

# Iowa Early Hearing Detection and Intervention Program Quality Improvement

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Ad Hoc: EHDI Advisory Committee Members



Iowa's Early Hearing Detection & Intervention Program

# PROJECT AIM

By January, 2016, decrease the number of birthing facilities (BF) that fall into the non compliant category by 10% on the quarterly state report card for all birthing facilities.

## Why this project Aim?

- Decrease the number of unnecessary contacts (parents/PCPs/providers)
- Improve timeliness of follow up
- Improve data quality
- Decrease the numbers of infants in need of follow up (e.g. better screening, better fup by BF)



# PROJECT AIM CONT'D

Was this Aim a part of your HRSA project proposal?

- Yes

How Does This Aim Relate to Overall LTF/D goals?

- Education, quarterly progress report and state report card tools increases self regulation and improves best practices. Birthing facilities are able to run their own reports to monitor individual progress.
- Reducing the number of infants that “refer” on their screen helps decrease the numbers of infants needing follow up thereby decreasing the numbers of infants that could become LTF/D.



# MEASUREMENT

## Overall Measure:

Numerator: total number of birthing facilities that fall into the non compliant category

Denominator: total number of birthing facilities

## Sub Measures:

- # Missing infants
- # Missing PCPs
- Refer rate upon discharge
- Average number of days to enter birth screen results

## Reviewing Raw Data:

- Track #'s missing infants/PCPs on monthly spreadsheet for each BF following quality assurance check in EHDI-IS
- Track refer rates and average date of entry for each BF through quarterly compliance reports generated by EHDI-IS



# WHAT STRATEGIES SHOULD WE TEST?

## Theory One

- Birthing facilities will have access to their quarterly data enabling them to identify areas of need and complete quality improvement.

## Theory Two

- Birthing facilities will see where they are ranked in comparison to their peers (e.g. size, competitors) thereby encouraging them to make positive changes.



# STRATEGY SUPPORT BY EHDI PROGRAM

## Theory One

- Provided an individualized quarterly report for each birthing facility displaying a detailed account of their data points.
- A webinar training was offered which provided instructions on how the birthing facility could run their own quality assurance reports for each data point.
- An instruction sheet is included with the quarterly progress report showing birthing facilities how to interpret the data points.
- Individualized training was given upon request.

## Theory Two

- Equipped birthing facilities with a state report card which listed each facility as Distinguished, Benchmark or Non Compliant and by hospital level.



# WHAT DO THEY SEE?

Iowa EHDI Screening Report Card by Hospital Size: 2015 Quarter 4

Birthing Facility	Birthing Facility Level	# Births	# Screened	# Passed	# Referred on Birth Screen	Refer Rate (%)	Missing PCP information	Children missing from database	# of Days to Enter Screen Results	Current Quarter Grade	Last Quarter Grade
Avera Holy Family Health	1	15	15	14	0	0.00	0	0	2.71	Distinguished	Non-compliant
Buena Vista Regional Medical Center	1	78	77	74	3	3.90	0	0	3.52	Distinguished	Benchmark
Floyd County Memorial Hospital	1	27	27	26	1	3.70	1	0	2.59	Distinguished	Distinguished
Floyd Valley Hospital	1	29	29	28	1	3.45	0	0	1.45	Distinguished	Distinguished
Guttenberg Municipal Hospital	1	9	9	9	0	0.00	0	0	3.82	Distinguished	Benchmark
Iowa Lutheran Hospital	1	114	112	110	2	1.79	0	0	3.87	Distinguished	Benchmark
Mahaska Hospital	1	59	59	54	2	3.39	0	0	4.74	Distinguished	Non-compliant
Manning Regional Healthcare Center	1	1	1	1	0	0.00	1	0	0.00	Distinguished	Benchmark
Methodist West Hospital	1	193	193	191	2	1.04	0	0	3.35	Distinguished	Benchmark
Montgomery County Memorial Hospital	1	11	11	11	0	0.00	1	0	1.23	Distinguished	Benchmark
Waverly Health Center	1	62	62	62	0	0.00	2	0	3.05	Distinguished	Benchmark
CHI Health - Council Bluffs	1	127	126	124	2	1.59	0	2	4.07	Benchmark	Non-compliant
Grinnell Regional Medical Center	1	30	30	28	2	6.67	0	0	2.91	Benchmark	Distinguished
Mercy Medical Center - Centerville	1	13	13	12	1	7.69	0	0	1.69	Benchmark	Non-compliant
Myrtue Memorial Hospital	1	17	17	14	3	17.65	0	0	3.42	Benchmark	Non-compliant
Palmer Lutheran Health Center, Inc.	1	21	21	13	6	28.57	0	0	4.97	Benchmark	Non-compliant
St. Anthony Regional Hospital	1	101	101	91	7	6.93	0	0	3.77	Benchmark	Non-compliant
Trinity - Bettendorf	1	235	235	221	11	4.68	0	1	4.97	Benchmark	Non-compliant
Van Buren County Hospital	1	13	13	11	1	7.69	0	0	4.85	Benchmark	Non-compliant
Cass County Memorial Hospital	1	39	39	36	3	7.69	0	0	3.15	Benchmark	Benchmark
Greater Regional Medical Center	1	33	33	25	8	24.24	0	0	1.98	Benchmark	Benchmark
Greene County Medical Center	1	13	12	10	2	16.67	0	0	4.15	Benchmark	Benchmark
Mercy Medical Center - West Lakes	1	93	93	89	4	4.30	6	0	5.38	Benchmark	Benchmark
Orange City Area Health System	1	57	57	55	2	3.51	2	0	6.39	Benchmark	Benchmark
Osceola Community Hospital, Inc.	1	5	5	4	0	0.00	0	0	19.50	Benchmark	Benchmark
Regional Medical Center of NE Iowa	1	49	49	41	6	12.24	0	0	1.74	Benchmark	Benchmark
Sanford Sheldon	1	28	28	26	2	7.14	0	0	4.72	Benchmark	Benchmark



