



# South Dakota EHDI Collaborative

March 7, 2016

# State Overview

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## QI TEAM MEMBERS

- ❖ Lucy Fossen—State DOH Coordinator
- ❖ Haifa A. Samra—University of South Dakota (USD) research coordinator
- ❖ Jessica Messersmith—USD Pediatric Audiology
- ❖ Teresa Fendrich—Sioux Falls, Avera, Pediatric Audiology
- ❖ Julie Symes—USD West River Grant Coordinator—RN, Maternal Child Nursing and Disability
- ❖ Bette Schumacher—Clinical Nurse Specialist, Sanford Children’s Hospital
- ❖ Suzanne England—Certified Nurse Midwife, Family Nurse Practitioner, Women's Health/MCH Consultant IHS
- ❖ Leanne Sterk—Rapid City, Neonatal Nurse Practitioner
- ❖ Paula Kennison—Rapid City, Audiology
- ❖ Jan Mangleson—Native Women’s, Rapid City, Certified Nurse Midwife

<b>SOUTH DAKOTA EHDI Data</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Total Births</b>	12,470	12,722	12,926	12,958
<b>minus deaths &amp; parent(s) declined</b>	66	95	71	71
<b>Newborns eligible for screening</b>	12,404	12,627	12,833	12,887
<b>Never screened (missed or unknown)</b>	128 (1.0%)	107 (0.8%)	133 (1.0%)	83 (0.6%)
<b>Non-residents, infant transferred &amp; no documentation of screening, or unable to be screened due to medical reasons</b>	63	37	49	29
<b>Newborns screened for hearing loss</b>	12,227 (98.1%)	12,483 (98.9%)	12,673 (98.6%)	12,775 (98.6%)
<b><u># Did not pass</u></b>	282 (2.3%)	280 (2.2%)	360 (2.8%)	231 (1.8%)
<b># with No Diagnosis</b>	258 (91.5%)	243 (86.8%)	286 (79.4%)	177 (76.6%)
<b>Unknown</b>	194 (75.1%)	208 (85.6%)	267 (93.3%)	112 (63.3%)
<b>Family contacted unresponsive</b>	31	16	16	26
<b>Unable to contact</b>	8	10	3	10
<b># with No Hearing Loss</b>	15	10	15	22
<b># with Hearing Loss Identified</b>	2	27	29 (7 referred for intervention)	33

# Project Aim

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- ❖ Aim: By March 31, 2017, decrease the number of infants who did not pass their last screen who are considered to be LTF/D at the audiological diagnostic level before three months of age by 5% annually.
  - 100% of audiologists in South Dakota will document diagnostic results to the South Dakota EHDI by March 2017.
  - Rationale: A 2011 survey revealed that 69% of audiologists report results from audiological screens and/or diagnostic evaluations to the Department of health, indicating a need for training and education.
  - This aim was part of the latest HRSA proposal
- ❖ How does this aim relate to overall LTFU goal/s
  - In 2014, only 23.7% of the LTFU infants received complete documentation of a diagnostic evaluation by 3 months of age.

# Strategies

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- ❖ Develop and pilot test an audiology toolkit
- ❖ Solicit audiology input to improve toolkit and ensure buy-in
- ❖ Provide audiology training and follow-up

# Measurement

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- ❖ Performance indicators specific to EHDI goals 2 and 3
  - Tracking
    - Pre- and Post-implementation of the toolkit
    - Toolkit Use Training
    - Use of bar charts and trend lines. Data presented in numbers and percentages
- ❖ Infants who screened positive and received comprehensive audiologic evaluation before 3 months of age.
- ❖ Infants with bilateral or unilateral hearing loss.
- ❖ Infants with permanent conductive, sensorineural, or auditory dys-synchronous hearing loss.
- ❖ Infants referred for audiologic evaluation who were lost to follow-up.
- ❖ Infants at risk of developing late-onset hearing loss who were lost to follow-up.

# Measurement (cont.)

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- ❖ Infants referred for audiologic evaluation who were not screened for hearing loss.
- ❖ Infants identified with hearing loss referred to medical specialists and ongoing audiology evaluation.
- ❖ Availability of audiology protocols that are based on current national guidelines.
- ❖ Audiologists, audiology centers who have experience conducting pediatric assessment.
- ❖ Documented training plan for audiologist.
- ❖ Audiologists trained and using the toolkit.
- ❖ Documented plan for dissemination of audiology training and number of toolkits disseminated

# Strategies

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- ❖ We developed a toolkit and a training program by engaging the audiology community in the state in the development of this recommended protocol
- ❖ We have not implemented any changes yet (toolkit is in the revision and evaluation phase)
- ❖ We have not implemented or spread the successful strategies yet, but when the toolkit and the training material are fully developed we plan to pilot with one audiology using the PDSA methodology and make changes accordingly.



# Lessons Learned & Next Steps

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## Lessons learned

Include the discipline that will use the toolkit in development.

Be patient.

## Next steps

Designing a Health Care Provider Toolkit and evaluation of efficacy.