

Learning How to Make the EHDI Connections on Time

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Benchmarks and Quality Indicators

JCIH (2007)

- Regular measurement of performance
- Monitoring of measurements
 - Inter-program comparison
 - Continuous quality improvement
- Benchmarks represent the minimal requirements for a high quality EHDI program

Quality Indicators for Screening

- Complete screening by 1 month of age ($> 95\%$)
- Infants who fail screening process ($< 4\%$)



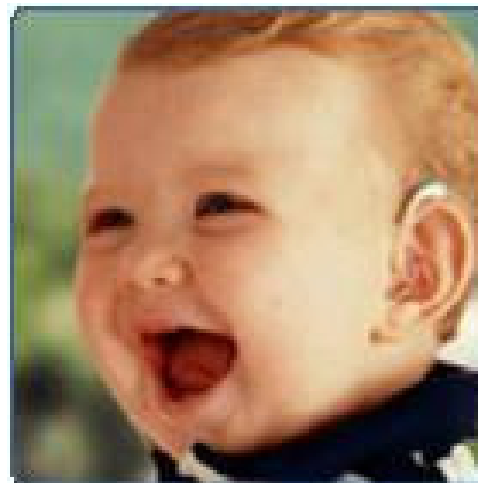
Quality Indicators for Confirmation of Hearing Loss

- For infants who fail the screening process, a comprehensive audiological evaluation is completed by 3 months of age (90%)
- For infants with bilateral hearing loss amplification is received within 1 month of confirmation of hearing loss (95%)



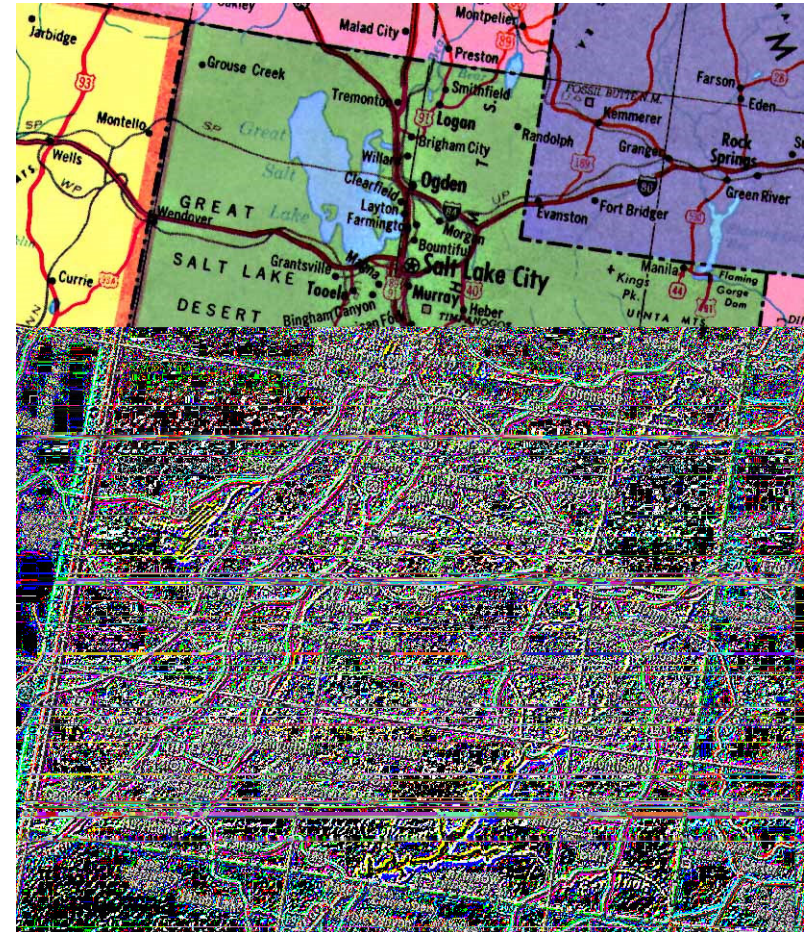
Quality Indicators for Early Intervention

