

Standardized Site Visits: Collaborating with Hospitals, Audiologists and/or Family Support

NOTE: This session is designed to be a working session for State/Territory EHDI Coordinators (Principal Investigators on CDC and HRSA EHDI State Awards) and their designees.

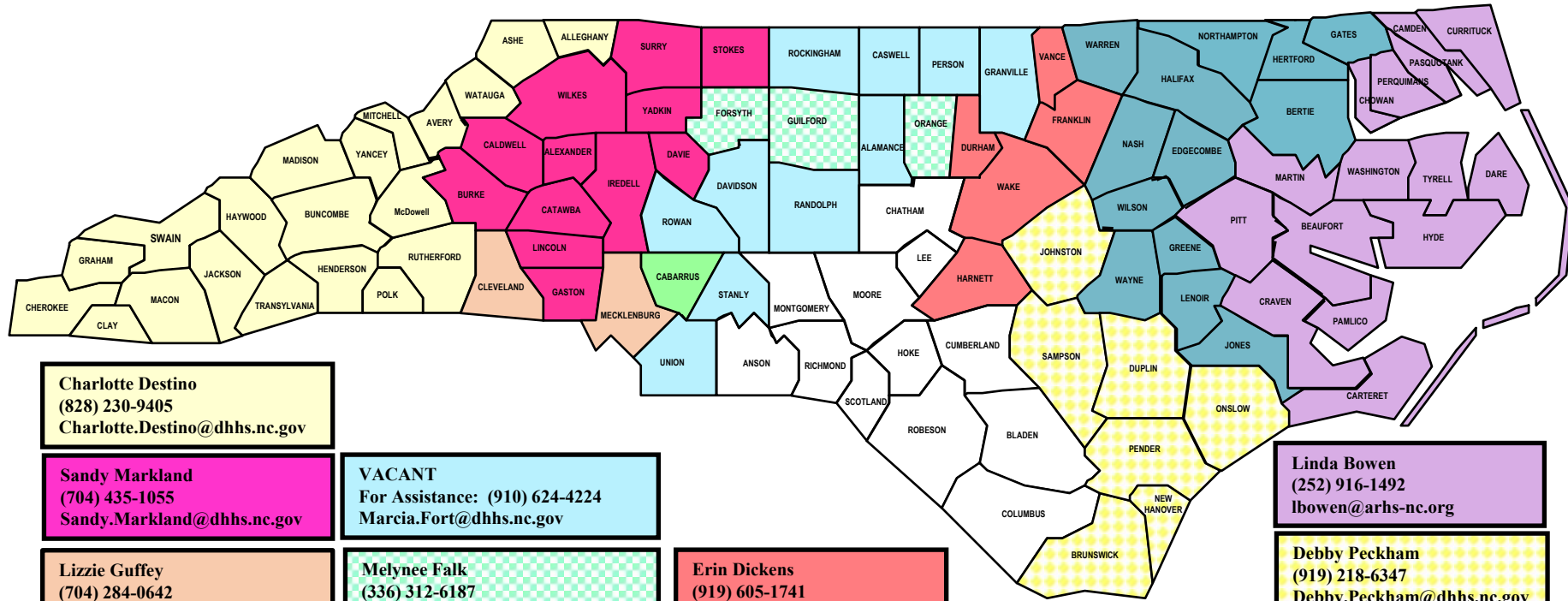
Due to the working session design, space is limited to EHDI Coordinators and their designees.

North Carolina

- Team of 10 Regional Consultants (Audiologists and Speech-Language Pathologists)
- Two Parent Consultants
- HRSA Project Coordinator
- Data Manager
- EHDI Program Coordinator/Genetics and Newborn Screening Unit Manager



North Carolina Early Hearing Detection and Intervention Regional Contacts



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*speaks Spanish

*Orange County served by Erin Dickens and Melynee Falk

*Wake County served by Erin Dickens, Terry Crudup and Jason Guetgemann

Hospital Compliance Guide and Annual Review



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

Universal Newborn Hearing Screening (UNHS) Birthing Facility Compliance Guide Manual

North Carolina's Early Hearing Detection and Intervention (EHDI) Program

The EHDI Program cares about the hearing of newborn babies. EHDI [provides assistance](#) and education to hospitals, medical providers, and others. It supports families by connecting them to resources and helping them to receive the care their baby needs.

The NC EHDI Program is located in the [North Carolina Department of Health and Human Services](#)

UNHS Hospital Compliance Guide Implementation Plan

Chapter X: NC EHDI Universal Newborn Hearing Screening (UNHS) Birthing Facility Compliance Guide Implementation Plan

1. Background

NC EHDI developed the following UNHS Birthing Facility Compliance Guide (Manual, Profile, Score Sheet) and Discussion Points implementation plan in an effort to support a comprehensive and effective statewide mechanism to screen all newborns for hearing acuity, to provide prompt audiological follow-up testing for those infants who do not pass the newborn screen, and to provide timely and appropriate early intervention services for those infants who are diagnosed with hearing loss. The UNHS Birthing Facility Compliance Guide serves as a manual for birthing facilities and pediatric healthcare providers in the development and implementation of their respective UNHS Program. These guidelines are not intended to supersede individual birthing facility policies or the independent clinical assessment and judgment of physicians and medical providers in any individual case.

2. Roles and Responsibilities

EHDI Regional Consultants are responsible for arranging an annual UNHS Program Review with each of the birthing facilities in their assigned regions. During the annual Birthing Facility Program Review, the UNHS Birthing Facility Compliance Guide Manual will be reviewed, and the Profile, Score Sheet, and Discussion Points will be completed. The invitation to participate in the annual Program Review will be sent to the birthing facility staff with sufficient time for preparation and scheduling the meeting. Annual Birthing Facility Program Reviews can be done in-person or virtually, depending on the situation.

UNHS Birthing Facility Compliance Guide Discussion Points

FOR CONSULTANT USE ONLY

Before each program review, consider the following when preparing for the meeting.

How is the birthing facility doing:

1. Entering baby's full name before discharge?
2. Entering the correct Primary Care Provider?
3. Scheduling follow-up appointments prior to discharge for infants that failed the initial [screen](#)?
4. Using the appointment tab?
5. Entering CCHD results?
6. Moving babies off the hospital queue? What is keeping babies on the hospital queue?
7. Entering the correct screening designation?