# WHAT DO THEY SEE?

Overall Outcomes	#	%	State Goal
Total births	266		
Moved Out of State	0	0%	
Refused	5	2%	Documentation of refusal
Lost Contact	0	0%	Less than 5% of all children born in Iowa should be lost to follow up.
Identified with Hearing Loss Deceased = 1	0	0%	All infants identified with HL no later than 3 months of age per AAP EHDI and JCIH. Approximately 2-3/1000 kids are identified at birth.

Newborn Hearing Screening	#	%	State Goal
Total Birth Screens Required	260		
Passed	242	93%	96%
Missed	4	2%	Less than 1%
Referred (Did Not Pass)	13	5%	Less than 4%
No Screen Outcome	1		
Screened by 1 month	239	92%	95%

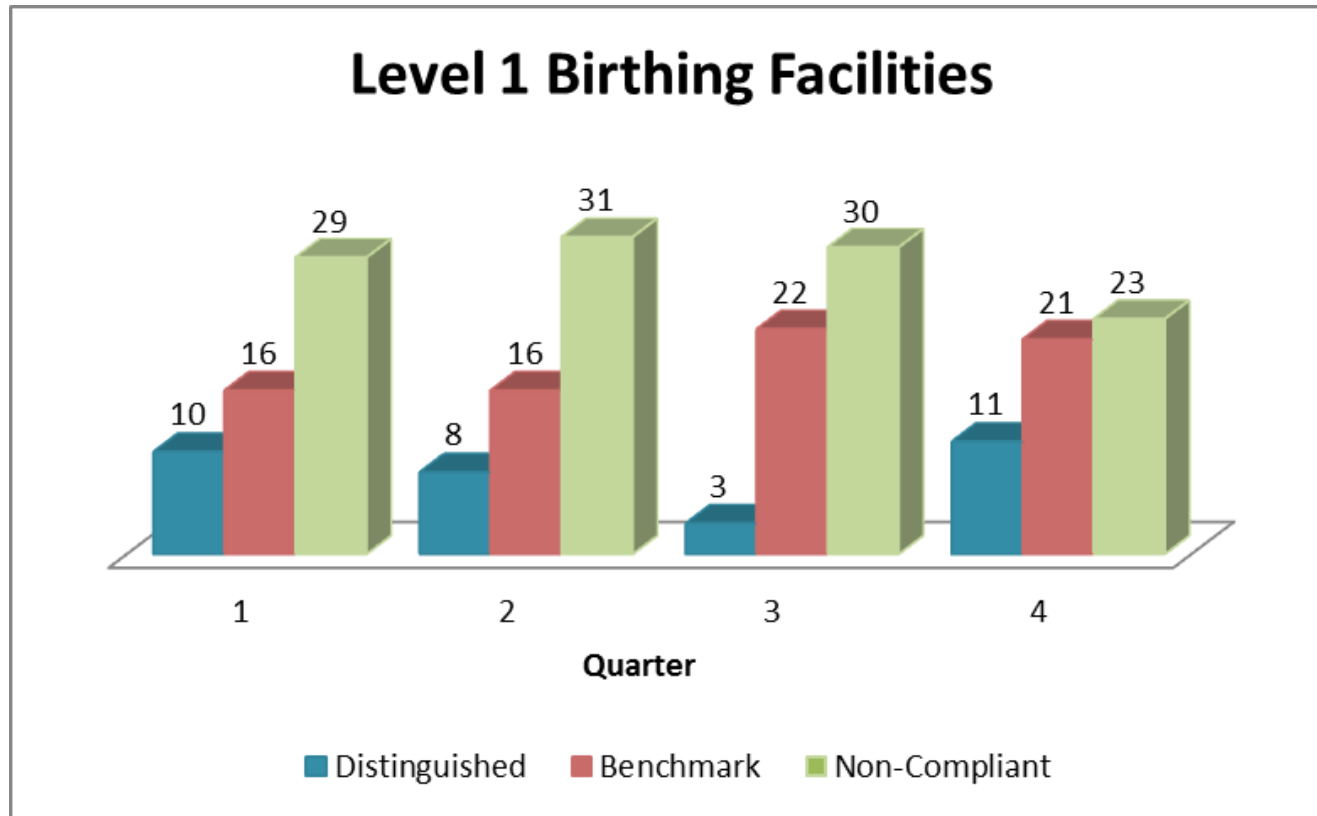
Outpatient Screen	#	%	State Goal
Total OP Screens Required	17		
Passed	7	41%	Rescreen no later than 1 month of age.
Referred	1	6%	Rescreen no later than 1 month of age. Refer immediately for diagnostic assessment if infant does not pass re-screen.
Not Completed	9	53%	Screen/Rescreen no later than one month of age.
Audiology Assessment Completed	0	0%	
Declined/MOS/MF/LC	0	0%	

