



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

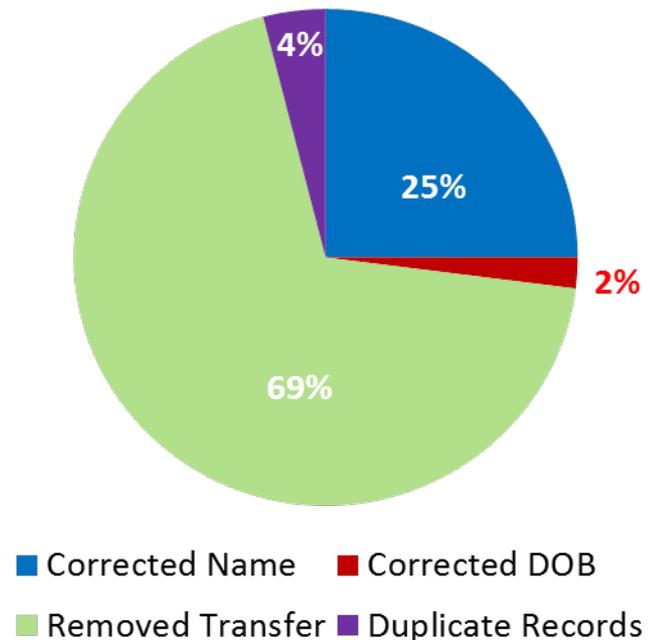
❖ Types of Entry Errors include:

- 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



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

| | | | | | | | | |
|-----------|-----------|--------|---|-----------|-----------|------|------|------|
| 5/21/2015 | DUCK | DAFFY | M | DUCK | 6/5/2015 | AABR | Pass | Pass |
| 5/21/2015 | DUCK | DAFFY | M | DUCK | 6/5/2015 | AABR | Pass | Pass |
| 5/22/2015 | WHITE | SNOW | F | WHITE | 6/8/2015 | AABR | Pass | Pass |
| 5/22/2015 | MOUSE | MINNIE | F | MOUSE | 6/3/2015 | AABR | Pass | Pass |
| 5/22/2015 | MOUSE | MINNIE | F | MOUSE | 6/3/2015 | AABR | Pass | Pass |
| 5/22/2015 | BELL | TINKER | F | BELL | 6/3/2015 | AABR | Pass | Pass |
| 5/22/2015 | BELL | TINKER | F | BELL | 6/3/2015 | AABR | Pass | Pass |
| 5/22/2015 | PAN | PETER | M | PAN | 6/3/2015 | AABR | Pass | Pass |
| 5/22/2015 | PAN | PETER | M | PAN | 6/3/2015 | AABR | Pass | Pass |
| 5/22/2015 | LIGHTYEAR | BUZZ | M | LIGHTYEAR | 5/30/2015 | AABR | Pass | Pass |
| 5/22/2015 | LIGHTYEAR | BUZZ | M | LIGHTYEAR | 6/2/2015 | AABR | Pass | Pass |

What strategies did we test?

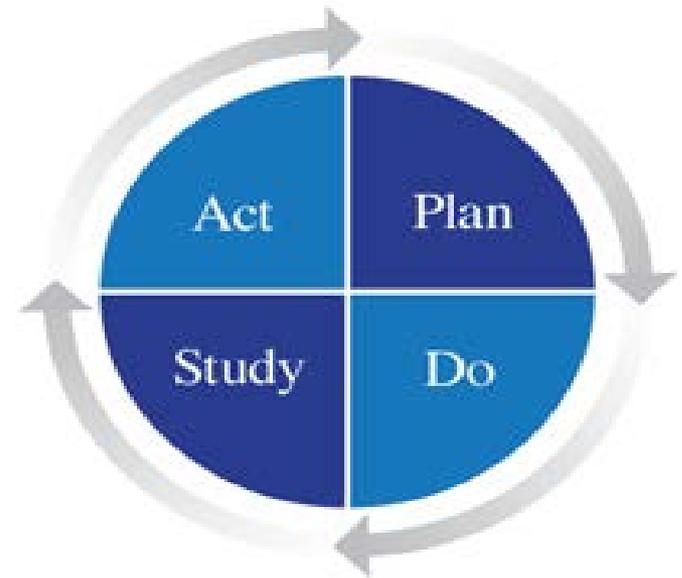
- ❖ Identify ERAVE Super-Users for each birthing facility
- ❖ Increase monitoring and communication to facilitate active quality assurance
- ❖ Incorporate Ad Hoc Report & review as a monthly best practice
- ❖ Provide additional ERAVE training for nursery users



