Presentation Acronyms

IL H&V GBYS – Illinois Hands & Voices Guide By Your Side

APORS – Adverse Pregnancy Outcomes Reporting System

NIH – National Institutes of Health

IS – Information System

LTF – Lost to follow-up

IDPH – Illinois Department of Public Health

FEHDI – Families in EHDI

FBOs – Family-based organizations

NTRC – National Technical Resource Center

PHI – Personal Health Information

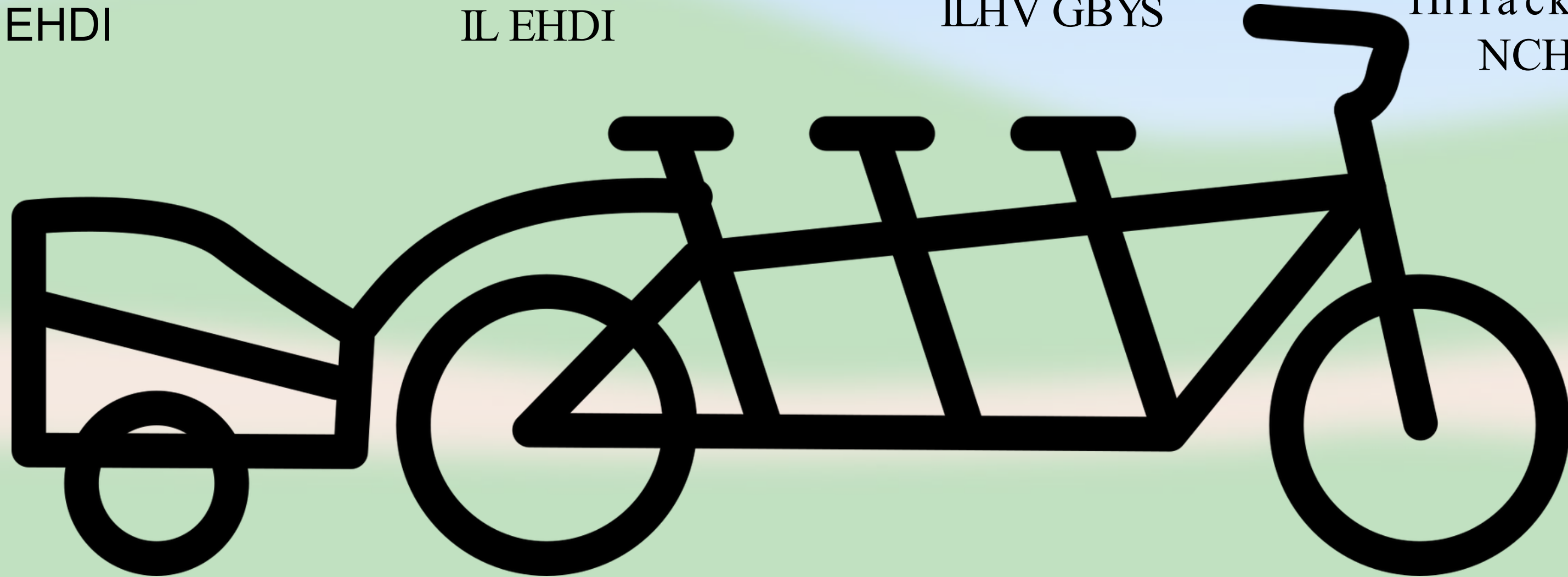Ginger Mullin
IL EHDI

Kate Jordan
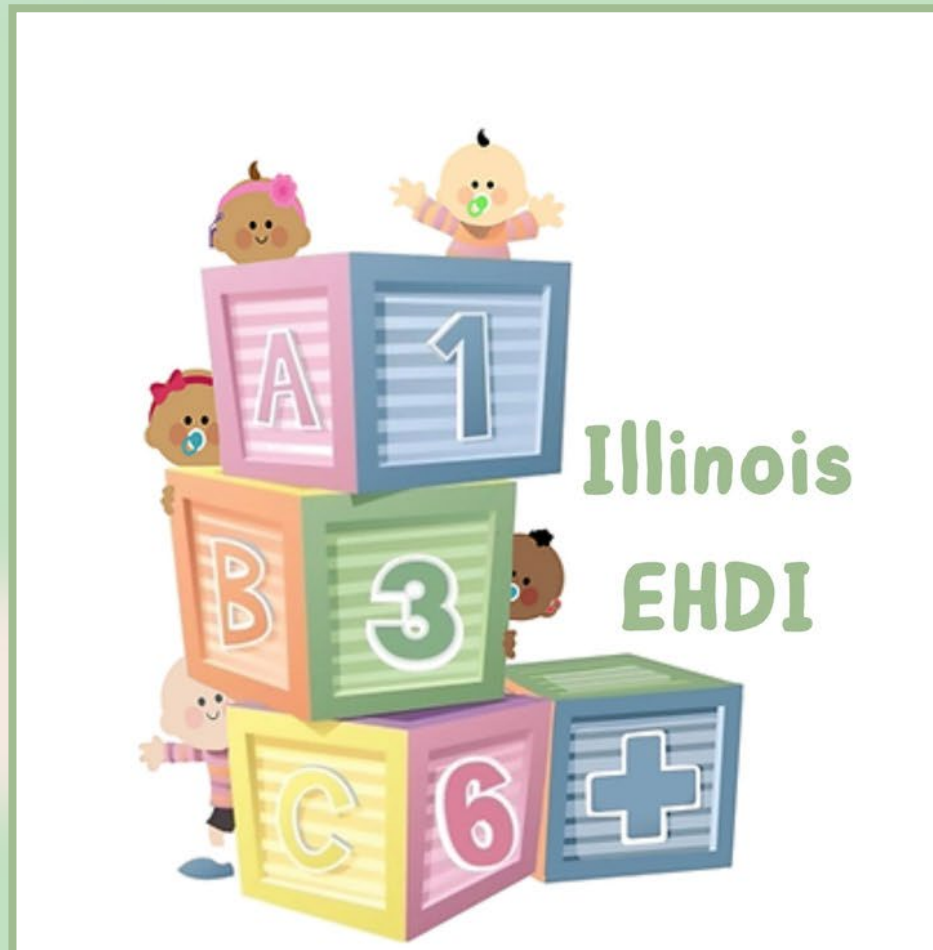IL EHDI

Carrie Balian
ILHV GBYS

James Fritzler
HiTrack/ USU/ NCHAM

Disclosure for Ginger Mullin AuD

Dr. Mullin is an employee of the Illinois Department of Public Health

