# **Premature and Medically Complex Neonates: Applying Critical Thinking to Support** Long-term Outcomes

Kati Knudsen, PT, MPT, CNT, PCS, DCS

# FDUCAT RESOURC

life-changing learning for therapists by therapists

#### About this Live Webinar

This dynamic and collaborative advanced NICU therapy course will enable clinicians to apply strategies to support infants with extreme prematurity, complex neurological diagnoses, and in utero substance exposure using advanced problem-solving techniques. Modification of developmental and family-integrated practices to meet the needs of medically-complex infants will be discussed. Therapists will learn specific neuroprotective and neuropromotive strategies to support small babies in the NICU. Methods will be provided to support infants beyond the NICU through identification of follow up concerns, options for longterm support, and family integration to promote parent advocacy. Additionally, tools will be provided to support an expanded role of therapy in the NICU by establishing the benefits of strong developmental perspective, focus on long-term outcomes, increased role of therapists from admission through discharge, and team collaboration. Finally, clinicians will be able to identify and implement quality improvement techniques to better assist neonates and define and improve therapeutic outcomes.

## **Objectives**

- Utilize three strategies to support infants with extreme prematurity, complex neurological diagnoses, and in utero substance exposure using advanced problem-solving techniques.
- Apply at least two neuroprotective and neuropromotive strategies to • support complex patients in the NICU.
- Determine a novel method to support infants beyond the NICU through • identification of follow-up concerns, options for long-term support, and family integration to promote parent advocacy.
- Recommend a way to increase therapists' presence or therapeutic • practices in the NICU, using the cases provided.
- Determine a quality improvement technique to better assist neonates and • therapeutic outcomes.

## Help your patients achieve better outcomes.

physical therapist since 1996 and as a therapist in the NICU since 1999. Kati is lead therapist for two NICUs at sister hospitals in Portland, Oregon. She has obtained certifications in neonatal therapy, pediatric physical therapy, lactation education, neurodevelopmental treatment, infant massage, developmental care, and transportation of children with special needs in order to better support infants and families. Kati has published articles about support for preterm and medically fragile infants and has spoken nationally and internationally on care of infants in the NICU. Kati serves as the therapy representative on the Vermont Oxford Network Multidisciplinary Advisory Council and is a founding member and past co-chair of the Neonatal Therapy Certification Board. Kati also sees patients in NICU follow-up clinic where she has helped to redesign care to make it more accessible to families.

Kati Knudsen has practiced as a pediatric

Faculty

Financial Disclosures: Ms. Knudsen receives an honorarium as a Board Member of Pampers and AngelEye Health Non-Financial Disclosures:

Ms. Knudsen serves on the Neonatal Therapy Certification Board and Vermont Oxford Network Multidisciplinary Advisory Council



life-changing learning for therapists by therapists

#### Schedule – Day 1 10:40-6:45pm EST (US)

#### 10:40–11:00 Webinar Registration/Zoom Course Opens 11:00-12:15 The Complex Neonate

- Clinical implication of diagnoses, overall medical & developmental picture
- Determining the what, when why and how to modify standard developmental care strategies when working with premies or other neonates with severe diagnoses or deficits
- Family integration: strategies and approaches for early family engagement & support, team collaboration with family
- Developmental care: from delivery through discharge, sensorimotor & regulation supports
- Increasing the role of neonatal therapy: developmental background, focus on long-term outcomes, increased role of therapists from admission through discharge, team collaboration

#### 12:15-1:15 Sensory System Development and Strategies for **Neuroprotection & Neuropromotion**

- The sensory systems: order, physiology, therapeutic support
- Specific neuroprotective & neuropromotive strategies
- Tools available to support sensory development

#### 1:15-1:45 LUNCH

- Case Study #1 (breakout rooms followed by 1:45-2:45 group discussion):
  - Application of neuroprotection & neuropromotion strategies to support a moderate preterm infant

#### 2:45-4:15 **Small Babies/Micropremies**

- Lower limits of viability: define, rationale
- Reduction of morbidities with decreased mortality
- Systems: central nervous system & brain, integumentary, pulmonary, cardiovascular, gastrointestinal & genitourinary
- Impact of medications on preterm development
- Neuroprotection & neuropromotion strategies specific to small babies
- Therapeutic strategies to support micropremies & families: education, positioning & handling, feeding

#### 4:15-4:30

#### BREAK 4:30-6:45 Follow Up/Follow Through Care

- Options & access: in or out of health care system, locations, Early Intervention, financial
- Need for support from the NICU, parent education & advocacy, long term support
- Medical, development, feeding, growth, regulation, psychosocial, family integration
- Case Study #2 (breakout rooms followed by group discussion): Therapeutic support of a small baby in the NICU and via NICU follow through

#### Schedule – Day 2 10:40-6:45pm EST (US)

#### 10:40–11:00 Webinar Registration/Zoom Course Opens 11:00-1:30 Complex Neurological Scenarios

- Lissencephaly, seizure disorders, holoprosencephaly, chromosomal abnormalities with neurological sequelae, HIE (cooling & post-cooling)
- Systems overview: central nervous system & brain. integumentary, pulmonary, cardiovascular, gastrointestinal & genitourinary
- Neuroprotection & neuropromotion therapeutic strategies to support complex neuro patients & families

#### 1:30-2:30 Case Study #3 (breakout rooms followed by group

- discussion):
- Application of clinical strategies to support an infant with HIE during and post-cooling

