Collaborating Across States to Improve NBS Timeliness: An Overview of the CoIN for Timeliness

Yvonne Kellar-Guenther, PhD
Colorado School of Public Health

Funded through cooperative agreements from Genetic Services Branch of the Health Resources and Services Administration (HRSA)
NewSTEPS: APHL (#U22MC24078 - Ojodu)
NewSTEPs360: ColoradoSPH (#UC8MC28554 - Sontag)
Thank you to our amazing CoIN Teams!

Arizona
California
Colorado/Wyoming
Iowa
New Hampshire
Tennessee
Texas
What is CoIN?

• 15 month Continuous Quality Improvement (CQI) Projects

• Learning collaborative
  – Applied to take part
  – Focused on Quality Improvement
  – Sharing lessons learned, ideas, and resources
  – Use of technology to enable collaboration

• States met monthly and also with own state teams
  – Teams were interdisciplinary often including lab, follow-up, and hospital representative
Our Goal

Improve timeliness from time of birth to report out of newborn screening findings
Changes in Median Percent January to December 2015

- **Birth to Collection**
  - Jan 2015: 83.6%
  - Dec 2015: 87.9%

- **Collection to Lab Receipt**

- **Receipt to Report Out**

- **Birth to Report Out**

*Timely as defined by ACHDNC Recommendation*
Changes in Timeliness Median Percent
January to December 2015

- Birth to Collection: 83.6% (Jan 2015) to 87.9% (Dec 2015)
- Collection to Lab Receipt: 23.2% (Jan 2015) to 37.0% (Dec 2015)

*Timely as defined by ACHDNC Recommendation: Arrived within a day of collection
Changes in Timeliness Median Percent January to December 2015

- Birth to collection: 83.6% (Jan 2015) vs. 87.9% (Dec 2015)
- Collection to lab receipt: 23.2% (Jan 2015) vs. 37.0% (Dec 2015)
- Receipt to report out: 49.8% (Jan 2015) vs. 85.1% (Dec 2015)

Reported out within 3 days of receipt by lab.
Changes in Timeliness Median Percent January to December 2015

- **Birth to Collection**: 83.6% to 87.9%
- **Collection to Lab Receipt**: 23.2% to 37.0%
- **Receipt to Report Out**: 49.8% to 85.1%
- **Birth to Report Out**: 75.3% to 83.1%

*Timely as defined by ACHDNC Recommendation*

Reported within 7 days of life

- **Jan 2015 Median % timely**
- **Dec 2015 Median % Timely**
State Activities that Improved Timeliness
CoILN State Activities Included:

- Working with hospitals on ideal pick up location
  - The mean proportion of specimens arriving late changed from 31.9% to 3.7%.
New Hampshire – Changed Pick Up Location at Hospital
CoIIIN State Activities Included:

• Creating reports for hospitals to track progress
  – Some states choose transparent reporting

• Educating hospital staff
  – Timeliness recommendations
  – Why timing is important
Iowa - Hospital Education

Timeliness in Newborn Screening Report
2015-02-01 to 2015-02-28
Count: 31

A project of the Iowa Collaborative Improvement & Innovation Network (CoIIN) to improve timeliness in newborn screening

GOAL: By March 2016, 95 percent of specimens will be received by SHL within 60 hours of birth.

Time between birth and receipt of specimen by the NBS laboratory

Overall Hospital Outcomes

Percent of NBS specimens received by laboratory within 60 hours of birth
CoIIN State Activities Included:

- Implementing or expanding courier service
Tennessee Rolled Out Courier Service

Average Transit Time from DBS Collection to State Lab
*Before and After the Courier Service, 2015*

Data as of August 20, 2015 and include initial specimens and repeats.
CoINN State Activities Included:

• Changing laboratory operating hours
  – receive specimens and/or test samples on weekends
Top 10 Lessons Learned
Where Do We Go From Here?

Goal: To achieve timely reporting of results in 95% of newborns who receive dried-blood spot (DBS) newborn screening within each state participating in NewSTEPs 360 by August 30, 2018.
NewSTEPs 360 Overview

NewSTEPs 360 Participants
- State
- Group
- State & Group
- Not Yet Participating

[Map showing the United States with states colored in various shades indicating participation status.]

NewSTEPs 360
A Program of the Association of Public Health Laboratories®
NewSTEPs 360 Overview

• Many projects are focused on:
  – Creating HIT Solutions: Order entry or results reported
  – Improving education to many different groups

• States receive
  – Financial Assistance
  – Training on Continuous Quality Improvements (CQI)
  – CQI Coaching
  – Sharing resources
  – Monthly calls
  – Analysis of real time data

• For more details https://www.newsteps.org/newsteps-360
NewSTEPs 360 Overview

• Newborn Screening Community will get:
  – Sharing of best practices and developed resources
  – Identification of promoters of timeliness
  – Identification of barriers of timeliness
  – Building and strengthening relationships
So Stay Tuned.
NewSTEPs and NewSTEPs 360 Team

Marci Sontag     Jelili Ojodu
Yvonne Kellar-Guenther     Sikha Singh
Joshua Miller     Thalia Wood
Sarah McKasson     Careema Yusuf
Ruthanne Salsbury     Guisou Zarbalian
Laura Russell     Funke Akinsola