The Illinois Early Hearing Detection and Intervention Program (EHDI) is supported by funding through the Centers for Disease Control and Prevention (CDC) and Health Resources & Services Administration (HRSA)

Accepted to present by the 2024 EHDI Conference Committee

Presenter does not personally receive any financial or non-financial benefits from any agencies referenced in this presentation

Disclosure for James Fritzler

Mr. Fritzler is an employee of Utah State University as part of HiTrack Development

Accepted to present by the 2024 EHDI Conference Committee

Disclosure for Carrie Balian

HANDS& VOICES™
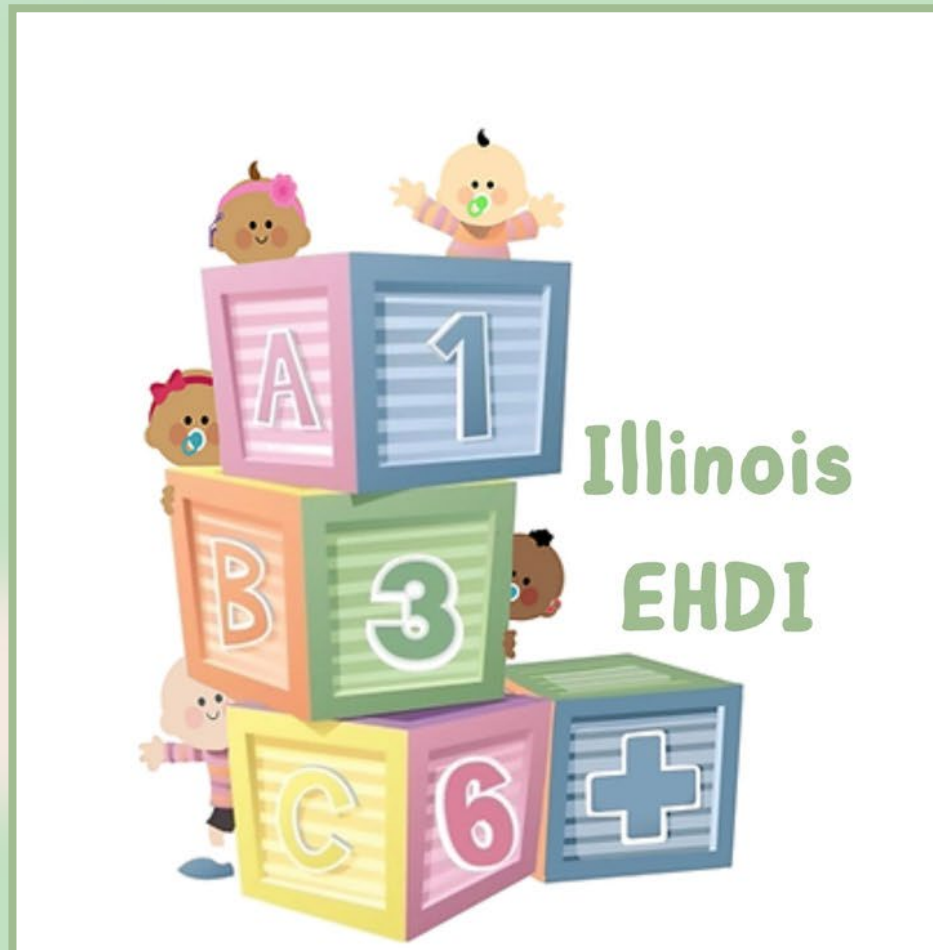ILLINOIS

GUIDE BY YOUR SIDE™
ILLINOIS

Ms. Balian is a contractor with IL Hands & Voices Guide By Your Side

The IL Hands & Voices Guide By Your Side program is supported in part by a grant from the IL Department of Public Health