- Confirmed hearing loss eligible for Part C, signed IFSP by 6 months of age (90%)
- Acquired or late-identified hearing loss, signed IFSP within 45 days of diagnosis (95%)
- Confirmed hearing loss, receive first developmental assessment with a standardized test for language, speech, and non-verbal cognitive development by 12 months of age (90%)



Utah Profile

- Annual births: 56,000
- NHS implemented: 1999
- Reporting to DOH:
Required
- Tracking System: HiTrack



Utah Performance: Screening

Evaluation Period 2005-2006

Surveys mailed February 2008

Screening Process

- 104,628 screened (98%)
 - Meets indicator
- 732 evaluations recommended (.006%)
 - Meets indicator
- 956 lost to follow-up after inpatient referral (16%)
 - Did not finish screening process

Evaluation of Utah Performance

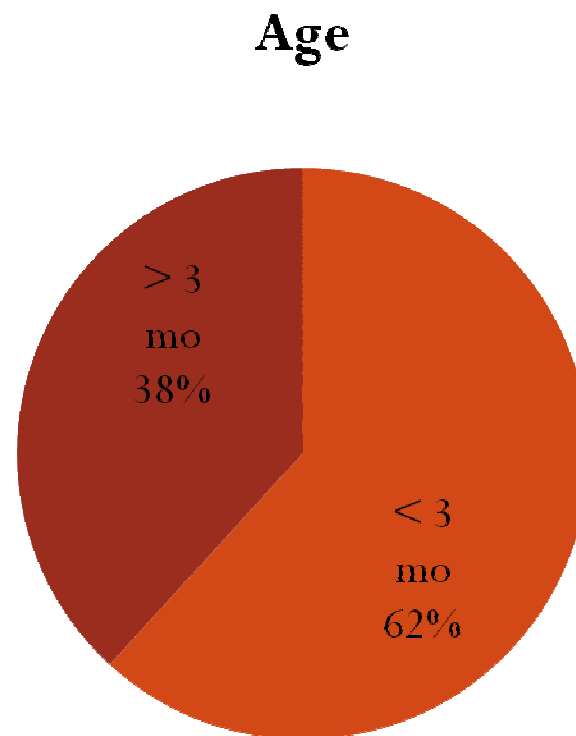
- Survey: mailed to parents
- Groups:
 - Group 1: Confirmed hearing loss (144)
 - Response rate 27% (n = 34)
 - Group 2: Evaluation in process (246)
 - Response rate 11% (n = 20)

Group 1: Confirmed Hearing Loss

(n = 34)

- **Age Identified**

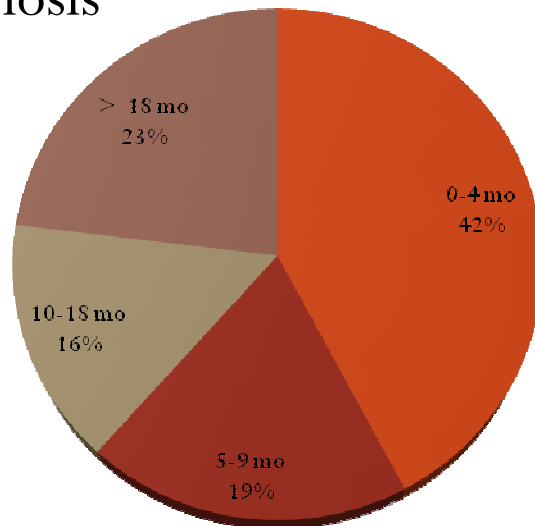
- 21 infants by 3 months of age
 - Meets indicator
- 13 infants > 3 months of age



Group 1: Confirmed Hearing Loss

Age fit with hearing aids

- 26 fit with hearing aids
 - Average age 9 months
 - Range 2 mo to 30 mo
 - 11 fit within 1 month of diagnosis
- 8 not fit with hearing aids
 - 4 unilateral
 - 1 moved out of state
 - 1 mild bilateral loss
 - *1 passed screening*
 - *1 incomplete testing*