PDSA Cycle 1

❖ 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

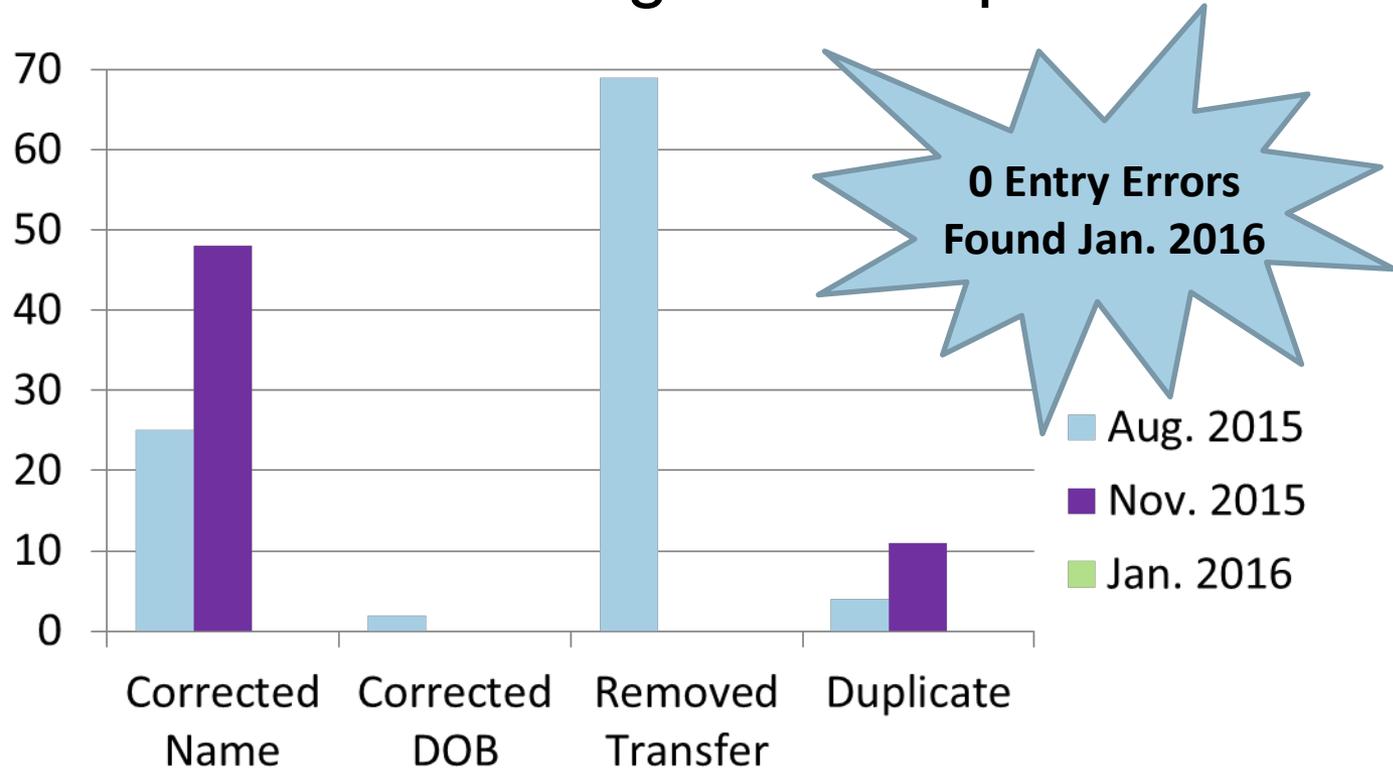


PDSA Cycle 2

- ❖ **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



Spreading the Change

- ❖ **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