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Expansion of Birth Certificate Data

- Added "Parent 2" data transfer from birth certificates to improve Early Intervention data matching

- Corrected coding for free standing birth centers

- Added death data for children 0-36 months (assists transition and language and literacy data marking

Data Exchange

Medicaid and Adverse Pregnancy Outcomes System

- Targets
  - Load contact details from Medicaid into HiTrack (IS)
    - Also gain key health info - out of state services and specialty providers
  - Exchange health risk factors between HiTrack (IS) and APORS
    - Hearing Related & Non-Hearing Related
      - Especially Post-Discharge Diagnosis
      - Eventually get CMV results
    - APORS motivated due to a new NIH grant
- Challenges
  - Risk factor definitions changed, needing a place for them
  - Timing of data load - matching rules look back 30 days
- Progress
  - Incremental
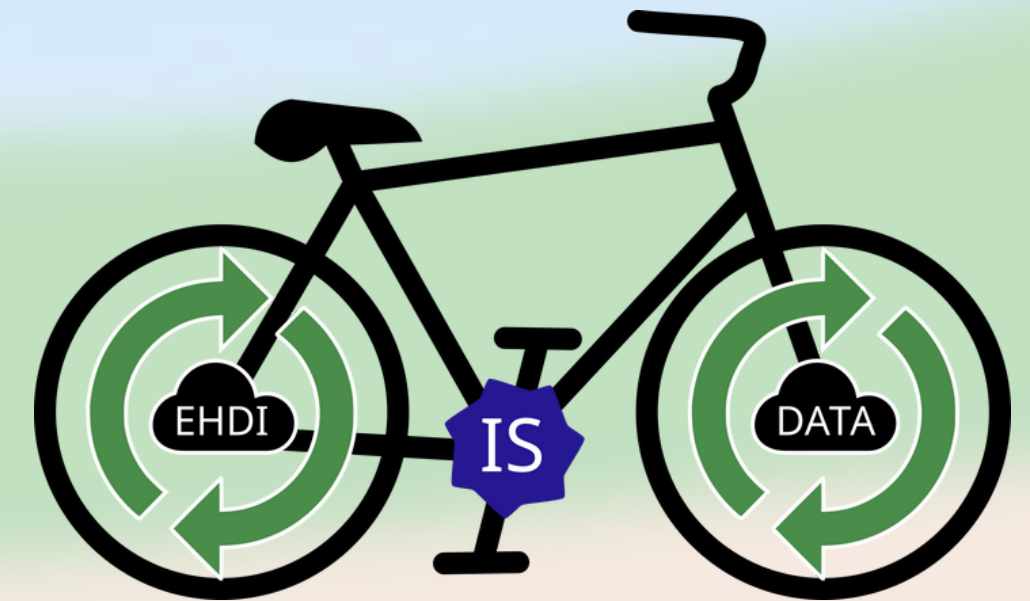
Faxing - 2 way sharing

- Data Exchange accurate Pediatrician contact information including FAX#
  - Automating FAX in IS led to 80% Staff Effort Reduction
  - Cost reduction - postage ($0.68 each) and reduced staffing
  - 100 to 200 letters faxed a week
- Data Exchange means less effort
- Faster response times from physicians and audiologists
- Confidence in record details
  - Less "wheel spinning" while arranging services for babies
- Team Morale
  - Clerical staff felt validated - investment made in their processes
  - Improved basic functions of the state EHDI program

Hospital "Report Cards"

Newborn Hearing Screening Program
2022 Quarter 2 Performance Report

Key

Meets Standards	State Average	
Below Standards	Perinatal Network #10	
Out of Compliance		

If out of compliance, seek assistance from the IDPH EHDI staff at 217-782-4733 or dph.newbornhearing@illinois.gov.

Screening Rate

Hospital Breakdown

Alton Mem	98.96%	St. Elizabeth	100.00%
Anderson	100.00%	St. Joseph	99.38%
Good Sam	99.70%		
Memorial East	99.71%		
Memorial Car	99.61%		

Screened No Later than 1 Month of Age

Alton Mem	100.00%	St. Elizabeth	99.59%
Anderson	99.71%	St. Joseph	99.38%
Good Sam	100.00%		
Memorial East	98.55%		
Memorial Car	99.21%		

Inpatient Refer Rate

Alton Mem	7.30%	St. Elizabeth	5.42%
Anderson	1.47%	St. Joseph	4.40%
Good Sam	0.90%		
Memorial East	6.40%		
Memorial Car	5.35%		

2020 Diagnosed No Later than 3 Months of Age

Alton Mem	72.73%	St. Elizabeth	82.61%
Anderson	72.22%	St. Joseph	100.00%
Good Sam	66.67%		
Memorial East	95.59%		
Memorial Car	58.82%		

2020 Lost to Diagnostic Follow-Up

Alton Mem	23.53%	St. Elizabeth	28.13%
Anderson	18.18%	St. Joseph	18.18%
Good Sam	60.00%		
Memorial East	13.25%		
Memorial Car	58.49%		

2020 data was used for the diagnosed no later than 3 months and lost to diagnostic follow-up measures. EHDI data can take one year to normalize due to scheduling and receipt time of reports. This data has been submitted to the Centers for Disease Control and Prevention (CDC) and is considered complete. If you would like updated individual hospital rates for these measures, please contact the EHDI staff.

