

# Rhode Island

**QI lead:** Liza Then (EHDI coordinator) Liza.Then@health.ri.gov

## QI Team:

Sherri Moniz- Administrative Audiology Coordinator

Betty Vohr- Medical Director

Ellen Amore - KIDSNET Manager

Richard Lupino - NBHS Data Manager

Elsbeth Brown- Parent Consultant

Rebecca Vargas- Follow-up Coordinator

Pauline Belmonte- Senior Date Entry

Javier Lozada - Technical Assistant Liaison

Amanda Norton - NCHAM Quality Improvement Advisor

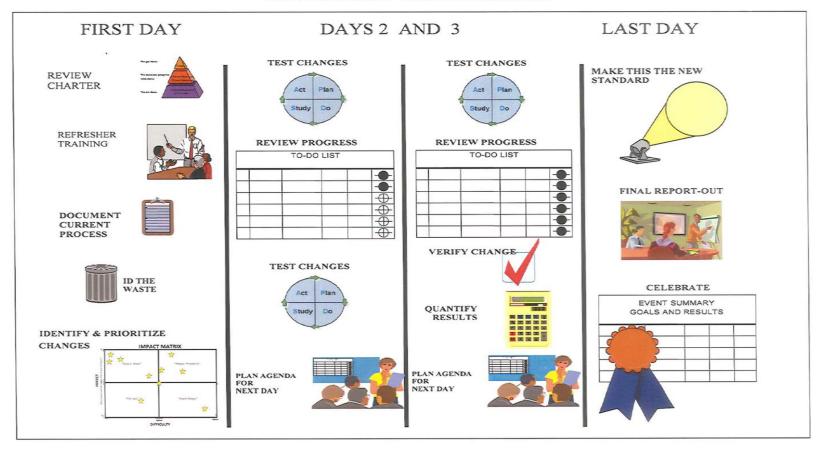
# Situation

# Need of additional FTE

- Overwhelming Process
- Manual tracking taking up too much time
- Need of collaboration and effective communication with Stakeholders
- Not meeting EHDI benchmarks (1-3-6)
- Reportial delays in diagnostic reporting

# KAIZEN EVENT

#### KAIZEN EVENT VISUAL SUMMARY



# **Project AIM**

### We aim to ...

Improve the effectiveness and efficiency of the EHDI follow-up process, to increase the number of diagnostic follow-up from 75% to 85% by March 30, 2016.

# Measurement

### **Outcome Measure**

- Numerator: total # of diagnostic results
- Denominator: total # of refers

## **Quarterly Data Review**

- Monthly reports
- Run Charts



### Goal 1

Reduce the number of diagnostic loss to follow up and loss to documentation in KIDSNET following a referral from the newborn hearing screen

No Diagnostic ABR from 16.8% to 6.8% In process from 18.2% to 8.2%

### Goal 2

Reduce number of second and third Visual Reinforcement Audiometry letters sent to families in 2015

Second letter from 926 to 0 Third letter from 619 to 0 Reduce returned mail by 50%

### Goal 3

Reduce the number of misdirected calls to schedule appointments

Reduce misdirected calls by 50%

### Goal 4

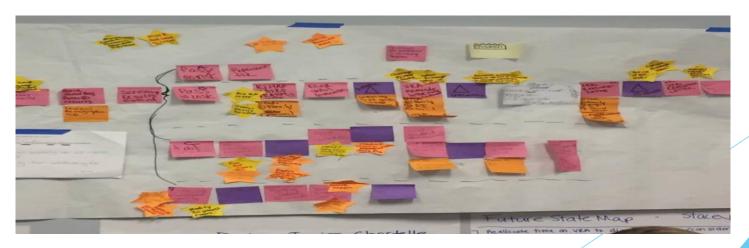
Reduce the number of faxed diagnostic results that need to be data entered into RITRACK by RIHAP Coordinator (based on June-December 2015 data)

Decrease Program Coordinator data entry from 23 records a month to 3 records



# Assessment - Current State Value Stream Map

- 1. Overwhelming process
- 2. Too many repetitive steps and workarounds
- 3. Diagnostic results not reported within 48 hrs standard
- 4. Too many letters and returned mail
- 5. Manual process
- 6. Miscommunication of processes



# Assessment Improvement Ideas

- 1. Revise Letters
- 2. Early Intervention Referrals
- 3. Revise Reports
- 4. Electronic Faxes
- 5. Reporting from Audiologist

#### PDSA to Test Changes Plan Act · What changes are to be made? Plan to carry out the cycle Adapt? Or Abandon? · Next cycle? Do Study · Complete the · Carry out the plan analysis of data Document Compare data to problems/unexpected Summarize what

### PDSA #1: Revise Parent letters

- \* Revised Visual Reinforcement Audiometry Medical Monitoring parent letter from 1998
- \* Revised PCP letter
- \* Explored using Department of Health envelopes vs Women and Infants
- \* Reduced number of reminder VRAMM letters

#### Benefit:

- \* Less wordy/clear instructions
- \* Age of child aligns with list of VRA testing centers
- \* Parents can schedule VRA appointments sooner
- \* Eliminate repetitive processes, reduce staff time and family stress, decrease postage cost and returned mail

# PDSA's - Strategies Tested

### PDSA #3: Revise Reports

- \* Merge ABR No DX Report and In Process report with appointment scheduled field add provider name and site, number of completed appointment, number of broken appointments, KIDSNET number
- \* Changed hearing loss diagnosis and degree from database code to word

#### Benefit:

- \* Electronic vs manual
- \* Filtered by site to be provided to audiologist
- \* Time saver

# PDSA#5: Revise Cohort Reports

\* Add KIDSNET ID number, EI IFSP date

#### Benefit:

- \* Access information from one system
- \* Reduce 3 step process to 1 step process
- \* Eliminate manual process