Communication with EHDI Consultant

8. Responding to requests from their EHDI consultant?
9. Reaching out to their EHDI consultant when there are NBHS related issues (new staff, password issues, brochures needed, scheduling issues...)?
10. Reaching out to their EHDI consultant when equipment is inoperable/needs repair (Loaner



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

2023 UNHS Birthing Facility Profile

Birthing Facility: _____

Compliance Guide Completion Date: _____

Compliance Guide Meeting Participants:

Nursery Phone Number(s): _____

Nursery Fax Number: _____

NICU Phone Number(s): _____

NICU Fax Number: _____

Designated Contacts:

Quarterly/Annual Reports

Current:

Additions:

Deletions:

EHDI Coordinator:

Name(s): _____

Email: _____

Phone: _____

Metabolic Coordinator:

Name(s): _____

Email: _____

Phone: _____

CCHD Coordinator:

Name(s): _____

Email: _____

Phone: _____

Additional Notes:

Section B. Inpatient Screen

Where do you document hearing screening, CCHD and metabolic screen results in addition to Hearing Link to verify (cross-check) the results?

Hearing Screening: _____

CCHD: _____

Metabolic Screening: _____

Section C. Outpatient Screen/Rescreen

1. Does this birthing facility complete:

a. Outpatient screen/rescreens for babies born at this facility?

- Yes
 No

If No, Please explain: _____

b. Initial screens for babies born (check all that apply)

- At home
 At another facility
 Out of state
 None of the above

c. Rescreens for babies born (check all that apply)

- At home
 At another facility
 Out of state
 None of the above

2023 UNHS Birthing Facility Compliance Guide Score Sheet Summary

Standard		Point Value	Score
1	NHS Policies & Procedures	6.0	0.0
2	Screening Equipment	3.0	0.0
3	Outpatient Rescreen Referral/Scheduling Process	5.0	0.0
4	Parental Education	3.0	0.0
5	Staff Training	4.0	0.0
6	Site/Equipment Inspection	2.0	0.0
7	Communication and Reporting	4.0	0.0
8	Data Submission (via Hearing Link)	8.0	0.0
9	Benchmarks and Quality Indicators	15.0	0.0
TOTAL		50.0	0.0

Birthing Facility Rating

Description	Point Range	Score
Greatly Exceeds Expectations	46-50	0.0
Exceeds Expectations	40-45	
Meets Expectations	36-39	
Below Expectations	30-35	
Needs Significant Improvement	0-29	

Strengths:

Recommendations for Improvement:

If total score is less than 36 points, an Interim (6 month) Program Review needs to be scheduled:

Proposed Date:

Other Comments:

Signatures:

Manager, NC DCFW Genetics and Newborn Screening

Date

NC EHDl Consultant

Date

Birthing Facility Representative

Date



Thank you!

For copies or more information contact:

Marcia.Fort@dhhs.nc.gov

or

Jude.Williams@dhhs.nc.gov



Indiana
Department
of
Health

EARLY HEARING DETECTION AND INTERVENTION PROGRAM (EHDI) UPDATE

ISHA CONVENTION 2021

Suzanne Foley, AuD., CCC-A

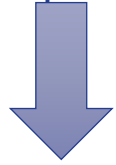
Director, EHDI

sfoley@isdh.in.gov

EHDI System and Administration



Indiana Department of Health



Maternal and Child Health



Genomics Newborn Screening



Indiana EHDI

EHDI Staff

Director-**Dr. Suzanne Foley**

Follow-Up Coordinator-**Stacy Allgeier**

2 EHDI Parent Consultants-**Julie Swaim, Lisa Wolfe**

6 regional consultants (audiologists)

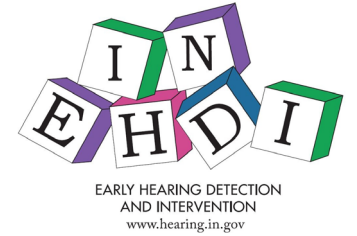
Guide By Your Side Director- **Mariana Barquet**

10 GBYS parent guides

Support staff

Astra Program-Educational Advocacy

EHDI System and Administration



Indiana Department of Health

Maternal and Child Health

Genomics Newborn Screening

Indiana EHDI Staff

- Director-Dr. Suzanne Foley
- 2 EHDI Parent Consultants-Julie Swaim, Lisa Wolfe
- Follow up Coordinator
- 4 Regional Audiology Consultants and Lead Consultant
- 10 Guide By Your Side and 5 ASTra guides for parent to parent support



Hospital contacts

- Regional audiologists visit once a year (template)
- Monitor hospital stats quarterly (used to be annual)
- Monthly emails to reporters
- Train every new reporter –regional audiologist
- Developed IN training on newborn hearing screening procedures (ncham)
- Loaner hearing screening equipment –annual review

Hospital statistic review

REPORT YEAR	REPORT MONTH	REPORTING ORG	ON TIME SUBMISSION	TOTAL BIRTHS	TOTAL SCREENED	SCREENING RATE	TOTAL PASSED	TOTAL PASSED WITH RISK FACTORS	TOTAL NOT PASSED	REFER RATE
2022	1	Regional Health	No	29.00	25.00	86.21%	24.00	0.00	1.00	4%
2022	3		No	31.00	31.00	100.00%	31.00	0.00	0.00	0%
2022	4		Yes	25.00	25.00	100.00%	24.00	0.00	1.00	4%
2022	5		No	40.00	37.00	92.50%	36.00	0.00	1.00	3%
2022	6		No	37.00	32.00	86.49%	27.00	0.00	5.00	16%
2022	7		Yes	34.00	33.00	97.06%	31.00	0.00	2.00	6%
2022	1	Memorial	Yes	6.00	6.00	100.00%	6.00	0.00	0.00	0%
2022	2		Yes	9.00	5.00	55.56%	5.00	0.00	0.00	0%
2022	3		Yes	7.00	6.00	85.71%	6.00	0.00	0.00	0%
2022	4		Yes	10.00	9.00	90.00%	9.00	0.00	0.00	0%
2022	5		Yes	11.00	11.00	100.00%	11.00	0.00	0.00	0%
2022	6		No	14.00	14.00	100.00%	12.00	0.00	2.00	14%
2022	7		Yes	12.00	11.00	91.67%	10.00	0.00	1.00	9%

Audiology visits



- Comprehensive audiology provider list
- Monitor audiology reporting electronically, fax and not
- Loaner diagnostic equipment to expand capacity
- Regional audiology visits
- Monthly emails
- Annual Topics in Audiology, ISHA, EI and Early Childhood conferences

