adequate preparation, most examiners can complete the training within a single 5-day training session. * Some examiners with extensive infant experience and pre-visit preparation, can achieve certification in less than 5 days.

Cost: cost associated per trainee (+ travel expenses for the trainee or trainer). Cost is associated per trainee for NNNS kit, which includes 1 NNS manual, 2 head supports, 1 flashlight, 1 bell, 1 ball, 1 rattle.

  o https://www.brown.edu/research/projects/children-at-risk/about/nnns-training-and-certification-program-0

Test of Infant Motor Performance (TIMP) (Activity Measure)
Purpose: To identify infants with deficits in postural control and to document the effects of developmental therapy to improve postural control needed for functional movement in early infancy.

Age Range: 34-weeks gestational age through 4-months post-term (or full term to 4-months)

Areas Tested: 13 observed behaviors and 25 elicited behaviors assessing the ability to orient and stabilize the head in space and in response to auditory and visual stimulation in supine, prone, side lying, upright, and during transitions from one position to another, distal selective control of the fingers and ankles, antigravity control of arm and leg movement.

Training required: approximately 14 hours of study plus a minimum of 10 hours practice testing infants.


Authors: Campbell SK, Girolami GL, Kolobe TH, Osten E, and Lenke M.

Publisher: Infant Motor Performance Scales, LLC, 1301 W. Madison St. #526, Chicago, IL. 60607-1953

  o http://thetimp.com

General Movement Assessment (GMA) (Impairment Measure)
Purpose: A quick, non-invasive, non-intrusive with high reliability and high validity for the early detection of neurological anomalies.

Age Range: Birth to 20 weeks post term.

Areas Tested: Spontaneous general movements elicited by infant.

Training required: Basic course; an introduction Prechtl's Method on the Qualitative Assessment of General Movements in young infants. Advanced course; covers details of the assessment, proper terminology and technique as well as with the application of individual developmental trajectories.

  o http://general-movements-trust.info/51/papers
  o http://general-movements-trust.info/5/home


Finnegan Neonatal Abstinence Scoring Tool (FNAST) (Impairment Measure)
Purpose: 21 items scored on a 1-5 point scoring system to quantify severity of neonatal exposure of term infants to toxic substances.

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**Areas Tested:** Central nervous system, gastrointestinal, metabolic, vasomotor, and respiratory disturbances.

**Cost:** Available online

**Publisher:** Current therapy in neonatal-perinatal medicine. 2ed. Ontario: BC Decker: 1990. Available through Western Australia Centre for Evidence Based Nursing and Midwifery, January 2007.

- [https://www.neoadvances.com/authors.html](https://www.neoadvances.com/authors.html)

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**Pain Scales of Neonates and Infants**

**Neonatal Pain, Agitation and Sedation Scale (N-PASS)**

**Purpose:** a clinically useable, consistent, age appropriate assessment and documentation methodology for ongoing infant pain and also sedation in the neonatal intensive care unit (NICU).

**Age Range:** 23 to 40 weeks gestation

**Areas Tested:** Crying, behavioral state, facial expressions, extremity tone and vital signs.

**Cost:** Available on line.

**Author:** Hummel P, Pulchalski M. Loyala University Health Systems. Loyola University Chicago, 2001.

- [www.anestesiarianimazione.com/DWLDocuments/npass.doc](http://www.anestesiarianimazione.com/DWLDocuments/npass.doc)

**CRIES**

**Purpose:** The CRIES scale is used for infants > than or = 38 weeks of gestation. A maximal score of 10 is possible. If the CRIES score is > 4, further pain assessment should be undertaken, and analgesic administration is indicated for a score of 6 or higher.

**Age Range:** less than or equal to 38 weeks gestation.

**Areas Tested:** Characteristics of crying, oxygen requirement, changes in vital signs, facial expression, and sleep state are scored.

**Cost:** Available on line.

**Author:** Krechel SW, Bildner J.


**Neonatal Infant Pain Scales (NIPS)**

**Purpose:** To measure pain in preterm and full term infants

**Age Range:** Birth to 1-year

**Areas Tested:** Scored on 6 parameters: facial expression, cry, breathing patterns, arms, legs, and state of arousal.

**Cost:** Available online.

**Author:** J. Lawrence, D. Alcock, P. McGrath, J. Kay, S.B. MacMurray, C. Dulberg Publisher: Neonatal Network.


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**The Premature Infant Pain Profile (PIPP)**

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Purpose: A behavioral measure of pain for premature infants.
Age Range: < 28 weeks to >= 36 weeks gestation
Areas Tested: Behavioral observation as an indication of pain.
Cost: Available on line

Face, Legs, Activity, Cry, and Consolibility Behavioral Pain Scale (FLACC)
Purpose: To quantify pain behaviors in children who are not able to verbalize pain
Age Range: Birth to 18-years
Areas Tested: Observation of facial expression, leg movement, activity, cry and consolability.
Cost: Available online.

