QI Storyboard

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Project Aim

- Improve the quality and timeliness in the hospital submission and reporting of UNHS data by August 2015 through a 20% reduction in data entry errors.

- Why this aim?
  - Data entry errors increase the risk of LTFU/D by delaying timeliness and resolution between state users and families
  - Hospital users creating infant hearing records using incorrect demographic contact information produce large quantities of invalid data
Measurement

Types of Entry Errors include:

- Double First Names
- Incorrect Names
- Incorrect DOB
- Duplicate records
- Removed Transfers

Measuring one hospital for 2015
Number of errors corrected = 270
Total number of records reviewed = 554

- Corrected Name: 69%
- Corrected DOB: 25%
- Removed Transfer: 4%
- Duplicate Records: 2%
Operational Definitions

- Incorrect names = using mom’s last name or BG/BB instead of baby’s legal name
- Double first name = entering first and middle name in the first name field
- Duplicate = entering multiple hearing records for one child
- Incorrect DOB = entering the wrong day or year of birth
- Removed Transfers = entering transfer hospital information invalidly
How did we track?

- Data was tracked using an Ad Hoc Report thru Electronic Registration of Arkansas Vital Events (ERAVE) comparing all records entered using a spreadsheet.
- Ad Hoc Report is reviewed monthly by state users and weekly by nursery users.
- Erave Initial Screening form used to increase accuracy in-house quality assurance.

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<th>Gender</th>
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What strategies did we test?

- Identify ERAVE Super-Users for each birthing facility
- Increase monitoring and communication to facilitate active quality assurance
- Incorporate Ad Hoc Report & review as a monthly best practice
- Provide additional ERAVE training for nursery users
PDSA Cycle 1

- Ask nursery staff to implement an audit system using ERAVE records and facility reports to decrease the quantity of duplicate and incorrect hearing records.

- Nursery staff did not follow through with audit system creation

- Unsuccessful – found additional instructions were needed

- Adapt - due to quantity of errors state intervened to correct 270 errors
PDSA Cycle 2 – ERAVE Initial Screening form used as an internal procedure to improve the quality of data reported to the state.

- State provided form to nursery staff to increase accurate demographic data collection preventing entry errors
- Conducted a site visit to “Hospital A” to reeducate nursery staff on creating records and entering results into ERAVE database
- Increase communication by phone and email to new Super-Users at “Hospital A”
- Adopted this test of change to implement at birthing hospitals
PDSA Cycle 2

- Data entry errors reduced after implementing the ERAVE Initial Screening Form September 2015

- 0 Entry Errors Found Jan. 2016

- Corrected Name: Aug. 2015 (20), Nov. 2015 (60), Jan. 2016 (0)
- Corrected DOB: Aug. 2015 (5), Nov. 2015 (0), Jan. 2016 (0)
- Removed Transfer: Aug. 2015 (70), Nov. 2015 (0), Jan. 2016 (0)
- Duplicate: Aug. 2015 (10), Nov. 2015 (0), Jan. 2016 (0)
Results—Adopted the change statewide to 31 birth hospitals. Assigned Infant Hearing Program Liaisons to work with each hospital to implement the change and reinforced the change during site visits:

- Installed the Ad Hoc report at hospitals and trained hospital staff on weekly use with monthly monitoring by state users
- Trained hospital staff using ERAVE Refresher Course materials
- Reintroduced the ERAVE Initial Screening Form as a best practice to improve the collection of accurate demographic information
Lessons Learned

- Increase state monitoring of hospitals to look for anomalies
- Develop relationships between the Infant Hearing Program and nursery users to improve customer relations using weekly communications
- Develop relationships with nursery Super-Users state wide, reeducated using the ERAVE Refresher Course, to improve the quality and timeliness of data submission
Next Steps

- Decrease LTFU/D by:
  - Improve demographic information collection by using the ERAVE Initial Screening Form
  - Obtain Second Contact Information for each hearing record
  - Evaluate Super-Users at each birthing facility quarterly to ensure adequate training is provided to new users
  - Increase communication between the Infant Hearing Program and nursery staff by using monthly email blast, weekly email/phone calls and monthly monitoring by liaisons