Contact List

www.hearing.in.gov

Fax: 317-925-2888

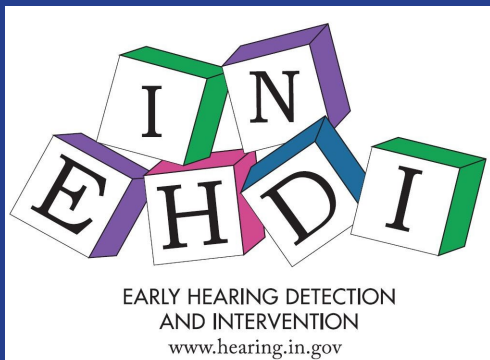
Suzanne Foley, Au.D., CCC-A

Director

office: 317-232-0972

mobile: 317-339-1328

sfoley@isdh.in.gov



Colorado's Virtual Site Visit Program

- The VSV curriculum was created by a team led by Randi Winston-Gerson at the National Center for Hearing Assessment & Management (NCHAM)
- Colorado was one of 6 pilot states involved in this project
 - All states were invited to adapt the curriculum to meet their state's needs; some interview questions were adapted/revised
 - VSV team members in Colorado represent our entire EHDI System



COEHDI

Colorado Early Hearing
Detection and Intervention

03 Inside a Virtual Site Visit

Hospital Representatives
(e.g., Newborn hearing
screening coordinator,
nurse manager, etc.)

Physician (Colorado AAP)



Parent Representative
(Colorado H&V)

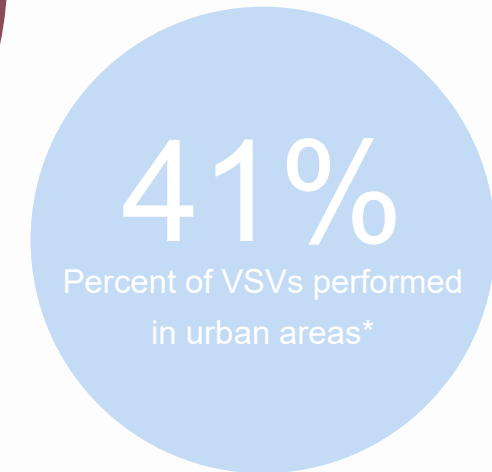
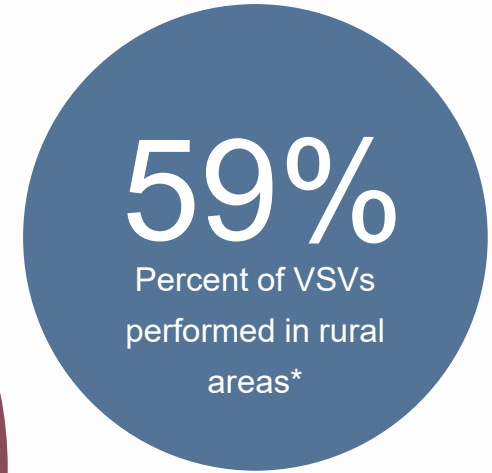
Audiologist (COEHDI)

COEHDI Director

CO-Hear (EI) Coordinator

Recruitment

- Hospitals with NBHS programs were contacted by phone or email to schedule a 1-hour VSV held via Zoom
- Due to privacy restrictions, COEHDI does not have access to hospital NBHS data, so hospitals were asked to share their NBHS data report from the most recent quarter



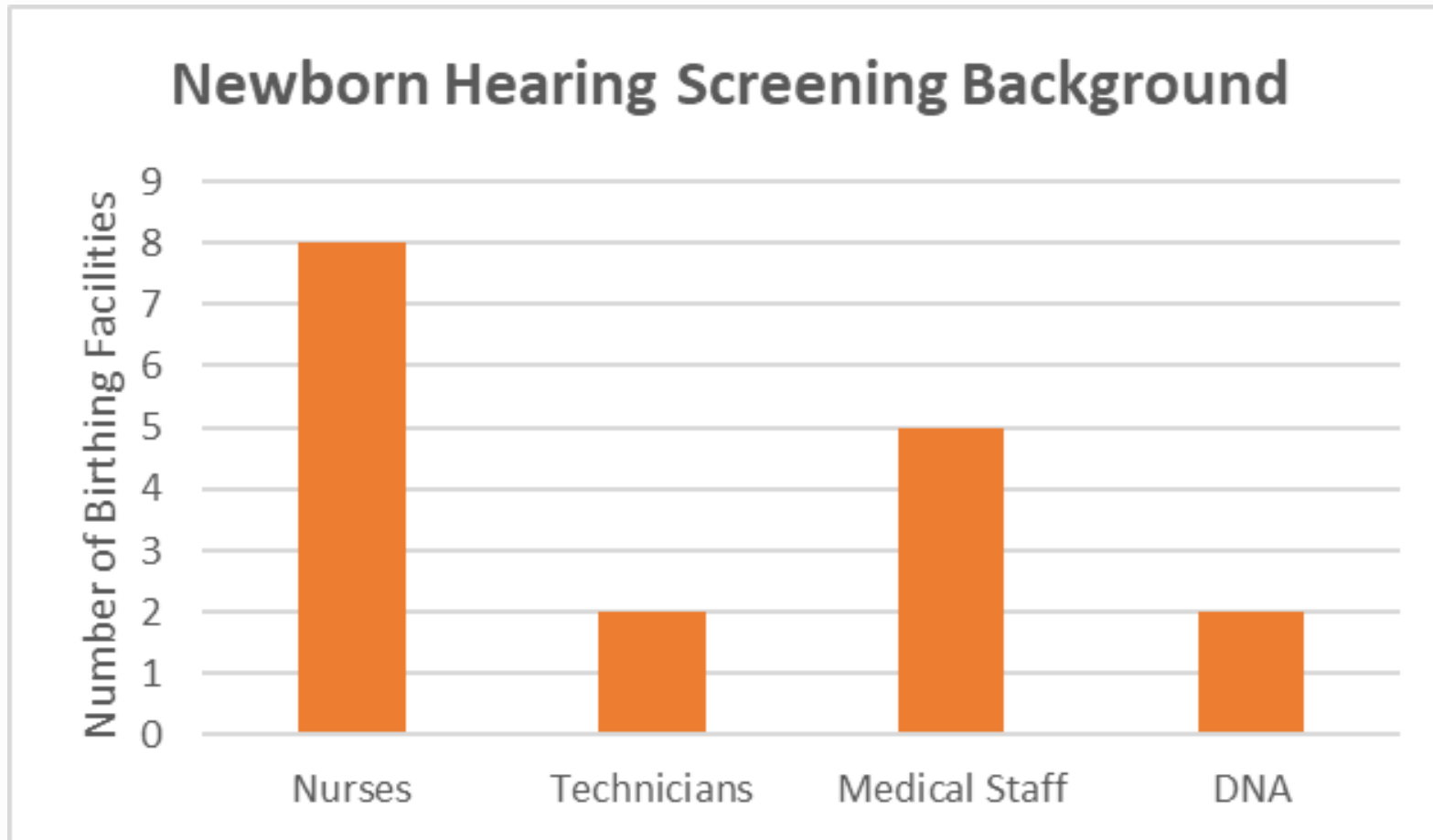
*Rural defined as a population of 49,999 or less. Metro defined as a population of 50,000 or more (U.S. Census Bureau, 2010)