Perinatal networks as a whole and individual hospitals that are out of compliance for certain measures should contact the EHDI staff for remediation plans. There are remediation plans for each measure. A multitude of procedures and protocols impact each measure. Therefore, procedures and protocols will be analyzed to determine if best practices are being followed. The Newborn Hearing Screening Program looks forward to working together to improve our state performance.

These performance measures are to add transparency to our Newborn Hearing Screening Program across the state. The bullet charts on the left show our colored baselines and your network's performance compared to the state average. The hospital breakdown in the highlight table on the right shows what figures make up your perinatal network gray bar in the chart.

Screening Rate= Total documented as screened/ (Total occurrent births-Not screened infant died-Not screened non-resident-Not screened unable due to medical reasons-Not screened parent declined services)
Screened No Later than 1 Month of Age= (Total pass before 1 month of age + No pass before 1 month of age)/Total documented as screened
Refer Rate= Total Referred/ Total Screened
2020 Diagnosed No Later than 3 Months=(No hearing loss before 3 Months + permanent hearing loss ID before 3 months)/(Total with no hearing loss (initial diagnosis) + Total with permanent hearing loss (initial diagnosis)
2020 Lost to Diagnostic Follow-Up= No diagnosis-unknown/ (Straight to diagnostic + Total not pass)

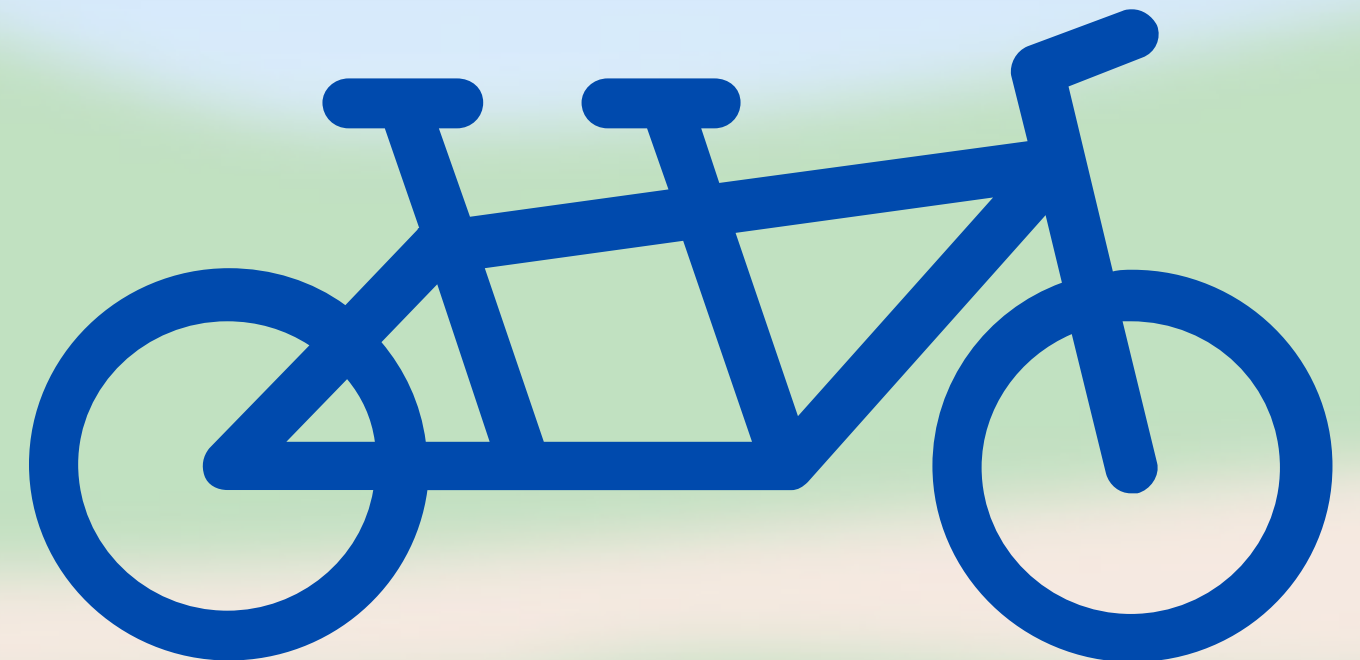Outpatient Refer Rate= Percentage of infants who received an outpatient screening and referred

