

#### The Newborn Hearing Screening Training Curriculum

#### A Newborn Hearing Screening Training Curriculum for Midwives and Outpatient Newborn Hearing Screeners

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# **Financial Disclosure**

- The NHSTC is a collaborative project between, NCHAM, the Maternal Child Bureau and the Illinois Department of Public Health. Other contributors include the Arizona Department of Health Services Office of Children with Special Healthcare Needs.
- The authors/contributors are responsible for the views and content of material and no endorsement by MCHB is implied or expressed. These materials are not intended to endorse any particular hearing screening system.





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The NHSTC was produced by Cine Learning Productions





#### Overview of the NHSTC

High rate of turnover

Lack of standardized training tools

Lack of self confidence

Poor screening practices

**High Refer rates** 

Inadequate communication

Parent anxiety

Loss to follow-up





#### NHSTC Web Version II

- Online competency based course available in Moodle (and HTML)
  - Individualized pace
  - Adult Learning activities
  - Self checks after each module
  - Best Practice recommendations based on JCIH 2007 Position
    Statement
  - Pre and post test/pre and post self assessment
  - Certificate of completion

– CEUs



#### NHSTC Web Version II



#### **Newborn Hearing Screening Training** Resources Welcome to the Newborn **Hearing Screening Training Curriculum** C -NEXT >

National Center

Utah State University\*



#### 7 Comprehensive Training Modules

- 1. Buy-in
  - Importance of NBHS
  - EHDI-1-3-6
  - Parent video
- 2. Preparing to screen
  - Infection control
  - Confidentially
  - Good documentation

- 3. Screening with OAE and A-ABR
  - Best Practice recommendations
  - Hands-on techniques
  - Troubleshooting strategies
- Scripts for Communicating with families and the medical home
  - Parent video





# Module 5 - 7

- 5. Completing the screening process
  - Accountability
    - (missed, transferred)
  - Loss to follow-up
  - NICHQ strategies
  - Next steps
  - Reporting to the state

- 6. Risk factors
  - JCIH risk factors
  - Recommendations for follow-up
  - Communicating with families
- 7. Outpatient Screening
  - Best practice recommendations
  - Strategies for successful screening





## Recertification

- Recommend Annually
- 40 comprehensive questions
- Wrong answer response
- Passing criteria: 80%





Australia, Cambodia, Canada, Ghana, Guam, India, Ireland, Kenya, Lebanon, Mexico Pakistan, Qatar, Saudi Arabia, Singapore, South Africa, South Korea, United Kingdo

#### Number of graduates from 2015-2018



# Participant Comments

- Videos was very detailed and felt like it was hands on. (Camden S.C)
- I have been performing A-ABR hearing screens in my hospital since 2001, but never had such an excellent, clear training program. This is great for people who have been screening for a while as well as for training new employees. (Holyoke, MA)
- I like how you have self checks to help the trainee evaluate how they are learning. The pace of the modules were perfect to follow along while actually retaining information. The information load was not overwhelming at all. (NOLA)
- I particularly liked learning why screening is so important and how to talk to parents because may not even know that a hearing test are done babies before they leave the hospital. (Mason, GA)
- I enjoyed the videos of the demonstration when performing an OAE screening and an A-ABR screening. It was helpful to see exactly how screenings are conducted. (Mission Viejo, CA)

# Participant Comments

- Every module gave important information (Easton, RH)
- I really enjoyed the training, it was very informative and helpful. The only thing I didn't like about the training was of course, the reality of having to let parents know that their baby, didn't pass the screens. But the good thing is that, there's so much help and support for families with a baby with hearing loss. (Palestine, TX)
- I enjoyed how thorough this course was. It answered a lot of questions that I had. (Glenwood, CO)
- I enjoyed the presentation of the material. (Columbia, SC)
- Everything was pretty easy to access. I watched the videos on my phone because my laptop has been having problems, but it worked pretty good. (Bakersfield, CA)

## New Curriculum:

#### **Outpatient Newborn Hearing Screening**

- All newborn hearing screening outside of the hospital
  - Midwives/Birthing Centers/Out of hospital births
  - Medical Providers (pediatricians, community health, county health, etc.)
  - Other social and educational programs
    - Early Head Start
    - Parent's As Teachers
    - Early Intervention





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#### Project Development Team

- Karen Ditty
- Stacy Jordon

Special thanks to Patricia Burk



#### What should it be called? NHSTC-O, NO or OH?

Newborn Hearing Screening **Training Curriculum?** a) Outpatient b)Non-hospital c) Out of hospital