COEHDI

Colorado Early Hearing
Detection and Intervention

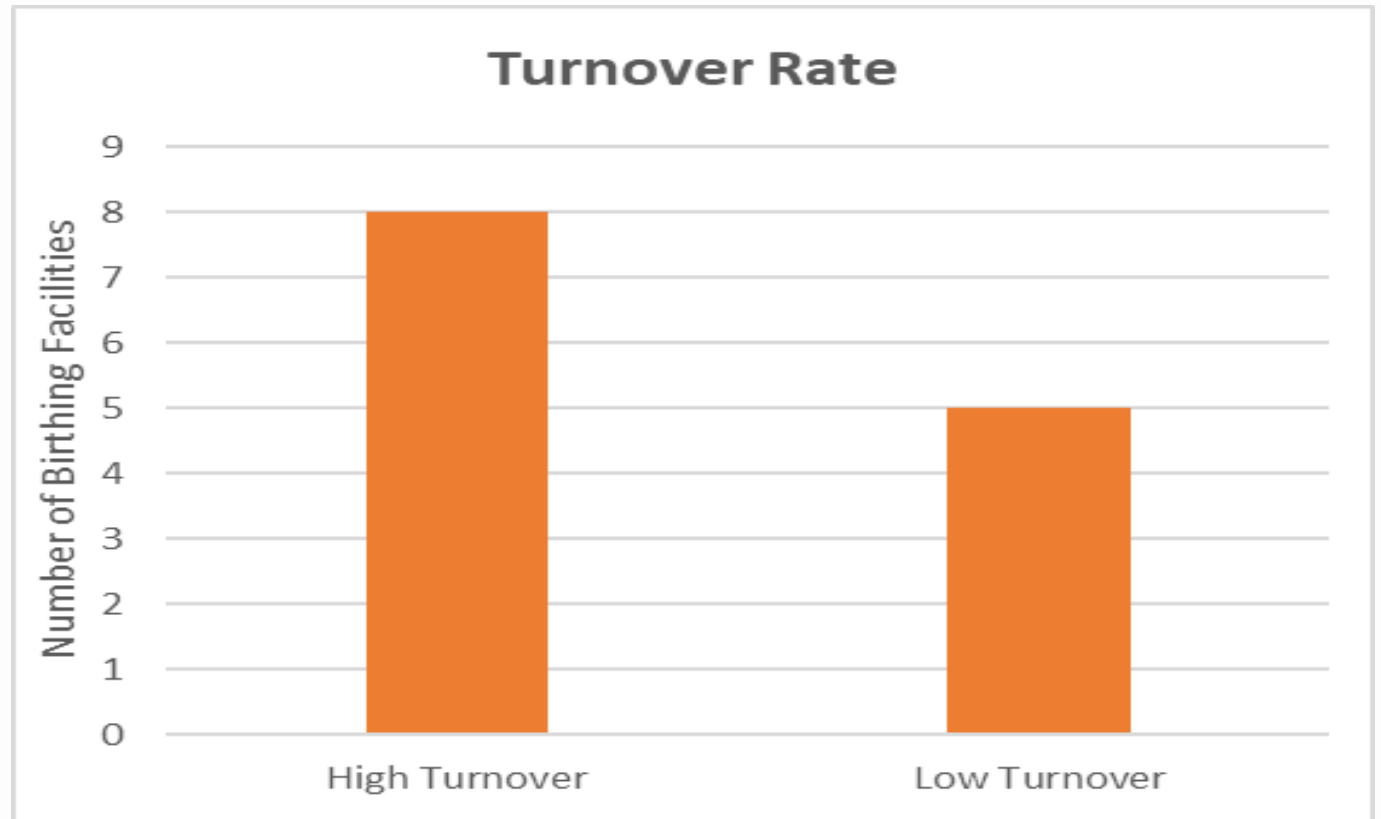
Data Analysis & Trends



05 Data Analysis & Trends

61% of hospitals surveyed reported a high turnover rate of newborn hearing screeners at their hospital

Turnover Rate Among Newborn Hearing Screeners



COEHDI

Colorado Early Hearing
Detection and Intervention

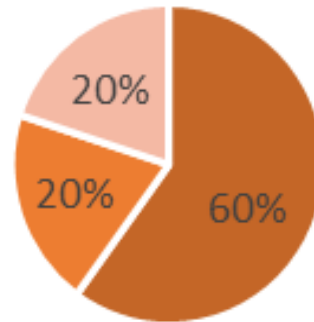


Data Analysis & Trends

100% of hospitals interviewed provide some type of training in NBHS.

However, the format and type of training widely varies.

