



## Complexity of pediatric audiology 2024 EHDI CONVENTION



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### Disclosure statements

Jess receives salary from St. Luke's Idaho Elks Hearing and Balance Center and non-financially is a member of the Idaho Sound Beginnings (EHDI) Advisory Board.

Gabe receives salary from Idaho State University and faculty consultant funds from Utah Regional LEND program. Non-financially, she is a member of the Idaho Sounds Beginnings (EHDI) Advisory Board and serves as the Continuing Education Administrator for Idaho Speech-Language-Hearing Association.

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### Learner Objectives



Learner will select appropriate assessment measures for patients with complex histories and/or needs.



Learner will provide appropriate intervention recommendations based on the pediatric patient and their families desired outcomes.



Learner will explain the value of objective and subjective measures in working with pediatric patients.

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**CASE #1 – risk Indicator**

Reason for referral: Risk indicators for delayed onset hearing loss - NICU stay 27 days

- Age: 11 month old
- Birth History:
  - 32 weeks gestation age
  - 27 days NICU
  - mild Jaundice (9.3) requiring phototherapy
  - no ototoxic medications
  - passed AABR in both ears

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What would you do?

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Resources & Facts

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### CASE #2- Medical complications

- Reason for Audiology referral: "Check inner ear" due to frequent vomiting
- Age: 14 months old
- Birth History: Full term (39 weeks), no complications, discharged home, passed AABR hearing screening both ears
- Readmitted 5 days old to NICU for 40 days due to Mitochondrial Metabolic Acidosis

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### What would you do?

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### Resources & Facts

Resources

- [National Library of Medicine \(NIH\)](#)
- [London Health Sciences Centre](#)
- [Lily Foundation \(UK\)](#)

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### CASE #3 – Lost to Follow-up (LTF)

- Reason for Audiology referral: Failed newborn hearing screening and speech delays
- Age: 2 years 5 months old
- only saying 10-15 spoken words, does not use any two syllable words, not currently in speech therapy

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### What would you do?

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### JCIH 2019 Position Statement

- Communication and documentation of results  
*"Screening results should be conveyed immediately to the family so that they can understand the outcome of the screening and the importance of follow-up when indicated."* (JCIH, p. 10)
- Before discharge, an appointment should be made for follow-up rescreening or for audiological testing." (JCIH, p. 10)
- Role of the Pediatrician/Primary Care Provider  
*"The PCP is part of the team that ensures that the audiological and medical assessment is conducted in a timely fashion for infants who do not pass screening."* (JCIH, p. 17)

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### Communication

- Newborn hearing screening results
  - Use scripts (NCHAM; NIDCD; AAA; ASHA)
- Audibility-based descriptions vs simulation-based descriptions vs classification-based strategies
  - Sapp, McCreery et al., 2022
- Be clear

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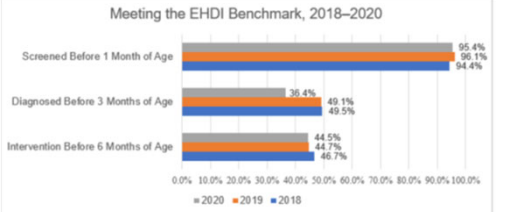
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### Pandemic impact?



National Average of Early Hearing Detection and Intervention (EHDI) Benchmarks: 2018-2020

Dundon et al. (2022). Likely impact of the COVID-19 pandemic on newborn hearing screening and follow-up services in the US in 2020. *Journal of Early Hearing Detection & Intervention*, 7(3), 1-5.

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### CASE #4 – Family Choice

Reason for Audiology referral: Failed newborn hearing screening

Age: 1 months old

Medical History: No pregnancy or birth complications, + family history of hearing loss




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What would you do?

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Delayed intervention...  
Is it???

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Family Choice

Family choice needs to be supported and we need to provide education and connect families to resources

*"Providers may consider offering resources to connect caregivers with DHH community stakeholders, including Deaf mentors, to ensure that caregivers receive adequate support and information pertaining to the full scope of communication methods." (Jones & Roberts, 2024)*

*"need for family-based organizations to support families but underscored the importance of matching families based on their similar needs (e.g., location, family choice for language modality, children with additional special needs)" (Ward et al, 2019)*

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**CASE #5 – Acquired HL**

Reason for Audiology referral:  
Hearing evaluation, referred by  
Pediatric ENT

Age: 8 months old

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**What do you think?**

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**Is this case unique?**

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Causes:

- recurrent infections or inflammation with formation of granulation tissue
- healing problems
- fibrosis after surgery
- Radiotherapy
- trauma
- dermatologic conditions
- neoplasm
- idiopathic

Becker & Tos, 1998; Bhavana, 2017; Droessaert et al., 2017; Kamaruzaman et al., 2023

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Resources & Facts

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CASE #6 – cCMV

Reason for Audiology referral:  
Failed newborn hearing screening

Age: 3 weeks

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What do you think?

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Should cCMV be universally tested?

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Resources & Facts

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Thank you

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