Newborn Hearing Screening Training Curriculum for Births? a) Outpatient b)Non-hospital c) Out of hospital





#### **Content Overview**

- Section 1: Introduction to NBHS
- Section 2: Best Practice Recommendations
- Section 3: Getting Ready to Screen
- Section 4: Screening with OAEs
   ((( infanthearing.org)

- Section 5: Screening with A-ABR
- Section 6: Communication with Parents
  - -for Screeners
  - -For Medical Providers
- Section 7: Risk Indicators





#### Section one: Buy-in

- -Definition of Screening
- –Importance of NBHS
- -Impact of Screening
- -EHDI-1-3-6
- -Videos of parents



Section Two:

Best Practice Recommendations and Considerations

- Screening Methods
- When to screen/rescreen
- Rescreening practices and considerations
  - Optimal age for screening
  - Verification of initial screening results
  - Verification of risk factors/ whether there is a family HX of CHL
  - Rescreening both ears
- Babies who should not be rescreened





#### Section Two: continued

- Special Considerations: Malformation(s) of the ear
- Considerations when screening babies older that one month of age
- Screening Results
- Documentation
- State Reporting
- Minimizing Loss to follow-up



# Section Three: Getting Ready to Screen

- Scripts for what to say to parents prior to the screening (technology specific)
- Script for parents who refuse the screening
- Infection Control
- State of the baby
- Inspecting the ear prior to screening
- Importance of a Quiet Environment
- Screening babies while nursing or bonding ((( infanthearing.org



# Section 4: Screening with OAEs

- What are OAEs?
- Anatomy as it relates to OAE Screening
- OAE Screening Steps (hands on videos) + a step by step description and visual
- Troubleshooting
- When to repeat the screening
- Importance of not screening repeatedly



# Section 5: Screening with A-ABR

- What is A-ABR?
- Anatomy as it relates to A-ABR Screening
- Preparing for A-ABR Screening (environmental conditions and state of the baby)
- A-ABR Screening Steps (hands on video + a step by step description and visual)
- Screening problems and troubleshooting
- When to repeat the screening





# Section 6: Communicating Results to Parents

#### **Outpatient Screener Scripts**

- Important considerations when talking with parents and conveying results
- Passing script
- Not passing initial birth screen
- Not passing follow-up screen
- Not Passing Script for Babies at High Risk for Hearing Loss





# Section 6: Communicating Results to Parents

#### **Medical Provider Scripts:**

- One-stop shop for best practice follow-up recs and communication (based on JCIH)
- Detailed scenarios to assist the medical provider in knowing how to effectively communicate possible outcomes and address next steps with parents



# Scripts

- Passed Inpatient Screen (well baby and risk factors)
- Failed Inpatient screen (well baby and risk factors)
- Failed Inpatient screen and parent believes their baby hears and doesn't need follow-up
- Parent Refused inpatient or Outpatient Screening



# Scripts

- Failed the Inpatient and Outpatient Screening and has fluid at the time of the "well baby" visit
- Failed Rescreen in medical providers office
- Babies with Craniofacial Anomalies
- Importance of following up on DX recommendation



## Section 7: Babies with Risk Indicators

- The Latest JCIH risk factors
- Screening recommendations
  - -Who should not be screened
- Importance of monitoring babies with risk factors
- Follow-up recommendations





#### Next Steps

- Complete content (once JCIH is published)
- Peer review
- Integrate recommended changes
- Video creation
- Final draft to developers





#### IL-MN Systems Outcome Study

Overall Goal: To increase the knowledge of all screeners and supervisory staff regarding newborn hearing screening / EHDI

Purpose:

- To evaluate feasibility of widespread implementation of the NHSTC in the hospital setting from a systems pespective
- To understand successes and challenges related to the process of implementing the NHSTC and the Hands-on Checklist as a standard training tool
- To determine if there is an improvement in hospital screening outcomes after staff completion of the NHSTC



# IL-MN Systems Outcome Study Focus

- 2 states conducting mandatory statewide implementation of the NHSTC (including a hands-on component)
- Focus is on the manager/administrator experience (meaning from the top down)
  - Evaluation is from a system's point of view
- Data Collection and Analysis



# IL-MN Systems Outcome Study Design

- 1. Informational letter goes out to all hospital administrators
- 2. Pre training/implementation survey
- 3. Training implementation
- 4. Post-training/implementation survey
- 5. Data collection conducted prior to rollout and after



## Why State EHDI Implementation

- Limited TA resources to go out to hospitals and provide comprehensive training and assistance
- Provides a consistent quality improvement standardized training solution
- Incorporates best practice recommendations and techniques







# Thank you for listening! Questions?

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