Outpatient Refer Rate

Alton Memorial	16.67%	St. Elizabeth	66.67%
Anderson	57.14%	St. Joseph	50.00%
Good Samaritan	0.00%		
Memorial East	92.31%		
Memorial Carbo	0.00%		
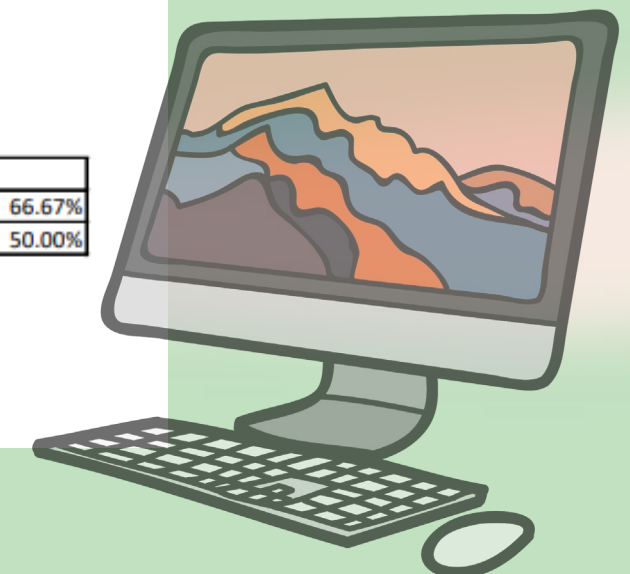
Remediation/ Screening Performance Countermeasure Matrices

- Screening Goal
- Refer Rate Goal
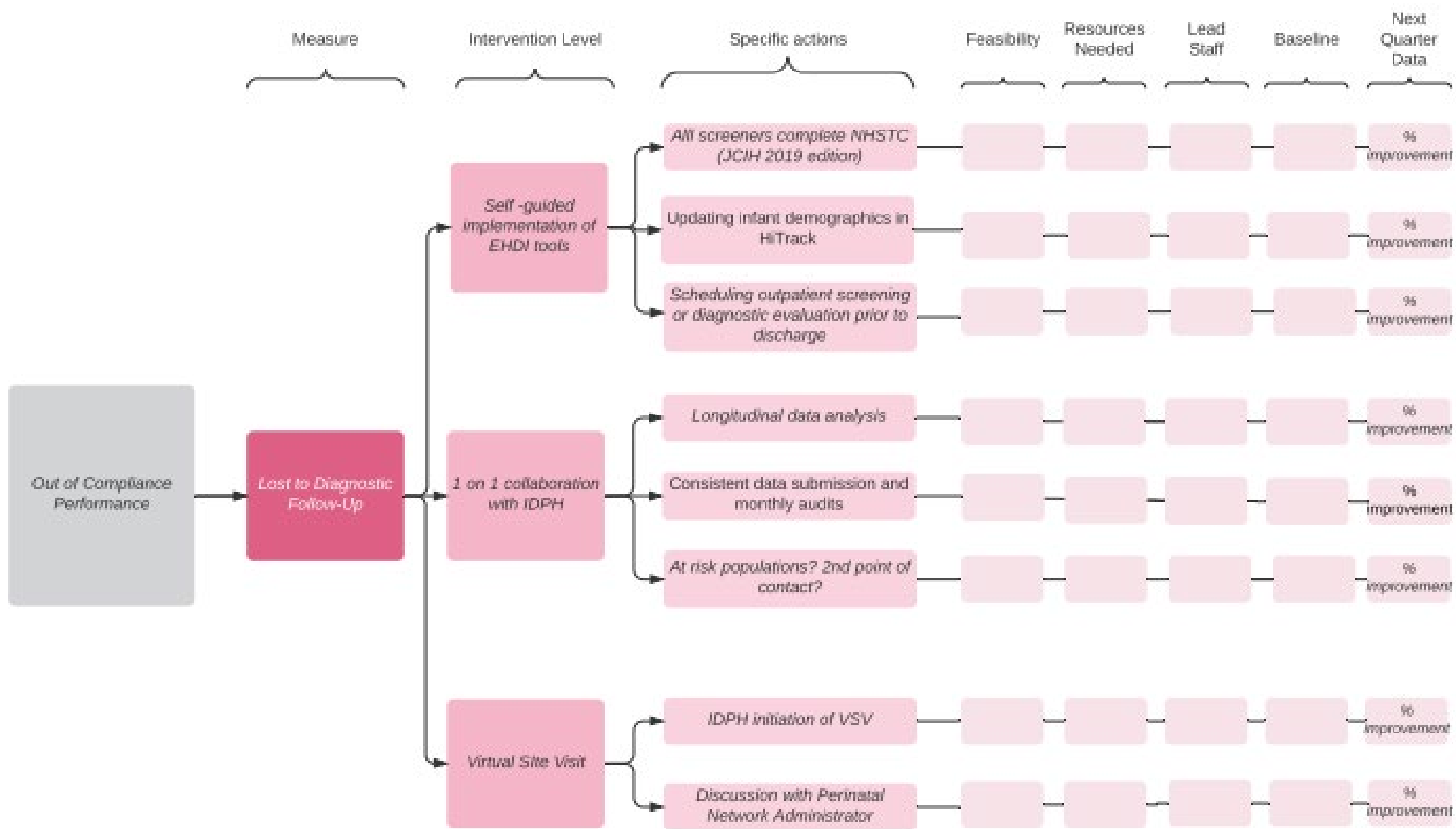- Diagnostics Goal
- LTF Goal

Process overview

| Review Quraterly Performance Report | Identity areas for improvement | Identify strategies for improvement | Develop action items | Prioritize action items | Take action |

