Small Change Can Make a Big Difference

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Thanks to...

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Health Resources and Services Administration
Maternal and Child Health Bureau
Universal Newborn Hearing Screening and Intervention
Reducing Loss to Follow-up after Failure to Pass Newborn Hearing Screening

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Many people carry the torch...
3 State Agencies work together for the Newborn Hearing Program

Illinois Department of Public Health
UIC – Division of Specialized Care for Children
Illinois Department of Human Services
(including Early Intervention)
Newborn Hearing Process

1. Screening completed before 1 month of age
   - IDPH

2. Diagnostic Hearing Evaluation by 3 months of age
   - DSCC

3. Early Intervention begins prior to 6 months of age
   - EI
The National Initiative for Children's Healthcare Quality (NICHQ) is an action-oriented organization dedicated solely to improving the quality of health care provided to children. Founded in 1999, NICHQ's mission is to eliminate the gap between what is and what can be in health care for all children.
How do we hand off that torch / baton?
Where do we hand the baton off to?  Where could we hand the baton off to?
The Hospital / OB Dept.
Infant / Family

Early Intervention

- Birth
- In-patient screening
- Out-patient screening
- Report to IDPH

Physician

Infant / Family

Audiologist
Infant / Family Early Intervention

Audiologist  Physician  Hospital

IDPH – DSCC - EI

Early Intervention

Physician

Audiologist

Hospital

Infant / Family

IDPH – DSCC - EI
Newborn Hearing Screening is like a Decathlon

- 100 m dash
- Long jump
- Shot put
- High jump
- 400 m dash
- 110 m high hurdles
- Discus throw
- Pole vault
- Javelin throw
- 1500 m run
You don’t have to take first in all the events to WIN!
Model for Improvement*

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in improvement?

Setting Aims
Establishing Measures
Selecting Changes

*2001 Associates in Process Improvement
Reduce the loss to follow-up for infants who failed UNHS

Infants data in HI*TRACK will show that the infant who failed UNHS received a diagnosis by 3 months of age and if appropriate was referred to Early Intervention by 6 months of age.

Suggestions 1-9 or other
EHDI decathlon – 10 events

ACT
Determine what changes are to be made

PLAN
Change or test

STUDY
Summarize what was learned

Do
Carry out the plan
AIM STATEMENT

Critical content
- By when
- What
- For whom
- How much

By ____, 2009 . . .
We will ______ . . .
For ______ . . .
- So that
  - 95% _____ . . .
  - Etc.
Sample aim statement

- By March 2009, our team will improve follow up of newborns who do not pass hearing screen so that
  - 95% of newborns are screened within 3 days of birth
  - Of those who show hearing loss; 90% or more have an appointment made for f/up with audiologist within 2 weeks of d/c
Our Measures... LONG TERM

- % newborns screened prior to discharge
- Rate of confirmed hearing loss per 1000 screened
- % infants with permanent hearing lost with an initial Individualized Family Services Plan (IFSP) completed by 6 months
- % infants with permanent hearing loss who are offered amplification/treatment (e.g. fitted with hearing aides) by 3 months of age
- % of infants who "did not pass" the screening phase (in hospital and/or outpatient screen) who get a complete audiologic evaluation by 3 months of age
- % of newborns with results of newborn screening available for first newborn visit
EHDI Events

scripting the message given the parents when an infant does not pass the initial screening test

getting a second point of contact for the family, e.g., a relative or friend
EHDI Events

verifying the identity of the primary care provider or clinic before the parents leave the hospital

making the next appointment for the family and explaining why is it important to keep the appointment before they leave the hospital
EHDI Events

reminder calls before appointments that include the reasons why the appointment is important

making two audiology appointments so that the infant who can’t be completely tested at the first appointment is already scheduled to return in a reasonable timeframe
EHDI Events

use of the fax-back to alert the primary care provider of screening results and the need for prompt follow-up

use of the fax back between specialists, including the audiologist and primary care provider
EHDI Events

obtaining a consent for release of information at first contact with Early Intervention so that information can be entered in the State database
The PDSA Cycle for Learning and Improvement

**Act**
- What changes are to be made?
- Next cycle?

**Plan**
- Objective
- Questions and predictions (why)
- Plan to carry out the cycle (who, what, where, when)

**Study**
- Complete the analysis of the data
- Compare data to predictions
- Summarize what was learned

**Do**
- Carry out the plan
- Document problems and unexpected observations
- Begin analysis of the data
Why Test?

- Increase degree of belief
- Document expectations
- Minimize resistance
- Learn and adapt
- Evaluate costs and side-effects
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<th>Current Situation</th>
<th>Resistant</th>
<th>Indifferent</th>
<th>Ready</th>
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<tr>
<td>Low Confidence that current change idea will lead to Improvement</td>
<td>Cost of failure large: Very Small Scale Test</td>
<td>Cost of failure small: Very Small Scale Test</td>
<td>Cost of failure small: Very Small Scale Test</td>
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<td>High Confidence that current change idea will lead to Improvement</td>
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<td>Cost of failure small: Small Scale Test</td>
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<td>Implement</td>
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<td><strong>Implement</strong></td>
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Change Concepts...Our Results

- 3 Teams began using scripting in the hospital after screening
- 2 teams implemented acquiring a second point of contact...“if you won the lottery, how could we contact you”
- 2 Teams worked on collaborations for diagnostics, medical consultation and hearing aid fitting
- ALL Teams engaged partners and defined roles (e.g. Part C and Title V)
- 2 Teams involved parent partners
- 3 Teams obtained ABR diagnostic equipment
Change Concepts… Our Results

- 1 Team developed family resource packets
- 1 Team developed family informational brochure
- 1 Team statistically showed and increased follow-up rate for out-patient screenings and/or diagnostic appointments
Learning collaborative leaders are here to provide support.

It's an anti-tipping device, I thought of it while watching Drag-Racing on TV...