Newborn Hearing Screening: Getting Back to Zero





Hearts for Hearing creates life-changing opportunities for children and adults with hearing loss to listen for a lifetime.



Objectives

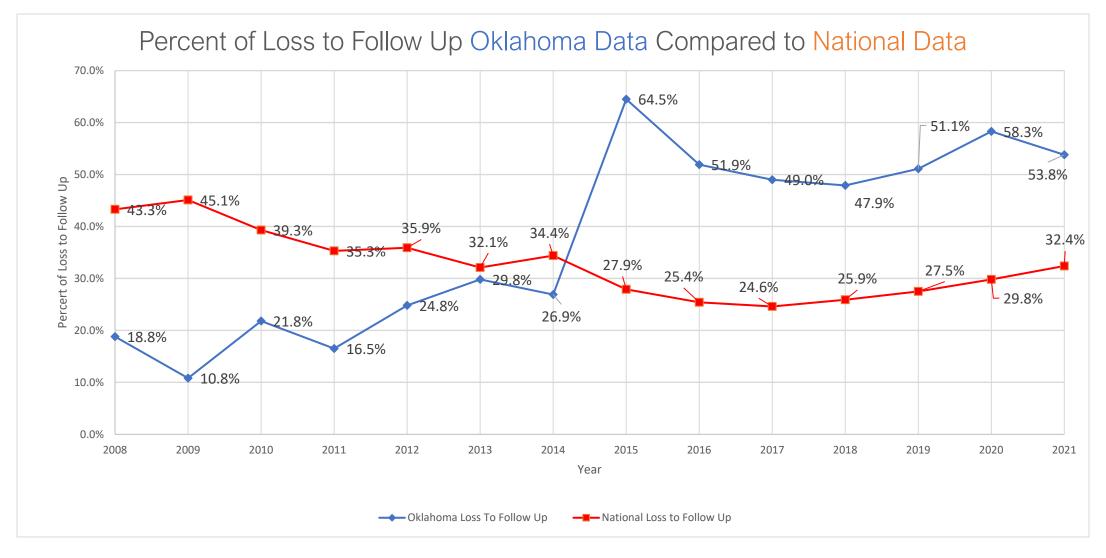
- Participants will identify two barriers to beginning/overseeing a newborn hearing screening program.
- Participants will identify three components of a successful newborn hearing screening program.
- Participants will identify two strategies for successful communication with state EHDI program.



Identify Opportunities for Improvement

- Increase in Loss to Follow Up (LTF) Rate
 - Oklahoma 48% LTF
 - National Average 25% LTF
 - 1.4 babies with Hearing Loss per 1000 (71 Babies)
- Parent/Hospital Concerns
 - Missed babies
 - Higher Refer Rates
- Late identified with Hearing Loss that failed the hearing screen





Content source: <u>Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities</u> https://www.cdc.gov/ncbddd/hearingloss/ehdi-data.html



What can Hearts for Hearing do to help improve our states loss to follow up and help ID babies with hearing loss sooner?

- > Start inpatient diagnostic testing for the babies in the NICU that refer x 2
- > Start OP Rescreen Clinic
- ➤ Newborn Hearing Screen program
 - > Follow all refer babies until they are diagnosed



2020 Inpatient Diagnostic Testing

2021 Screening at our clinics

2021 Q4 Screening the Newborns in the Hospitals



CURRENT SCREENING PROTOCOL

IMPROVED PROTOCOL WITH HEARTS FOR HEARING

1ST SCREEN

Auditory Brainstern Response (ABR) Screen

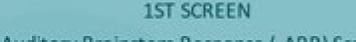
2ND SCREEN

If infant refers/fails 1st screen, complete another ABR screen*

3ND SCREEN

Screening ABR approx. one-week post-2nd screen

Refer to outpatient facility for follow -up



Auditory Brainstem Response (ABR) Screen

2ND SCREEN

If infant refers/fails 1st screen, complete another ABR screen

Post 2ND Refer SCREEN

NICU - Diagnostic Audiology Assessment WBN - 3rd rescreen as OP if no risk factors

WBN with risk factors do not complete 3 nd screen

NICU > 5 day NICU stay

Schedule Inpatient Diagnostic Audiology Assessment by pediatric audiologist

Counseling will be provided.

NICU < 5 day NICU stay and/or WBN with High Risk Factors

Schedule Outpatient Diagnostic Audiology Assessment by pediatric audiologist



Barriers with Starting NBHS Program

- Obtain Hospital Contracts
- Insurance reimbursement for the newborn hearing screen
- Building data management system



Components for a Successful Newborn Hearing Screen program

- Educate Screening Staff and Hospital Staff
- Educate Parent
 - Screen at the bedside
 - Purpose of screen
 - Engage parent
 - Clear direction on next step for babies that refer and schedule f/u within 5-10 days
- Removing roadblocks for families
 - Ask if any obstacles for follow up appt. i.e. gas, transportation
- Hold onto Family

 - Reminder call day before appt. Call family immediately if a no show
- Aim for a Loss to Follow up of Zero



Hearts for Hearing Newborn Hearing Screen Program

2022 Audiology Results

- 8,487 Babies Screened
 - 0.98% Final Refer Rate
 - 27 Permanent Hearing Loss
- 3.18 Babies with Hearing Loss per 1000
 - 5 Inconclusive & Pending F/U Audio Appt 18% Not Diagnosed yet
 - 0 Loss to Follow Up



Hearts for Hearing Newborn Hearing Screen Program

4th Quarter 2021 to 4th Quarter 2023

28,610 Babies Screened

Final Refers

0.98% Final Refer Rate

100% Capture Rate

Screen in 14 OK Hospitals



Hearts for Hearing Newborn Hearing Screen Program

Audiology Results

Q4 2021 to Q 4 2023

28,610 Babies Screened 76 Permanent Hearing Loss

2.66 Babies with Hearing Loss per 1000

52 Pending Audiology Appt or Inconclusive Pending F/U Appt

0 Loss to Follow Up

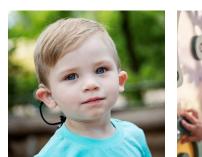


Two strategies for successful communication with state EDHI programs

Collaborate Efforts
Know all your resources

Work altogether - find the best avenue for family and contact with other parents

Communicate and strategize

















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heartsforhearing.org