



Quality Improvement Storyboard

New York State

Lori Iarossi, EHDI Coordinator - lori.iarossi@health.ny.gov

Marilyn Kacica, MD, MPH Medical Director, Division of Family Health

Donna Noyes, PhD Co-Director, Bureau of Early Intervention (BEI)

Kirsten Siegenthaler, PhD MSPH, BEI

Michelle Cavanagh, MPH Follow-Up Coordinator

Ken Juhas, Technical Specialist

Pat Heinrich, RN, MSN– NICHQ QI Advisor

Emma Hopkinson – NICHQ Project Specialist

Goals



In New York all infants who fail to pass the initial hearing screening will be evaluated by **three** months of age and receive appropriate intervention and referral for early intervention services by **six** months of age.

Project Aim



Our aim was to improve newborn hearing screening and follow-up outcomes and our capacity to provide improved care among all units that provide hearing screening and follow-up for infants.

The focus of these efforts over the past twelve months was to reduce loss to documentation (LTD) of hearing disposition prior to discharge for all infants born in NYS birthing facilities by 5%.

Why this Aim?



- Until birthing facilities report complete and reliable hearing screening data, it will be difficult to identify all the infants who require follow-up
- Data reporting process at the birthing facility involves several steps performed by different departments
- Nursery staff and birth registrars need to collaborate to improve reporting
- Successful strategies of the QIC will be spread to other birthing facilities

How does this aim relate to overall LTFU goal/s?

The aim will be to establish a complete repository of initial hearing screening results by improving reporting into NYEHDI-IS. Once we have comprehensive documentation, efforts can begin to follow up on infants who fail or miss their initial hearing screening through a systemic approach.

2016 Goals:

- Increase the number of infants who receive appropriate follow-up if they do not pass the initial hearing screen by 5%
- increase the number of infants who are referred to the state's EI Child Find if they do not return for appropriate screening or follow-up



Measurement

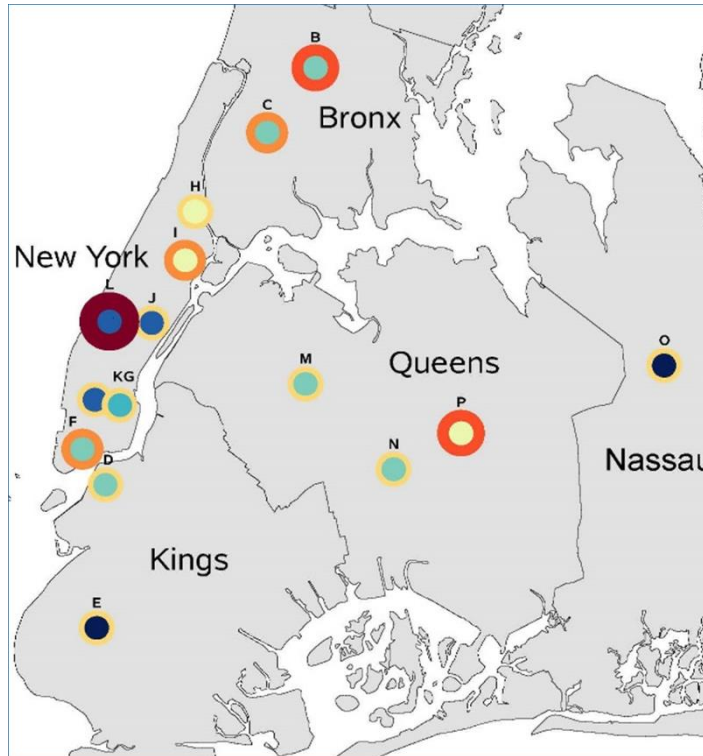
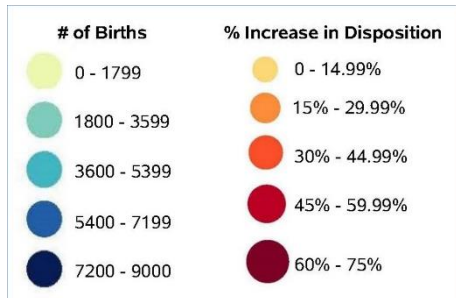


- For Phase 1 of our learning collaborative we focused on measuring the % of newborns who had an initial hearing screening disposition at each hospital
- $\% \text{ with disposition} = \text{number of babies with a disposition} / \text{number of babies born}$
- Data are pulled monthly via a SAS data analysis code which produces a run chart for each facility and generates a list containing all the children who did not receive an initial disposition so the hospitals know who needs follow-up