Newborn Hearing Screening Training



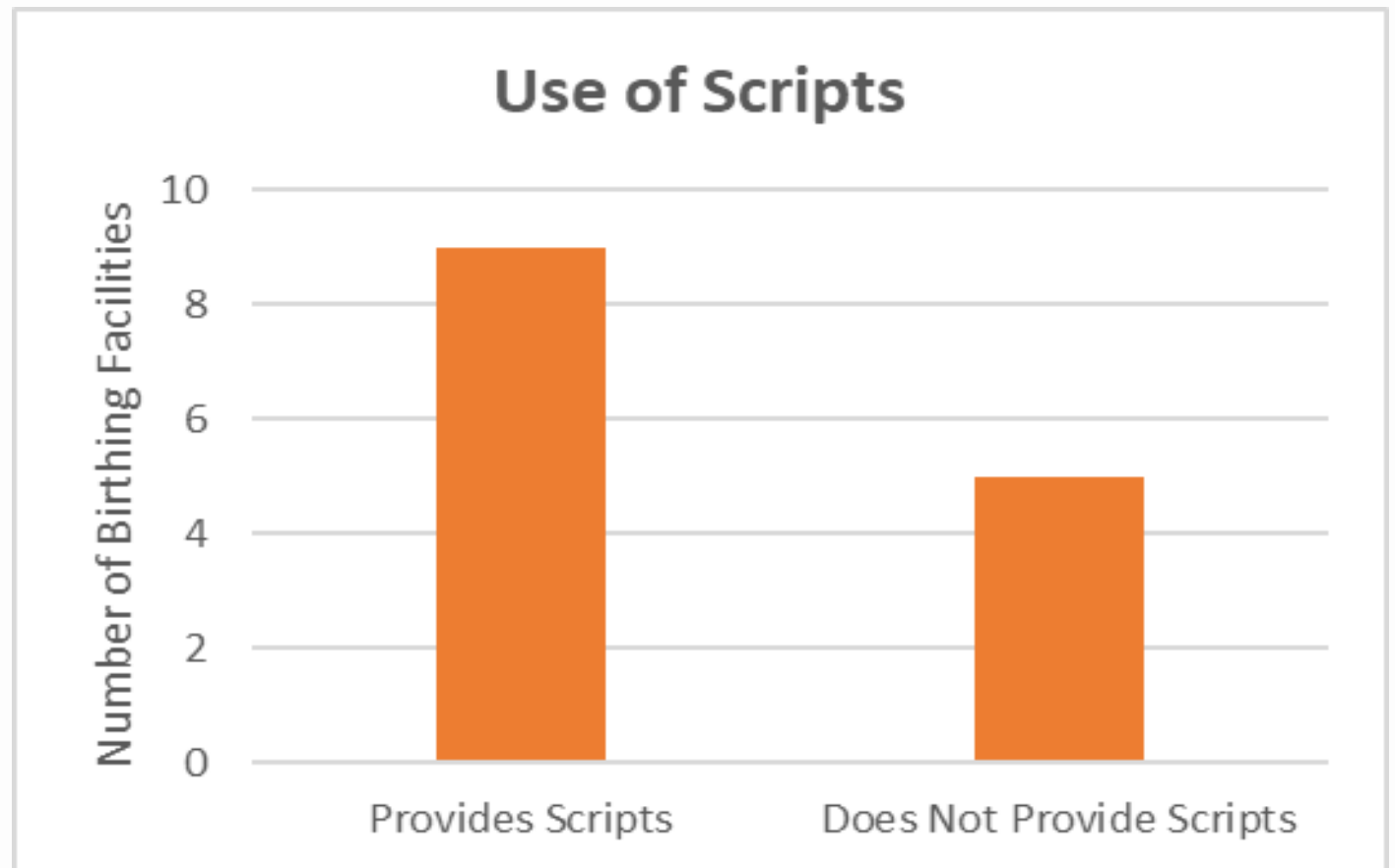
- Hands-On Training By Coordinator or Seasoned Screener
- Hands-On Training By Nurse Preceptor
- Hands-On Training By Medical Group



05 Data Analysis & Trends

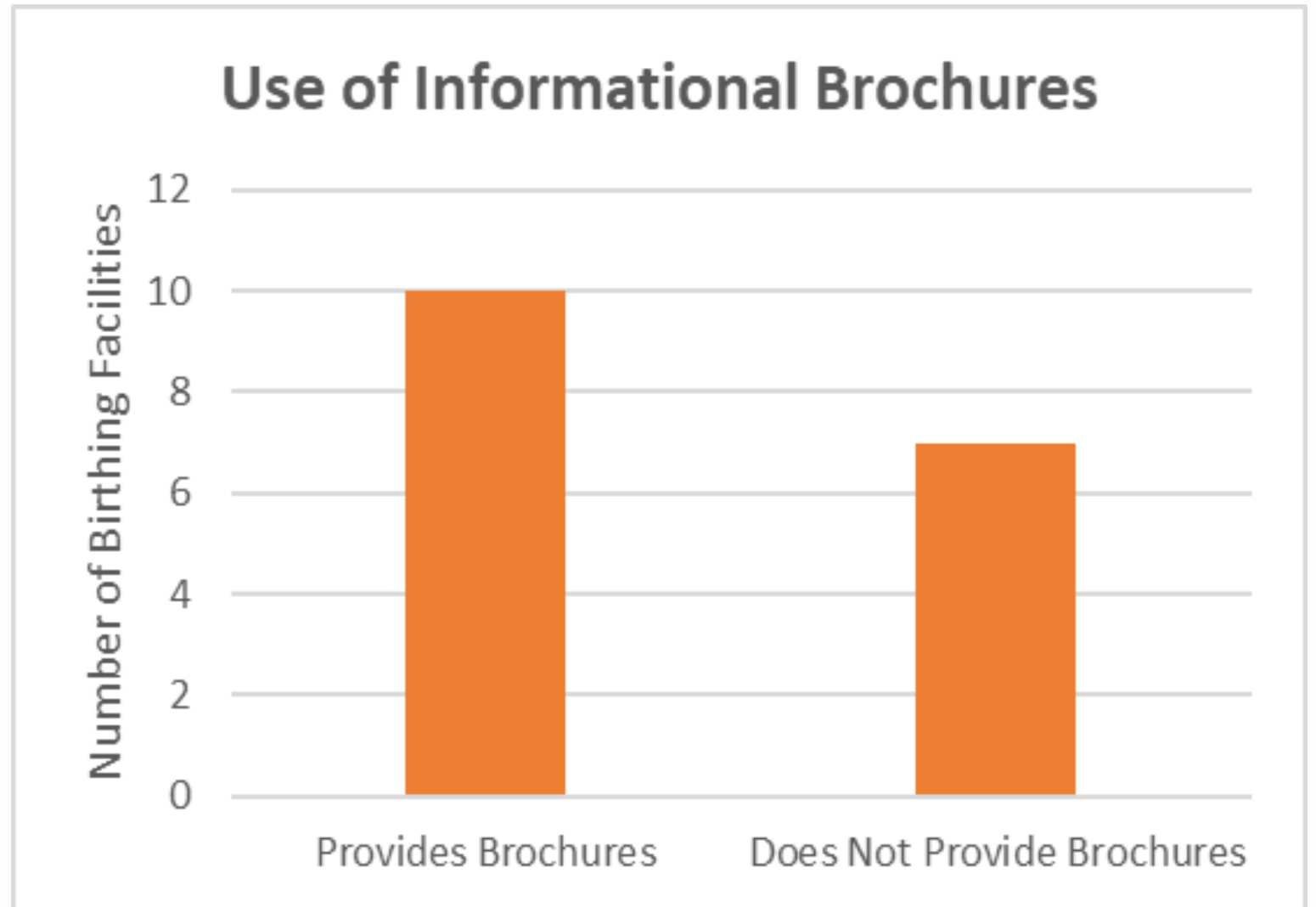
36% of hospitals surveyed *do not* use scripts when explaining NBHS procedures or communicating results with families