Decision analysis

Decision to be made: Steps for hospital remediation

	Self-guided implementation of EHDI tools (enter date initiated)	1 on 1 collaboration with IDPH (enter date initiated)	VIrtual SIte VIsit (enter date initiated)
Does not meet Screening goal			
Does not meet Screening No Later than 1 Mo goal			
Does not meet Refer Rate goal			
Does not meet Dx No Later than 3 mo goal			
Does not meet LTF			

Hearing Screening Performance Countermeasure matrix -LTF Goal

Gabrielle Bires | June 30, 2021

Measure	Intervention Level	Specific actions	Feasibility	Resources Needed	Lead Staff	Baseline	Next Quarter Data
Out of Compliance Performance → Lost to Diagnostic Follow-Up	Self-guided implementation of EHDI tools	All screeners complete NHSTC (JCIH 2019 edition)					% improvement
		Updating infant demographics in HiTrack					% improvement
		Scheduling outpatient screening or diagnostic evaluation prior to discharge					% improvement
	1 on 1 collaboration with IDPH	Longitudinal data analysis					% improvement
		Consistent data submission and monthly audits					% improvement
		At risk populations? 2nd point of contact?					% improvement
	Virtual Site Visit	IDPH initiation of VSV					% improvement
		Discussion with Perinatal Network Administrator					% improvement

Legend

Feasibility
1 - Very difficult to implement
2 - Difficult to implement
3 - Somewhat difficult to implement
4 - Easy to implement
5 - Very easy to implement

Resources Needed
1 - Not possible due to resources
2 - Too many resources needed
3 - Many Resources Needed
4 - Some resources needed
5 - Little resources needed

Lead Staff
Please enter first and last name of individual responsible for action plan and implementation

Baseline
Current performance score as shown on most recent quarterly report.

Next Quarter Data
Performance score as shown on next quarterly report to show percent decrease, improvement or stagnation.

"Report Cards" & Remediation

Quality Assurance Query
Usefulness Query attached to the EHDI-IS

Usefulness Rating on a Scale of 1-10

Category	Rating
Baby Search	9.27
Baby Basket	8.39
Combining Records	8.38
Communication Hub	8.06
State EHDI Provided Presentations	7.84
State EHDI Meetings	7.82
Screening Equipment Merge	7.78
Hospital Report Cards	7.74
Data Quality Report	7.62
Secure Messaging	7.44
VR/HT Comparison Report	7.23
Site Visits	6.81