Age Fit

Group 1: Confirmed Hearing Loss

Entry into Early Intervention

- 9 months average age of entry into early intervention program
 - Range 1 to 30 months

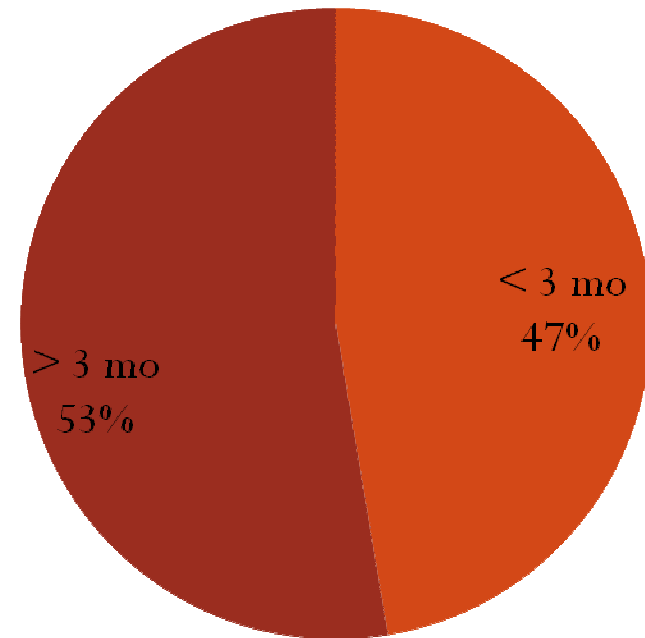
Group 2: Evaluation in Process

(n = 20)

- **Age Identified**

- 9 infants by 3 months of age
 - Meets indicator
- 10 infants > 3 months of age
- 1 did not receive Dx evaluation

Age



Group 2: Evaluation in Process

Age fit with hearing aids

- 7 diagnosed with hearing
 - 4 bilateral
 - 2 unilateral
 - 1 inconclusive
- 3 fit with hearing aids
 - Average age fit = 15 mo
 - 10 months / 12 months / 22 months
 - None meet indicator

Group 2: Evaluation in Process

Entry into early intervention

- 5 months average age of entry into early intervention program (n = 6)

Lessons Learned

- *Based on parent comment (Confirmed Hearing Loss):*
 - *Inadequate information provided to parents*
 - *Difficulty determining appropriate next steps*
 - *Many delays in obtaining needed services*
 - *Inadequate loaner system*
 - *Inadequate financial support available for services/products needed*
 - *Inadequate communication among professionals*
 - *Inconsistent knowledge among professionals on what is needed*
- *Based on parent report (Evaluation in Process):*
 - *Inappropriate testing procedures and delays in diagnosis*
 - *Insufficient locations to obtain testing*
 - *Insufficient information provided*

System Changes to address:

- Did not finish screening process
 - Midwives as screeners
 - Birth Certificate Application Process
 - Fostering Health Children
- Late Confirmation of Hearing status / Delays in Dx
 - New pediatric equipment purchased (TTTNA)
 - Additional of appointment times for sedated ABR's
- Late Fitting of Hearing aids (not enough infant and pediatric audiologists?)
 - LEND Audiology Supplement Grant

System Changes to address:

- Late or No Entry in EI
 - Development of PIPTOTS data system through CHARM
- Poor Communication between Providers
 - Grand Rounds (and other) presentations by Chapter Champion
 - Institute Fax Back system between audiologist and Medical Home
- Insufficient information for Parents
 - AAP/NCHAM “Roadmap incorporated into Provider Book
 - New Parent Notebook
 - Direct referral to EI from EHDI
- Statewide Loaner System?

Next Steps

- Results were reported at the annual DOH meeting with the NHS coordinators and audiologists
- A survey of children born in 2007 and the first half of 2008 is being conducted.