Use of Scripts When Communicating with Families

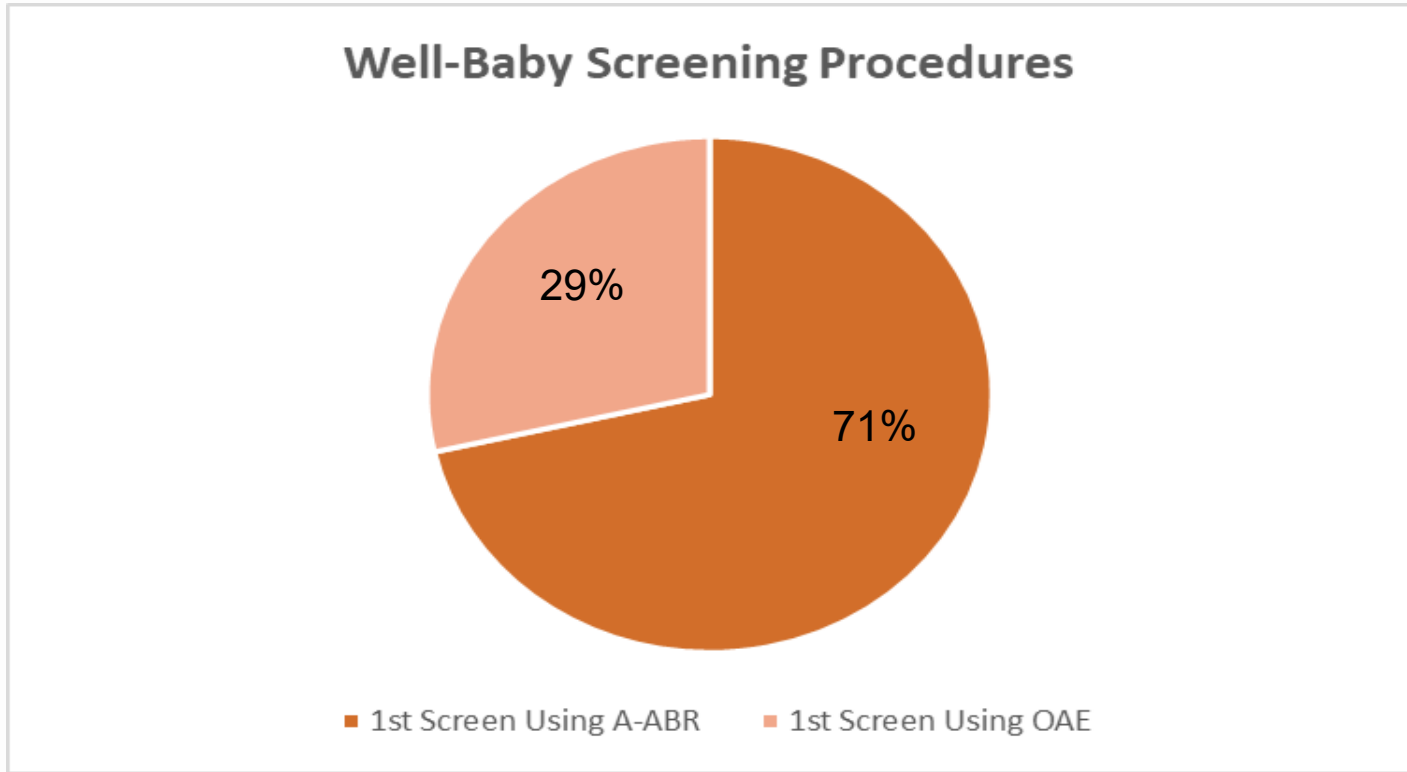


05 Data Analysis & Trends

41% of hospitals surveyed do not provide informational brochures to families about newborn hearing screening, results, or next steps.



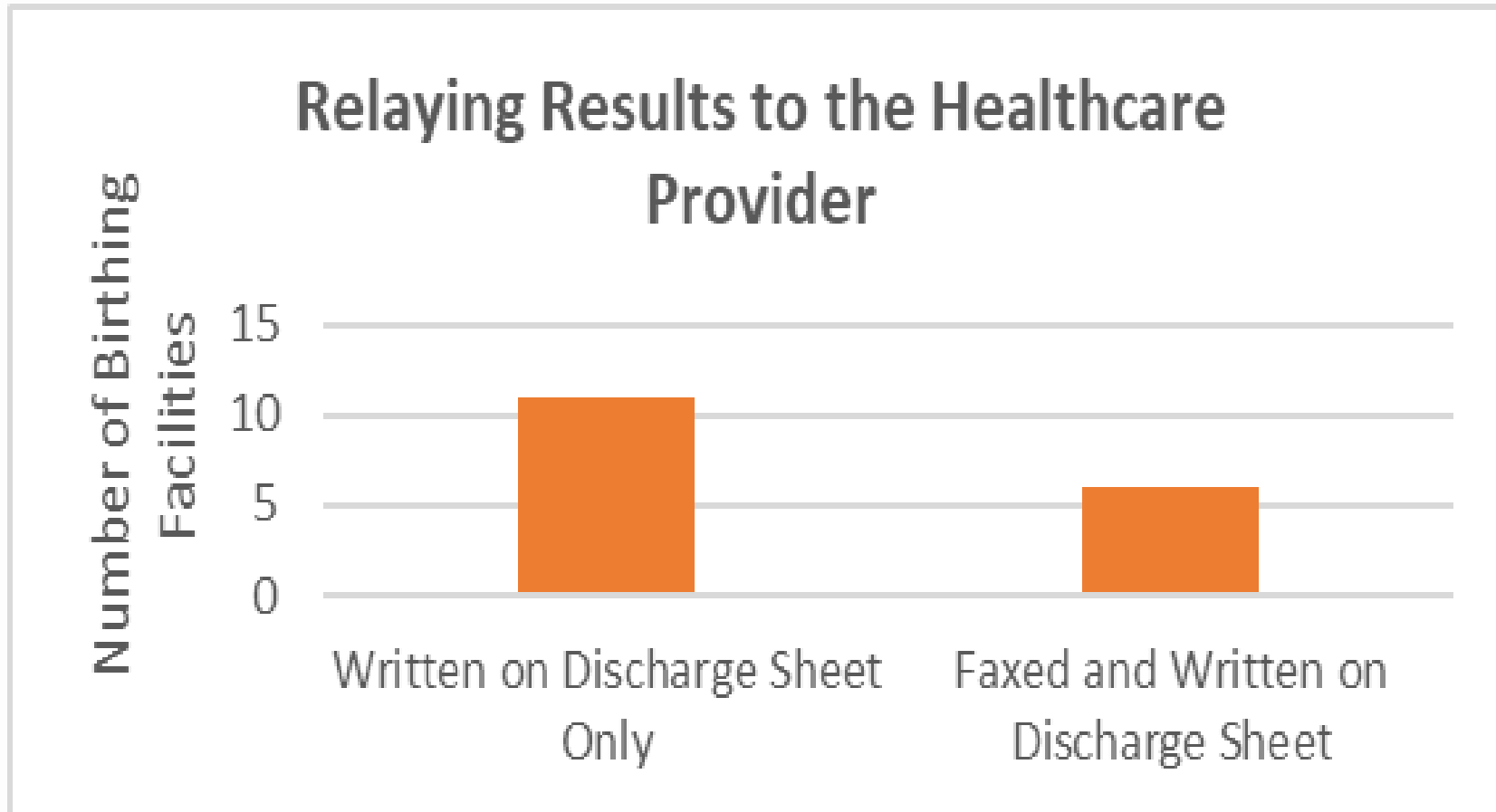
Data Analysis & Trends



100% of facilities reported 2nd attempt at screening is performed in both ears even if an infant refers on their screening in one ear