Prevention and Management of Procedural Pain in the Neonate: An Update
Committee on Fetus and Newborn and Section on Anesthesiology and Pain Medicine. Pediatrics Jan 2016, peds.2015-4271; DOI: 10.1542/peds.2015-4271
  o http://pediatrics.aappublications.org/content/early/2016/01/22/peds.2015-4271

Safe and Effective Interventions
Please refer to essential reading before going further

Global
  o https://www.ncbi.nlm.nih.gov/pubmed/28384484
- Age-appropriate care of the premature and critically ill hospitalized infant. Guideline for practice.
  o http://nann.org/uploads/Education/Age-Appropriate_Care-FINAL.pdf

Positioning to Support Alignment and Movement
  Raquel Keithley, Kara Boynewicz, Sue Campbell Delapp, Isabel Pineda
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  - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3938096/

Handling

  - https://doi.org/10.3109/09593985.2015.1010243

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Massage
  - [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5406680/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5406680/)

Environmental Modifications
  - [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3790962/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3790962/)
  - [https://www.pediatrics.aappublications.org/content/134/4/754.long](https://www.pediatrics.aappublications.org/content/134/4/754.long)
  - [https://www.jpeds.com/article/S0022-3476(17)30166-X/pdf](https://www.jpeds.com/article/S0022-3476(17)30166-X/pdf)

Developmental Care
- NANN Developmental Care Modules
  Access to 27 modules, with 38.0 CNE contact hours. Included in this set is a PDF overview for each module as well as a post-test and evaluation the learner will complete to receive the designated contact hours. The modules are an aid and do not include an in-depth description of the subject matter. Instead, they are study guides that augment and build on what learners are reading and studying or upon their professional experiences in developmental care as a means to promote understanding and retention.

Splinting
  - Raquel Keithley, Kara Boynewicz, Sue Campbell Delapp, Isabel Pineda
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- https://doi.org/10.1080/194111243.2012.750544

Wound Care

  - http://wwwacademyofneonatalnursingorgprivateJournalFilesSepOct11CEArticlespdf

Determining the Need for and Completing Oral Motor for Feeding Readiness Assessments and Providing Oral Motor Intervention in Preparation for Oral Feeding


Raquel Keithley, Kara Boyniewicz, Sue Campbell Delapp, Isabel Pineda
  o http://dx.doi.org/10.1891/0730-0832.32.6.404.


Shaker CS. Improving feeding outcomes in the NICU: Moving from volume-driven to infant-driven feeding.
  o https://shaker4swallowingandfeeding.files.wordpress.com/2013/02/shaker-infant-driven-feeding1.pdf
  o http://journals.asha.org/perspectives/terms.dtl


**Feeding Books**

Glass R, Wolf L. *Feeding and Swallowing Disorders in Infancy: Assessment and Management.* Publisher: Therapy Skill Builders a Division of Psychological Corporation, 555 Academic Court, San Antonio, Texas 78204-2498.

*Purpose:* This text provides a comprehensive description of infant feeding, evaluation and intervention from a medical perspective. This book provides detailed descriptions of individual infant case presentations and treatment strategies to address feeding impairments. Evidenced based references are provided at the end of each chapter. Topics include: specific diagnostic categories, comprehensive approach to feeding evaluations, diagnostic tests and procedures, treatment strategies for feeding dysfunction, anatomy, embryology, physiology, pediatric and neurodevelopmental evaluation, nutrition, feeding assessment, tone and positioning.

**Feeding /Assessments**

**Neonatal Oral-Motor Assessment Scale (NOMAS)**

- **Author:** Braun MA and Palmer MM.
  
  *Purpose:* To screen for oral motor dysfunction in the neonate, distinguish infants with normal sucking from those with disorganization, identify infants with poor feeding abilities, and distinguish inefficient from efficient feeders.