Quality Assurance Tasks	#	%	State Goal
Missing PCP	0	0%	No missing PCP's.
Missing infants in eSP (VR Data Match)	4	2%	No missing infants.
Missing contact info	0	0%	No missing contact information for each infant.
Average number of days to enter birth screen	3.45882353		≤6 days
Number of birth screen attempts	1.91729323		≤6 screens- 3/ear- Well Baby/OAE ≤4 screens- 2/ear- NICU/Well Baby AABR < 5 days ≤2 screens- 1/ear- NICU > 5 days

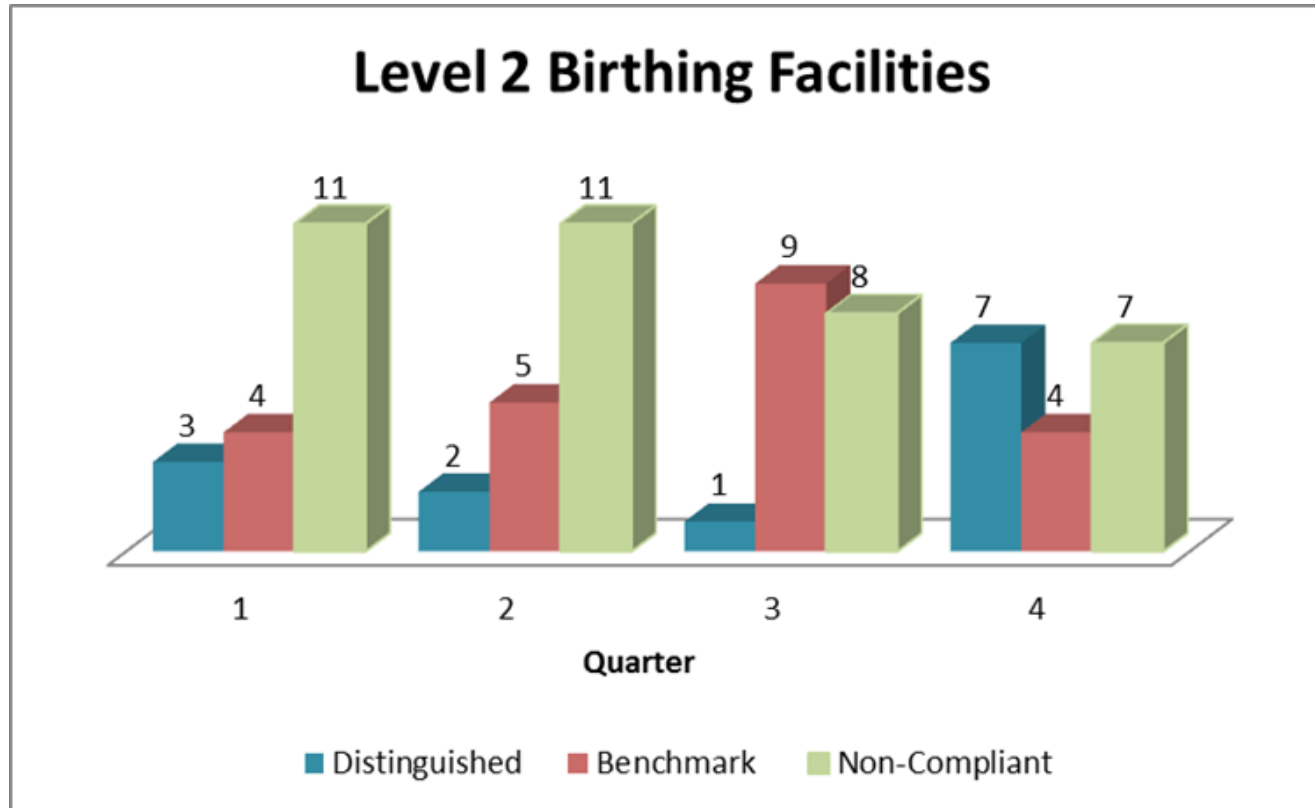




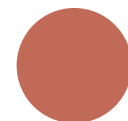
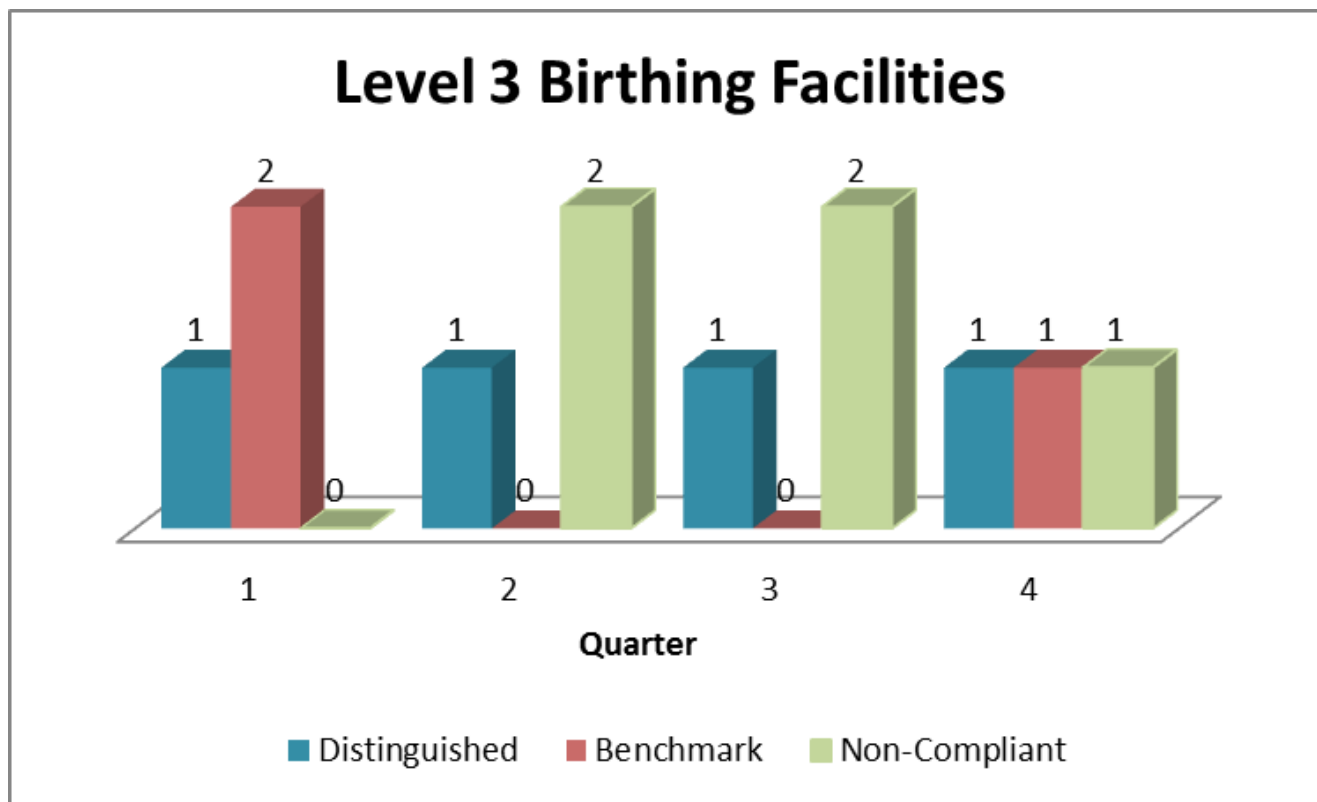
# RESULTS – WHAT DID THE DATA TELL US?



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# LESSONS LEARNED

- State report cards appear to be an effective way to motivate hospitals to improve.
- Keep reports simple (one page with instructions)
- Including all BFs ranking on the state report panicked some BFs initially but later led to improvements or outreach by hospital to EHDI program for assistance.
- Some BFs which would benefit most from the data show little interest, even when their competition is doing well and they are performing poorly.



## NEXT STEPS

- Continue the use of the state report card and quarterly BF quality assurance progress reports
- Identify BFs that consistently fall in the non compliant category
  - Provide additional support via phone, webinar to explore what may be going on with hearing screening and reporting
  - Have BF develop a quality improvement plan in the areas they consistently perform poorly.

