HIT the Ground Running:
Statewide Implementation of Electronic Demographics and Result Reporting

Minnesota Newborn Screening Program
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Why Electronic Reporting?

• Experience with EHDI
  – >3500 missing results/year
  – Inaccurate results
  – High programmatic costs

• Experience with CCHD Pilot
  – Misinterpretation of algorithm
  – Missing results
Project Scope

- Obtain newborn demographics directly from the EMR
- Obtain EHDI results directly from the screening device
- Obtain raw and individual-level CCHD results directly from the device or at the time of screening

FUNDED THROUGH FEE INCREASE
OZ Systems

Step 1
NANI (ADT Feed)

Step 2
Telepathy EHDI
Telepathy CCHD (HL7 Messages)

Step 3
Integrated Newborn Record
Project Team & Management

• 4 program staff with various roles and responsibilities
  – Business Project Manager
  – Training Coordinator
  – Audiologist/Devices/Training Assist
  – Operations

• 1 Staff from Office of Health IT
Outreach to e-Health Stakeholders

- Office of Health Information Technology
- Minnesota e-Health Advisory Board
- Minnesota Epic User Group
- Minnesota e-Health Summit

Purpose – visibility, standards alignment, and support
Initial Communications to Hospitals

- Invitation letters sent to IT and hospital staff via email
  - Describing project
  - Describing resource needs
  - Hosted two introductory webinars
Project Approach

- Start with Hospital System showing most interest
  - Ask them to be a pilot
  - Develop implementation workflow

- Continue sending out emails/letters on project
  - Mandated nature of reporting
  - Provide reporting metrics

![Graph showing hearing screening results not reported in 2014](chart.png)

- Initial Missing: 753
- Still Missing: 55
Modify Approach & Develop Materials

• Develop more fluid implementation workflow

• Developed training materials:
  – Videos
  – User Manuals
  – Quick Guides
  – Congrats/Welcome Flyers
**Current Project Approach**

- **Kick Off Webinar**
  - MDH
  - OZ Systems
  - IT Staff
  - Nursing Staff

- **ADT Feeds Built, Tested, and Devices Connected**
  - MDH
  - OZ Systems
  - Interface Team
  - Biomed Team
  - Nursing Staff

- **Go Live Date Selected**
  - MDH
  - OZ Systems
  - Interface Team
  - Biomed Team
  - Nursing Staff

- **Training Scheduled and Completed**
  - MDH
  - Nursing Staff

- **Post-Go Live Monitoring**
  - MDH
Estimated Birth Coverage* By Status

- **Production/Ongoing Submission**: 39.3%
- **Active Engagement**: 43.5%
- **Not Active**: 17.2%

*Based on 2015 data
*Out-of-Hospital Births excluded

**Key Events:**
- **Contract Signed**: May-14
- **Implementation Started**: Jun-14

**Numbers:**
- N= 38
- N= 36
- N= 17
Implementation Challenges

• Getting facility staff onboard (IT and Nursing staff) and keeping process moving
  – Getting assigned a PM, getting in queue
• Critical Access Hospitals
• Device networking issues
• Obtaining Certain Data Elements
Program Staff Time
(since Nov 2014)

• ~ 25-30 calls per month with birth facilities (30 min to 1.5 hours)
• ~ 60+ emails/calls per week between MDH, OZ Systems, device vendors, and birth facilities/midwives
• Have done over 50 on-site visits
• Have done ~ 25 training webinars
Meaningful Use

• MNScreen declared a Specialized Registry for Meaningful Use Stage 2
  – As of 1/4/2016

• Provides incentives to Eligible Hospitals to Implement and Maintain MNScreen

• 72 facilities registered thus far
Observations

• Electronic reporting does not solve all problems
  – Serial screening, mis-entry into EMR, etc.

• Target continues to move
  – Timeline,
  – Collection of data elements,
  – Return of results to EMR
Next Phase(s)

• Continue implementation
  – Current goal is all hospitals (excluding critical access hospitals) live by 6/30/2016
• Sending EHDI/CCHD results back to EMR
• Audiology electronic reporting into MNScreen
• Interoperability with LIMS and blood spot results
Thank You!

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