NOW

FUTURE

PAST
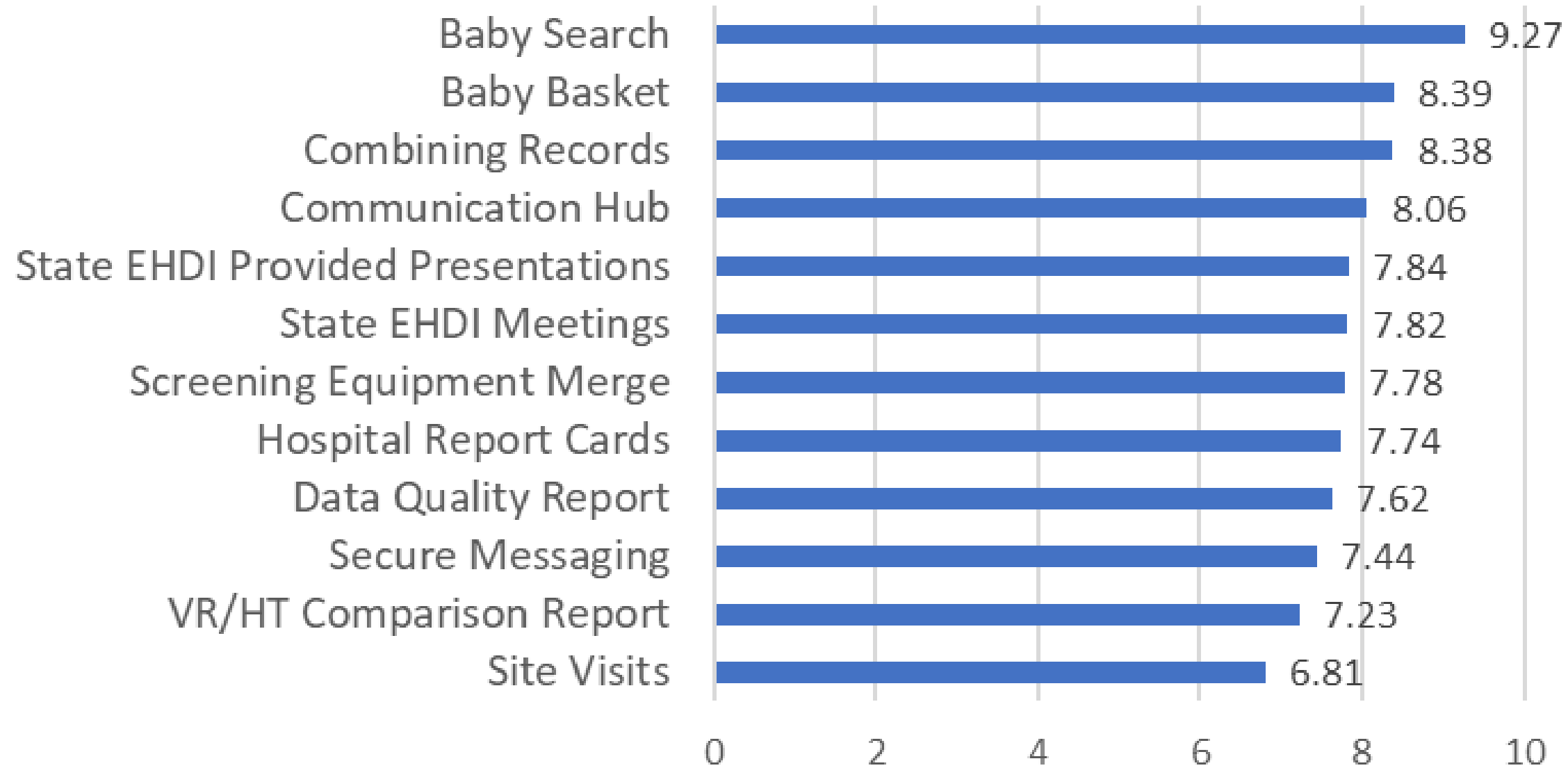
FEHDI

- Pioneers in the creation
- Standardized data collection
  - Date of referral sent and received
  - Age of infant at referral
  - Initial contact date to family
  - Contact: made but unresponsive or unable to contact
  - Date of enrollment
  - Age of infant at enrollment
  - Reason of discontinued services
- How it's reported: pilot in database
  - Custom forms then integration in database update

Found under "Supporting Resouces" section

Illinois Early Hearing Detection and Intervention - 2021 Annual Report
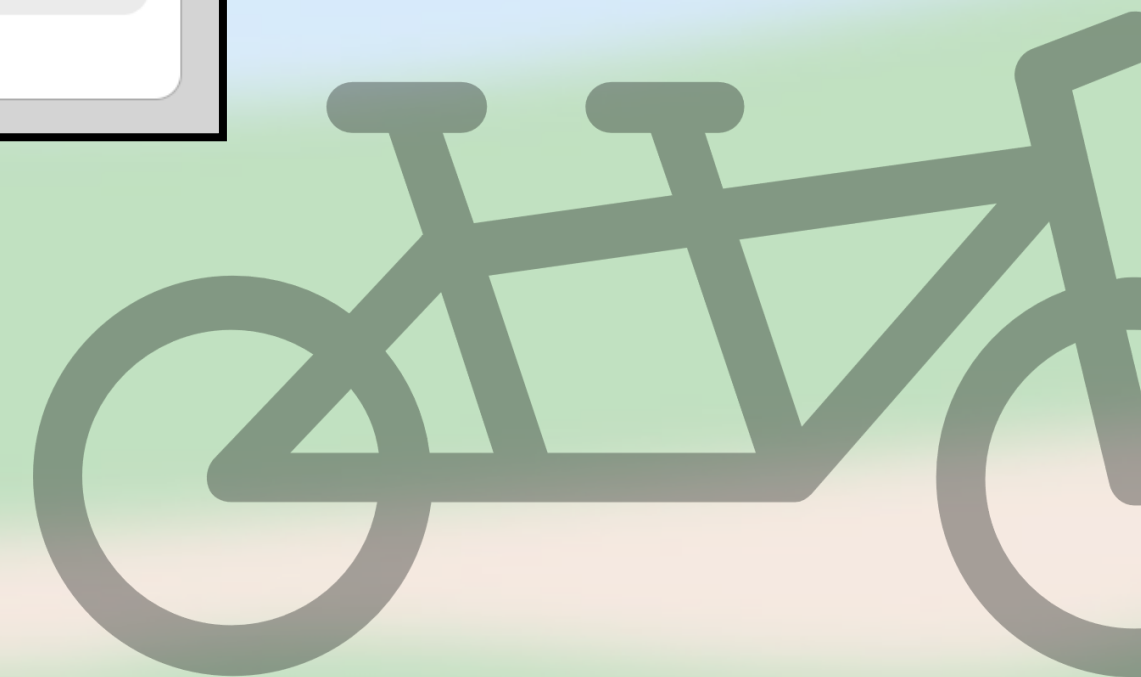
0-3 Years Old
Hearing Screening

Strata Reporting

Because on-site collaboration with home visiting programs was not possible during 2020, the EHDI Program displayed its flexibility and re-directed efforts toward foundational elements for hearing screening in infants and toddlers. Because the incidence of hearing loss doubles between birth and school-age, targeting the 0-3 age group is critical in identifying potential hearing losses in this population.

The Illinois EHDI Program created a web-based information system as a technical resource and tracking tool for early childhood hearing screening (0-3 years) aggregate data. In the future, the EHDI Program will collaborate with community partners and stakeholders to create a model of best practices for addressing late onset and progressive hearing loss in the 0-3 population. Resources for early childhood hearing screening may be found at www.kidshearing.org.

The prevalence of hearing loss can triple by school age.