#### 2:30-3:00 BREAK

#### 3:00-3:30 In Utero Substance Exposure Including Neonatal **Opioid Withdrawal Syndrome**

- Opioid exposure (aka NAS) as compared with other ٠ substances & medications
- Systems: central nervous system & brain, gastrointestinal (not typically impacted: integumentary, pulmonary, cardiovascular, genitourinary
- Eat Sleep Console for NOWS with family integration
- Therapeutic strategies to support IUSE infants & families: focus on current & future, trauma informed care lens, support for short & long-term outcomes

#### 3:30-4:30 Case Study #4 (breakout rooms followed by group) discussion):

Application of Eat Sleep Console & Trauma Informed • Care lens to support mother-infant dyad following in utero substance exposure

#### 4:30-4:45 BREAK

#### 4:45-6:45 Continuous Quality Improvement at the Bedside & **Measuring Outcomes**

- Application of knowledge and measuring therapy • outcomes via continuous quality improvement strategies in the NICU
- Identification of questions/concerns to be improved and measured
- Designing a COI project
- Sharing your results



life-changing learning for therapists by therapists

This course meets the criteria for 14 contact hours 1.4 CEUs, Advanced Level.

American Occupational Therapy Association Approved Provider

Education Resources Inc. is an AOTA Approved Provider of professional development. Course approval ID #03797. This Distance Learning-Interactive course is offered at 14 contact hours 1.4 CEUs. (Advanced level, OT Service Delivery). AOTA does not endorse specific course content,

This course can be used toward your NBCOT renewal requirements for 14 units.

Approved provider of the FL Board of Occupational Therapy-CE Broker – 16.5 hrs.

This course meets the approval of the **TX** Board of OT Examiners.



Education Resources Inc. Advanced level 1.4 ASHA CEUS

ASHA CE Provider approval and use of the Brand Block does not imply endorsement of course content, specific products or clinical procedures

This program has been submitted for approval of 14 clock hours of continuing education credit by the **TX** Speech Language-Hearing-Association (TSHA). TSHA approval does not imply endorsement of course content, specific products or clinical procedures.

Most Physical Therapy State Boards accept webinars as a live offering. Please check with your state board to confirm.

Approved by the **FL** Physical Therapy Association for 16.5 continuing education contact hours. Approved by the **MD** Board of Physical Therapy Examiners for 1.4 CEU's

Approved by the NJ Board of Physical Therapy Examiners.

Approved by **OK** State Board of PT.

Approved sponsor by the State of IL Department of Financial and Professional Regulation for Physical Therapy for 16.5 contact hours. Application has been made to Illinois El Training Program.

Approved provider by the NY State Board of Physical Therapy for 16.8 contact hours (1.68 CEUs).

Education Resources, Inc. is an approved provider for Physical Therapy CEUs in the following states: CA. KY and TX.

The following state boards of physical therapy accept other states' approval: **AK**, **AR**, **AZ**, **DC**, DE, GA, HI, ID, IN, KS, MI, MO, MS, NC, OR, PA, RI, SC, UT, VA, VT, WI, WY.

The following state boards of physical therapy either do not require course pre-approval or do not require CEUs for re-licensure: AL, CO, CT, IA, MA, ME, MT, NE, ND, NH, SD, WA. This course meets the criteria for 14 hours that can be applied toward the Neonatal Therapy National Certification.

12 hours of this course qualify towards the discipline-specific hours for the 20-hour requirement for NDTA re-certification. They do NOT qualify towards the 8-hour NDTA Instructor requirement for re-certification. Please contact us with any special needs requests: info@educationresourcesinc.com or 800-487-6530.

## Webinar Dates and Times – 2022

August 26 and 27, 2022

#### 10:40 am EST • 9:40 am CST • 8:40 am MST • 7:40 am PST (US)

Registration is for all sessions. Zoom log-in instructions and course materials will be emailed/added to your ERI account 5-7 days prior to the first date of the Webinar.

## Credits

e what you to. Our courses

remind you why. As a therapist, you change lives every day – and have your life changed in return. ERI is life-changing learning, for therapists by therapists.

## The ERI Advantage:

• Techniques you'll use the next day

- Peers who share your passion
- Renowned faculty
- Evidence-based courses that improve outcomes
- 30 years of life-changing learning

#### Specialty Tracks throughout the lifespan – Neonatal, Pediatric, Adult, Geriatric

Each ERI specialty track is designed to make the most of your continuing education time, budget, and goals. Start your search with us and plan every course you'll take in 2022.

#### Visit educationresourcesinc.com for all of your 2022 courses.

#### ERI Rewards Your ERI experience is more rewarding than ever.

- First Course Discount
- Group Discounts
- \$100 off your 4th Multi-day Course
- And more

Subject to availability. Exclusions may apply. Visit our website for details and coupon codes.



\$369 fee. **LIMITED ENROLLMENT.** Cancellation will be accepted until 14 days prior to the start date of the course, minus a \$75 Administration Fee. There will be NO REFUNDS after this 14-day deadline. We encourage you to register online!

## WEBINAR: Premature and Medically Complex Neonates: Applying Critical Thinking to Support Long-term Outcomes/Kati Knudsen

#### **Course Registration Form**

Name:			
Address:			
City:		State:	Zip Code:
Home Phone:		Work Phone:	
Cell Phone: Needed in the event of an em			
Please clearly print your email	l address for course confirmation		
Discipline:		Specialty:	
Education Resources reser responsible for any expens I have read your refu	ves the right to cancel any co	the course must be cancelled. stand.	r extenuating circumstances We are no
Amount charged		MC DISCOVER#	
Exp. Date	CVV2 Code		