# PDSA #2: Early Intervention (EI) Referral for "In Process" Patients

- \* Develop PDSA
- \* Identify 5 in process infants and refer to Early Intervention
- \* Inform EI sites of test

#### Benefit:

- \* In process infants referred to EI sooner
- \* Meet EHDI guidelines (1-3-6)
- \* Better care coordination

### PDSA #4: Revised Infant Demographic Page in RITRACK

\* Flag bad addresses in RITRACK

#### Benefit:

- \* Save postage cost
- \* Limit time
- \* Using one database vs two
- \* Automated process
- \* System Integrations

### PDSA #6: Revise Contact Log

\* Added fax and returned mail label

#### Benefit:

\* Automatic and accurate tracking of follow up correspondence

# PDSA's - Strategies Tested

### PDSA #7: Electronic Faxes

\* Setup electronic fax from computer to send and receive faxes

#### Benefit:

- \* Send and receive fax from computer
- \* Automated process
- \* Reduce mailing cost/overhead
- \* Time saver

### **PDSA #8: Reporting from Audiology**

- \* Test 30 minute process
- \* Provide diagnostic appointment dates
- \* Email new patient appointment lists for update

#### Benefit:

- \* Timely final diagnosis
- \* Less follow up with parents
- \* Meeting EHDI benchmarks

### PDSA #9: Reporting from Audiologist

\* Establish standard case review and coordination (CRC) meetings

### Benefits:

- \* Improve efficiency and coordination between audiology and RIHAP
- \* Improve services to babies
- \* Reducing follow up
- \* Foster communication and teamwork

# PDSA #10: Collaboration with Neonatal Follow up Providers and RIHAP

- \* Utilizing patient visit to schedule follow up appointment
- \* Collaboration with medical providers

### Benefits:

- \* Increasing follow up visit
- \* Less outreach to families
- \* Reduce the number of outstanding risk factor patients
- \* Increasing revenue

# Parent Follow-up Letter

### Old

```
-DATE-
-SOCIALCC -
-SOCIAL_ADDRESS1- -SOCIAL_ADDRESS2-
-SOCIAL_CITY-, -SOCIAL_STATE- -SOCIAL_ZIP-

-CARFIRST- -CARCLAST- -CIPST- -CLAST-
-CARADDR1- -CARADDR2- -CODB-
-CARCITY-, -CARSTATE- -CARZIP- RITRACK ID -CID-

To The Parent Of -CFIRST- -CLAST-,

Congratulations on the birth of your baby. Recently, we completed a hearing screen on your baby.

The results were a pass. It is recommended that your baby receive a full hearing test when he/she is 6 months corrected age. At that time, you will receive a reminder letter with a list of local pediatric audiologists that perform this testing. This testing is recommended for
```

The hearing test at six months of age tests your baby's responses to various sounds and speech. It will assist the audiologist if your baby is alert and in good general health at the time of testing.

We are sending a copy of this letter to your pediatrician so that he/she is aware of the screening results and our recommendation for a full hearing test. Please feel free to contact us with any questions regarding this letter. We can be reached at (401) 277-3700 voice or (401) 277-3701 TTY.

Sincerely,

~AUD\_MEDDIR\_SIG~ ~MEDDIR~ Medical Director

monitoring purposes due to ~RISKS-.

-AUD\_AUDCOORD\_SIG--AUDCOORD-RIHAP Program Coordinator

~PEDIATRICIANCC~ -PEDORG~ -PEDADDR1~

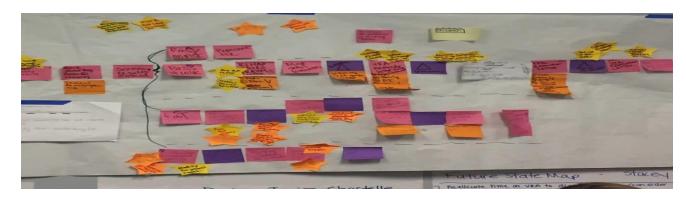
### Revised

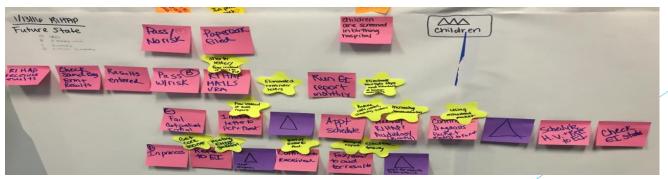
Providence, RI 02905-2499 January 12, 2016 Anne Smith Baby: Bobby Smith January 1, 2016 123 Oak Street Providence, RI 02908 Ritrack: 123456 To the parent of Bobby Smith, Your baby had a hearing screen on January 10, 2016. RESULTS: pass RISK FACTOR(S): low birth weight RECOMMENDATION: full hearing test (called VRA) at 7 to 9 months corrected age. Please pick from the list of hearing centers on the included form to schedule this very important VRA test within 2 weeks of receiving this letter. Sincerely, Dr. Betty Vohr Sherri Lee Moniz Medical Director RIHAP Program Coordinator CC: Pediatrician Dr. Kim Kardashian 123 Love Lane

Bottom, USA 99999

# **Future State Map**

- 1. 29 to 19 process steps (repetitive steps)
- 2. Decrease wait from 30-0 months for infants who passed hearing screening with risk factors (wait between letters)





# Lessons Learned & Next Steps

### **Lessons Learned**

- > Rapid improvement accomplished in short timeframe
- > Importance of collaboration and buy-in
- Referral criteria for Early Intervention
- > Open communication and positive feedback within audiology clinic was imperative

### **Next Steps**

- > PDSA cycles on canceled appointments and no-shows
- Newspaper
- > BASECAMP