  *Age Range:* Neonate to 3-months of age

  *Areas Tested:* 26-items divided into 2 categories: jaw movements and tongue movements: rate, rhythmicity, consistency of degree of jaw excursion, direction, range of motion, timing of tongue movement, tongue configuration

  Three day comprehensive training for certification. Contact NOMAS International, 1528 Merrill Road, San Juan Bautista, Ca. 95045 for course dates.
  o http://www.nomasinternational.org/index.php

NOMAS on line training:

The 11 talks in this online course focus on feeding difficulties in term and preterm infants, evaluation and treatment of sensory and motor-based feeding problems after discharge from NICU or special care nursery, videofluoroscopic studies of infants and children showing examples,
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procedure and diagnosis, and weaning from tube to oral feeding using a sensory-based protocol. Each talk runs about one hour. Certification not available. Introductory, intermediate and advanced material.
($850 if taken individually)

- **Series 2**: The 12 talks in this online course focus on the etiology, diagnosis, and treatment of feeding difficulties in the term and preterm infant. Evaluation and treatment strategies for the “difficult to feed” infant both in the NICU or special care nursery are discussed as well as those feeding issues that persist after discharge.
- **Series 3**: The full course is made up of all 12 talks. Each talk runs about 1 hour. Introductory, intermediate and advanced material
  - http://www.nomasinternational.org/about_training.php

**Early Feeding Skills Assessment (EFS)**

**Author**: Shaker CS, Thoyre S, Pridham K.

**Publisher**: Neonatal Netw. 2005;24(3):7-16.

**Purpose**: a checklist for assessing infant readiness for and tolerance of feeding and for profiling the infant’s developmental stage regarding specific feeding skills: the abilities to remain engaged in feeding, organize oral-motor functioning, coordinate swallowing with breathing, and maintain physiologic stability.

**Age Range**: Infants

2 day training workshop on how to use the tool. Contact Catherine Shaker:
pediatricseminars@gmail.com;
  - http://shaker4swallowingandfeeding.com

**Products Developed for the NICU**

  - Positioning Products including gel positioning aids, snuggle up, Frederick T Frog, Prone plus, Bendy bumper
- [www.dandleionmedical.com](http://www.dandleionmedical.com)
  - Positioning products including DandleRoo, DandleRoo Lite, Dandle Wrap, Dandle Pal
- [www.resqwedge.com](http://www.resqwedge.com)
  - Wedge positioner and sling for reflux.
- [www.sundancesolutions.com/neonatal/](http://www.sundancesolutions.com/neonatal/)
  - Positioning products including fluidized products
  - Positioning tool that can use mother’s scent and be used for boundaries and containment
- [http://tortlemedical.com](http://tortlemedical.com)
  - The positioning system includes the tortle air and tortle midliner for head positioning.
  - supplier of sleep sacks and hospital sleep sack program
- [https://www.catapult-products.com/](https://www.catapult-products.com/)
  - Swaddle bathing product TurtleTub

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Communication and Collaboration

Developing and Implementing Parent/ Caregiver Education Programs for Adult Learners with Diverse Backgrounds/ Providing Family Education in a Culturally Sensitive Manner

- National Association of Neonatal Nursing (NANN) offers several resources for neonatal families. As part of the Advances in Neonatal Care: Family Teaching Toolbox.
- Transitioning Newborns from NICU to HOME: A Resource Toolkit, Agency for Healthcare Research and Quality

Consulting with Other Professionals. Collaborating as Part of an Interdisciplinary Developmental Team/Communicating with Physicians, Occupational Therapists, Speech Language Pathologists, Respiratory Therapists, Child Life, Social Workers, and Other Professionals


Raquel Keithley, Kara Boynewicz, Sue Campbell Delapp, Isabel Pineda
Neonatology Special Interest Group
Resource Guide for Physical Therapy Practice in the NICU

Planning for Discharge, Including Community Resources, Car Seats, and Other Equipment or Therapy Needs

  - [http://pediatrics.aappublications.org/content/123/5/1424](http://pediatrics.aappublications.org/content/123/5/1424)

Regional Referrals for Early Intervention Services IDEA legislation

- Early intervention services to eligible children and families are federally mandated through the Individuals with Disabilities Education Act. The Part C program mandates a statewide, comprehensive, multidisciplinary service system to address the needs of infants and toddlers who are experiencing developmental delays or a diagnosed physical or mental condition with a high probability of an associated developmental disability in one or more of the following areas: cognitive development, physical development, language and speech development, psychosocial development, and self-help skills. Commonly cited factors that may put an infant or toddler at risk of developmental delay include prenatal exposure to toxins through maternal substance abuse, respiratory distress as a newborn, low birth weight, brain hemorrhage, and infection.
- National Dissemination Center for Children with Disabilities State Resources at
  - Pick a state and this site will take you to your local EI provider

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