05

Data Analysis & Trends

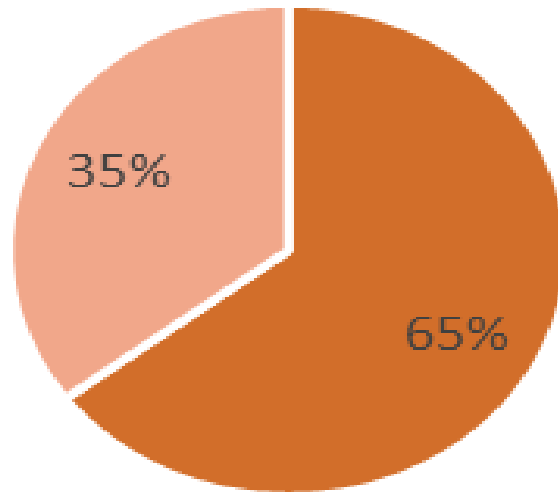


COEHDI

Colorado Early Hearing
Detection and Intervention

Data Analysis & Trends

cCMV Screening



- Provides cCMV Screening
- Does Not Provide cCMV Screening



Our Successes

- Colorado birthing facilities are following JCIH (JCIH, 2019) best practice guidelines for screening technology in the well-baby nursery and in the NICU.
- Colorado birthing facilities are following JCIH best practice guidelines for rescreening if a neonate refers on a screening in one ear.
- All Colorado birthing facilities provide hands-on training for newborn hearing screeners.



COEHDI

Colorado Early Hearing
Detection and Intervention

Areas for Improvement

- **Screener background:** Nurses are performing NBHS in 47% of hospitals; however, Roberts & Jones (2017) suggests that nurses are not comfortable performing NBHS.
- **Training:** Type of hands-on training varies among birthing facilities. JCIH 2019 and Robert & Jones (2017) recommend the use of the NCHAM Newborn Hearing Screening Training Curriculum.
- **High turnover:** A majority of birthing facilities indicated a high screener turnover, which can impact quality of NBHS program (Low et al., 2005)
- **Scripts:** Scripts are free and available resources for all birthing facilities; however, these resources are largely unused.
- **Use of informational brochures/videos:** These are free and available resources for all birthing facilities; however, these resources are largely unused in Colorado.
- **Relaying results to the healthcare provider:** Suggestion to standardize how results are provided to healthcare providers to ensure facilitation of appropriate follow-up (Shulman et al., 2010; Russ et al., 2010).
- **cCMV Screening:** There are currently no routine protocols regarding the screening of newborns for cCMV at birth



TURNING EHDI DATA INTO ACTION (QUALITY IMPROVEMENT/SITE VISITS)

MARCH 7, 2023

Tammy O'Hollearn, Iowa EHDI Director



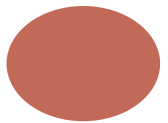
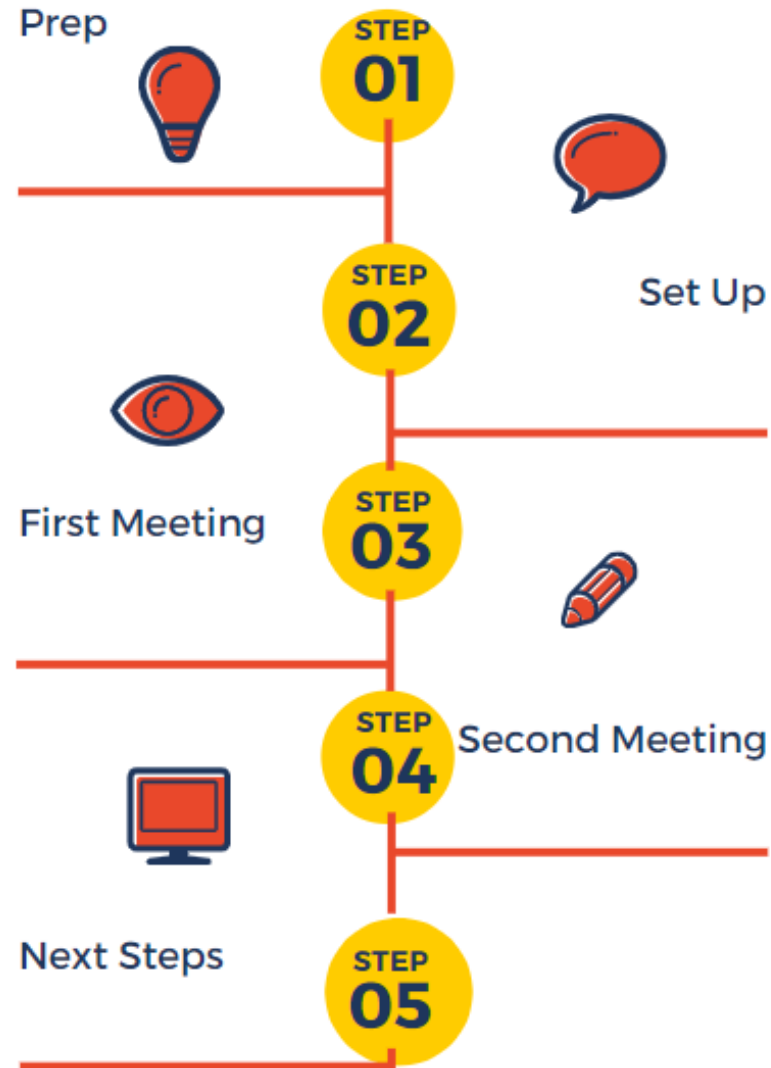
Iowa's Early Hearing Detection & Intervention Program

TARGETING PROVIDERS

- Data
- Providers List
- Prioritize the List



TURNING DATA INTO ACTION PROCESS

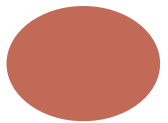


TURNING DATA INTO ACTION PROCESS

STEP 1: PREPARE

Prep

To prepare for meetings, Iowa EHCI staff met weekly with their epidemiologist to strategize



What Percent of Infants Are Diagnosed with Hearing Loss on Time by Location of Diagnostic Provider?