NYS QIC Birthing Facilities

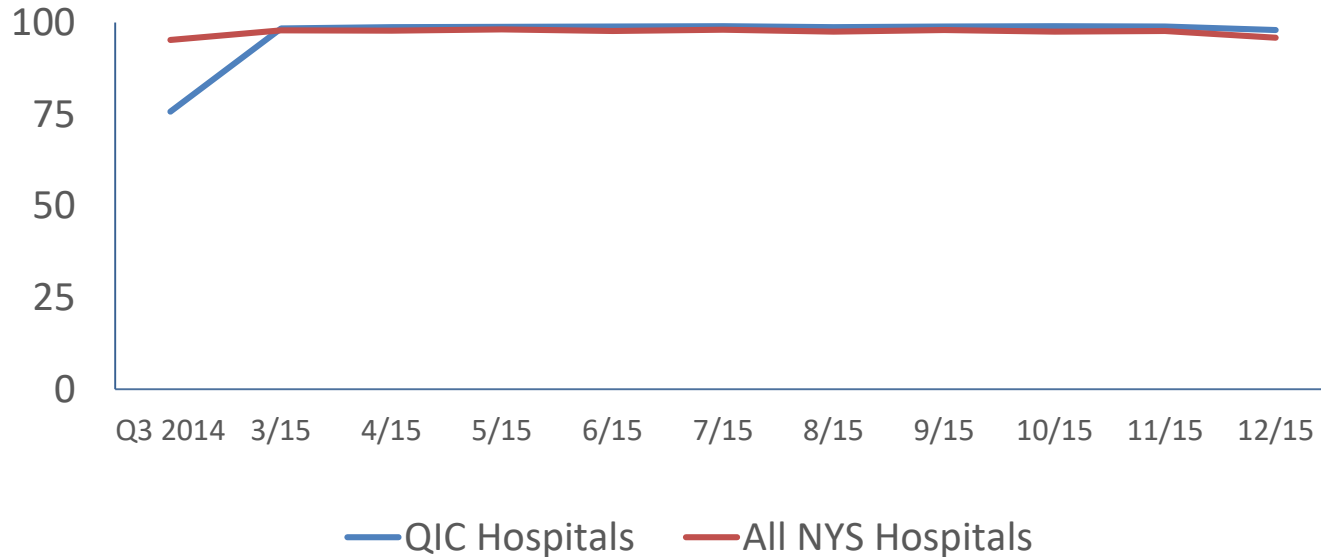
Out of the 16 facilities representing 70% of missing results, 15 were located in the New York Metropolitan area. This map displays the location of the facilities, the # of births per year (inner circle) and % increase/improvement in disposition (outer circle) for each facility. The QIC hospitals participating in this learning collaborative have a substantial effect on the overall % disposition in NYS.

*Facility A not pictured



Results

2015 EHDI QIC Initial Hearing Screening Documentation



Best Practices

- Standardize the process for documentation of all newborn screening results in the hospital records
- Document and report the hearing screening results accurately to the NYEHDI program via the birth certificate
- Standardize communication with parents about newborn hearing screening results
- Identify the PCP/Audiologist before/at discharge
- Hospitals that built an informed team committed to this project achieved early and sustained success.



Challenges



- Obtaining Executive Level Support
- Teamwork and collaboration across departments
- Dedicated work to understand the NYSDOH reporting requirements
- Discover the documentation process at hospital
- Special situations
 - Infants in the NICU
 - Infants who transfer to other hospitals

Lessons Learned

- Keep number of hospitals in QIC to a manageable number (16 was good for NYS)
- Communication and Feedback to hospitals is crucial to engagement
 - ✓ Coaching calls
 - ✓ In-person Sessions
 - ✓ Monthly data reports
- Engage experts such as NICHQ



Next Steps



- Aim 1: By March 31, 2016, decrease the LTF by 5% at up to twelve NYS birthing facilities, with 5% decrease in LTF statewide by March 31, 2017.
- Aim 2: By March 31, 2017, reduce the LTF/D annually by 5% by improving follow-up procedures and documentation of audiologists and pediatric primary care providers.
- Aim 3: By March 31, 2017, assure that 85% of infants who do not have a follow-up screening documented in NYEHDI-IS after an initial failed hearing screening have a referral to Child Find and the referral is documented in the NY Early Intervention Information System (NYEIS).
- Aim 4: By March 31, 2017, reduce LTF by 5% through individualized outreach to families.