2/3 per 1000
to
6/9 per 1000

Working to document the rate of screening and prevalence of atypical hearing.

STRATA

- Aggregate data
  - Establishing a baseline (language & literacy)
  - No PHI

- Strata User rights
  - System Admin level
  - State level
  - User level

- Quality Assurance Query

https://stratareporting.org#about

Early Hearing Detection and Intervention

DR. GINGER MULLIN
Audiologist
Illinois Early Hearing Detection and Intervention Program
Ginger.Mullin@illinois.gov

Illinois Sound Beginnings

KATE JORDAN, MA
Audiologist
Illinois Early Hearing Detection and Intervention Program
kathleen.Jordan@illinois.gov

Strata

JAMES FRITZLER, MMIS
HiTrack/USU/ NCHAM
james.fritzler@usu.edu

Hi-Track

CARRIE BALIAN
Coordinator
Illinois Hands & Voices Guide By Your Side
ilhvgbys@gmail.com

FEHDI
Under "Supporting Resources"

1/2024

Hearing Screening Performance Countermeasure matrix -Diagnostics Goal
Gabrielle Bires | June 30, 2021

Measure | Intervention Level | Specific actions | Feasibility | Resources Needed | Lead Staff | Baseline | Next Quarter Data

Out of Compliance Performance → Diagnosed No Later than 3 Months of Age

- Self -guided implementation of EHDI tools
  - All screeners complete NHSTC (JCIH 2019 edition)
  - Complete Nurse Manager checklist
  - Consistent data submissions of both inpatient screenings
- 1 on 1 collaboration with IDPH
  - HiTrack training of hospital monitoring of infant record review
  - Longitudinal data analysis
  - Analysis of patient-level screening submissions
- Virtual Site Visit
  - IDPH initiation of VSV
  - Discussion with Perinatal Network Administrator

Legend

Feasibility
1 - Very difficult to implement
2 - Difficult to implement
3 - Somewhat difficult to implement
4 - Easy to implement
5 - Very easy to implement

Resources Needed
1 - Not possible due to resources
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Please enter first and last name of individual responsible for action plan and implementation

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Current performance score as shown on most recent quarterly report.

Next Quarter Data
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Hearing Screening Performance Countermeasure matrix -LTF Goal
Gabrielle Bires | June 30, 2021

Out of Compliance Performance → Lost to Diagnostic Follow-Up

- Self -guided implementation of EHDI tools
  - All screeners complete NHSTC (JCIH 2019 edition)
  - Updating infant demographics in HiTrack
  - Scheduling outpatient screening or diagnostic evaluation prior to discharge
- 1 on 1 collaboration with IDPH
  - Longitudinal data analysis
  - Consistent data submission and monthly audits
  - At risk populations? 2nd point of contact?
- Virtual Site Visit
  - IDPH initiation of VSV
  - Discussion with Perinatal Network Administrator

Hearing Screening Performance Countermeasure matrix -Refer Rate Goal
Gabrielle Bires | June 30, 2021

Out of Compliance Performance → Refer Rate

- Self -guided Implementation of EHDI tools
  - All screeners complete NHSTC (JCIH 2019 edition)
  - Equipment maintenance and calibration per manufacturer's guidance
  - Complete Nurse Manager checklist
  - Consistent data submissions of both inpatient screenings
- 1 on 1 collaboration with IDPH
  - HiTrack training of hospital monitoring of infant record review
  - Longitudinal data analysis
  - Analysis of patient-level screening submissions
- Virtual Site Visit
  - IDPH initiation of VSV
  - Discussion with Perinatal Network Administrator

Screening Performance Countermeasure matrix -Screening Goal
Gabrielle Bires | June 30, 2021

Out of Compliance Performance → Screening

- Self -guided implementation of EHDI tools
  - All screeners complete NHSTC (JCIH 2019 edition)
  - Establish equipment back-up strategy and replacement plan
  - Equipment maintenance and calibration per manufacturer's guidance
  - Complete Nurse Manager checklist
- 1 on 1 collaboration with IDPH
  - Consistent data submissions and monthly audits
  - Longitudinal data analysis
  - Review outpatient screening protocol and appointment scheduling process
- Virtual Site Visit
  - IDPH initiation of VSV
  - Discussion with Perinatal Network Administrator

Screening Remediation Plan Decision matrix
Gabrielle Bires | June 30, 2021

Process overview

Review Quarterly Performance Report → Identify areas for improvement → Identify strategies for improvement → Develop action items → Prioritize action items → Take action

Decision analysis

Decision to be made: Steps for hospital remediation

	Self-guided implementation of EHDI tools (enter date initiated)	1 on 1 collaboration with IDPH (enter date initiated)	Virtual Site Visit (enter date initiated)
Does not meet Screening goal			
Does not meet Screening No Later than 1 Mo goal			
Does not meet Refer Rate goal			
Does not meet Dx No Later than 3 mo goal			
Does not meet LTF			

QUESTIONS?

Ginger Mullin

ginger.mullin
@illinois.gov

Kate Jordan

dph.hearingreports
@illinois.gov

James Fritzler

james.fritzler@usu.edu

Carrie Balian

ilhvgbys@gmail.com