Provider of PHI	Dx (HL) < 3 Months (%)	Median Days to PHI
Dx Provider in Iowa City	26.4	136.0
Dx Provider in Clive	62.9	66.0
Dx Provider in Des Moines	70.7	59.0
Dx Provider in Boys Town, Nebraska	82.8	48.0
Dx Provider in Sioux City	94.1	33.0
Dx Provider in Iowa City	88.2	43.0

The Iowa City provider diagnoses the greatest number of infants with HL, but diagnoses only 26% of infants with HL by 3 months of age. The overall state rate for diagnosis = **58.9%**.



TURNING DATA INTO ACTION PROCESS

STEP 2: SET UP



STEP
02

Set Up

Next, we contacted key personnel at targeted clinics. A request for two meeting dates was emailed to all invited.



FIRST MEETING INVITATION

I hope this email finds you doing well! Amanda just finished analyzing the last five years' worth of EHDI data of for Iowa infants. We would like to share the findings and identify areas we can work together to strengthen the greater system of EHDI.

The findings show that clinic/hospital name has closed some gaps and made huge strides in certain areas of performance. We have also researched and identified key factors within the clinic/hospital name that contribute to late diagnosis, lost to follow-up, and other aspects within the clinic/hospital name network that we think will be of interest to you. We would like to present the findings to you and other professionals within newborn hearing screening and the audiological care community in order to identify key areas for programming to strengthen the system of care for infants and children. We also want to hear from you how best the areas of concern could be targeted to ensure best practices and potentially help us with future programming.

We would like to schedule two meetings. The first meeting will be to review the findings and ask questions. The second meeting will be to develop quality improvement strategies. Please send some dates and times that will work for you and your team. (we also listed who we thought should be there and asked for others we may have missed that they would like included)



TURNING DATA INTO ACTION PROCESS

STEP 3: FIRST MEETING



First Meeting

At the first meeting, data was presented by the EHDI epidemiologist. Initial questions were answered and thoughts were shared.



*Copy of data presentation example is available upon request to Tammy O'Hollearn, tammy.ohollearn@idph.iowa.gov



TURNING DATA INTO ACTION PROCESS

STEP 4: SECOND MEETING



Second Meeting

The second meeting discussion focused on processes for screening and diagnosis, barriers, and possible solutions or strategies.

STEP
04



SAMPLE AGENDA FOR THE SECOND MEETING

- Introduction & Ice-Breaker (5 minutes)
- Discuss diagnosis processes for both
NICU and Well-baby infants(10 minutes)
- Discuss barriers (20 minutes)
- Discuss QI strategy & solutions (25 minutes)



TURNING DATA INTO ACTION PROCESS

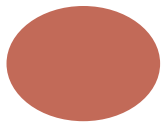
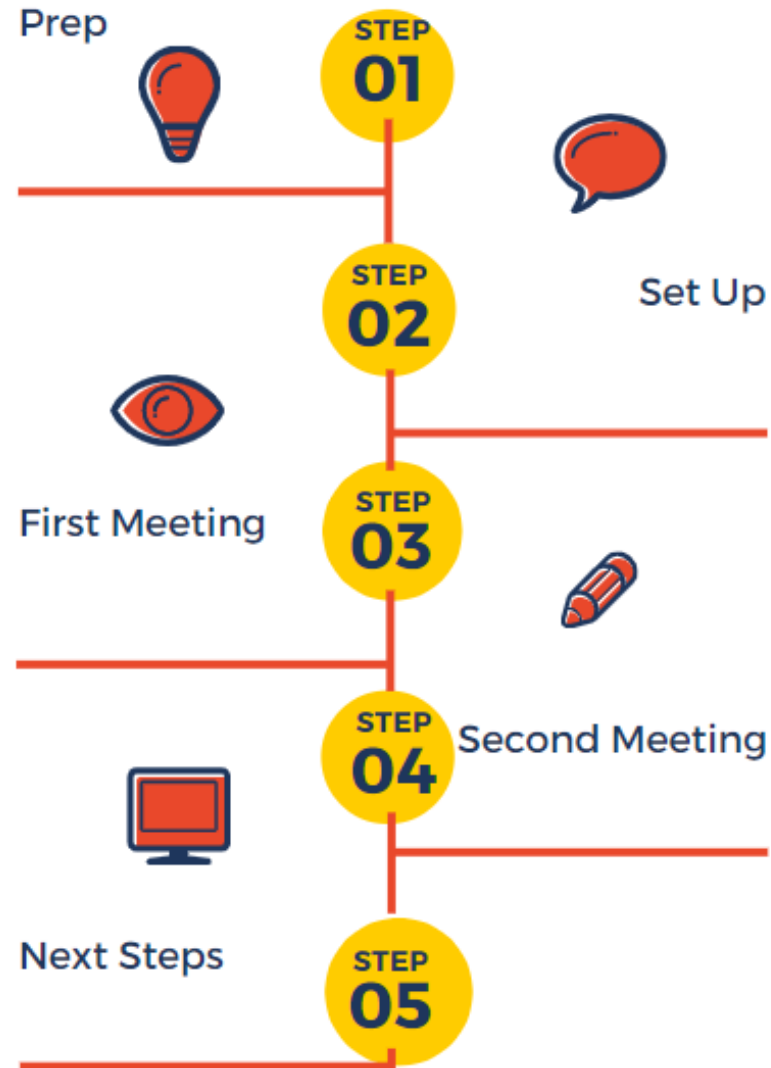
STEP 5: NEXT STEPS

Next Steps

Done! Right?
Not Quite.



TURNING DATA INTO ACTION PROCESS



LESSONS LEARNED

- Level of engagement may vary
- Encouragement to think outside the box
- Engaging managers and QI coordinators
- Centering discussion around control or influence
- Keep the change small to start
- Offer to be a part of the solution
- Build rapport



LESSONS LEARNED

- Document progress throughout
- Prioritize work
- Don't be afraid to use data
 - Tell your story
 - Influence change
 - Don't shy away from talking about inequities, problems, or gaps
- Celebrate the wins!



NEXT UP FOR IOWA EHDI

- Continue QI work with current providers
- Review and revise process
- Target additional providers
- Additional analysis, quantitative and qualitative
- Explore collaboration with other providers
- Use data to prioritize follow-up
- Publish data analysis findings



PRESENTER CONTACT INFORMATION

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