The Collaborative Improvement & Innovation Network (CoIIN) to Reduce Infant Mortality: Overview & Update

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Healthy Start QI Coaching Institute
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Presentation Outline

- Background on CoIIN
- Overview of Regions IV/VI CoIIN
- Lessons Learned
- Update on Region V and National Expansion
What is a CoIIN?

• A CoIN, or Collaborative Innovation Network, has been described as a team of self-motivated people with a collective vision, enabled by the Web to collaborate in achieving a common goal by sharing ideas, information, and work.¹

• Key Elements of a CoIN
  • Being a “cyber-team” (i.e. most CoIN work will be distance-based);
  • Innovation comes through rapid and on-going communication across all levels;
  • Work in patterns characterized by meritocracy, transparency, and openness to contributions from everyone.

• Adapted to reflect focus on both innovation and improvement yielding a Collaborative Improvement & Innovation Network (CoIIN) to Reduce Infant Mortality.

Collaborative Improvement & Innovation Network (CoIIN) to Reduce Infant Mortality

- Began in the 13 Southern States in January 2012
  - Infant Mortality Summit convening state teams of 7
  - States developed their state plans to reduce infant mortality

- CoIIN emerged in response to state desires to engage in collaborative learning around evidence-based strategies to reduce infant mortality and improve birth outcomes

- Developed and implemented in ongoing partnership with Abt Associates, ASTHO, AMCHP, March of Dimes, CityMatCH, CMS, CDC and other public and private partners.
CoILN Design

Common Strategies for Regions IV and VI

Increase smoking cessation

Enhance Interconception Care in Medicaid

Reduce elective deliveries <39 weeks

Enhance perinatal regionalization

Promote safe sleep

State Teams
- Title V Directors & MCH Staff
- State Health Officials
- Medicaid Directors & Staff
- Other Partners (private, local/community, consumer)

Strategy Teams
- Leads (2-3 Content Experts)
- Data & Methods Experts
- MCHB & Partner Org Staff
- State Representatives

Technical assistance Contract Team; shared workspace; data dashboard
CoIIN: Design to Action -- Plan

Define Scope and Nature of the Problem

Aims
- Establish quality improvement Aims for each Strategy.

Strategies
- Identify state-level opportunities to achieve Aims.

Measures
- Select measures to track progress towards Aims over the next 18-24 mos.

Build and Sustain Cyberteams
Regions IV & VI Infant Mortality CoIN
AIMS

• By December 2013,
  • Reduce non-medically indicated early elective delivery (< 39 weeks) by 33%
  • Reduce smoking rate among pregnant women by 3%
  • Increase safe sleep practices by 5%
  • Increase to 90%, or 20% above baseline, mothers delivering VLBW infants at the appropriate level of care
  • Change Medicaid policy to increase number of women who receive interconception care in 5-8 states
Reduce Early Elective Deliveries

LEADS: David Lakey, State Health Official, TX, Ruth Ann Shepherd, Title V Director, KY

DATA EXPERT: Bill Sappenfield, College of Public Health, USF

STAFF: Ellen Schleicher Pliska, ASTHO; Kate Marcell, MCHB
Reduce Early Elective Deliveries

Aim: By August 2014, Reduce non-medically indicated early elective delivery (<39 weeks)* by 33%

Examples of Key Drivers

• **Leadership at the Federal, State and Local Level**: Engage leaders/stakeholders/champions (e.g., Governor’s office, legislators, Medicaid, State Health Officers, AAP, ACOG, and hospitals)

• **Changes and Enhancements in Policy and Financial Approaches**: Implement hospital and insurance policies such as hard stops and reduced reimbursement

• **Community Engagement and Public Awareness**: Secure community involvement through advisory groups, community forums, and media campaigns

* Inductions or cesareans without trial of labor without indication (fetal distress, prolonged labor, PROMS) among singleton deliveries at 37, 38 weeks; excludes pre-existing conditions that may justify delivery
Non-Medically Indicated Early Term Deliveries Among Singleton, Term Deliveries

* Includes provisional birth certificate data
Excludes 1 Region IV State that did not submit 2014 data

29% total decline translating to ~85,000 early elective deliveries averted since 2011 Q1
5 states met aim of 33% reduction
11 states had declines of 20%+
Increase Smoking Cessation Among Pregnant Women

LEADS: Suzanna Dooley, former Title V MCH Director, OK; Cathy Taylor, Belmont University, TN

DATA EXPERT: Laurin Kasehagen Robinson, CDC/CityMatCH

STAFF: Norm Hess, March of Dimes; Vanessa Lee, MCHB
Increasing Smoking Cessation During Pregnancy

**Aim**: Decrease the tobacco smoking rate by 3% among pregnant women in the states of Regions IV and VI by August 31, 2014

**Examples of Key Drivers**

- **Capacity and Capability for Comprehensive Systems**: Provider training on evidence-based tobacco cessation interventions for pregnant women (e.g., 5A’s, quitline referrals)

- **Community Engagement and Public Awareness**: Engage key partners, such as perinatal collaboratives and home visiting; public educational campaigns

- **Data Collection, Monitoring, and Innovation**: Perform local-level PDSA cycles on state projects; conduct inventory on state quitline protocols
12% total decline translating to ~17,000 fewer women smoking in pregnancy since 2011 Q1

6 states met aim of 3% reduction

* Includes provisional birth certificate data reflecting smoking in any trimester;
Excludes 1 Region IV State that did not submit 2014 data
Promote Safe Sleep Practices

LEADS: Carrie K. Shapiro-Mendoza, Division of Reproductive Health, CDC; Kim Wyche Etheridge, former Regional MCH Director, TN

DATA EXPERT: Lyn Kieltyka, CDC Assignee, LA

STAFF: Carol Gilbert, CityMatCH; Erin Reiney, MCHB
Promoting Safe Sleep Practices

**Aim:** Increase infant safe sleep practices by 5% by August 2014 in Region IV and VI States and reduce disparities in sleep related infant deaths

**Examples of Key Drivers**

- Work with non-primary infant caregivers (e.g., day care workers, child care providers, churches, baby sitters) to assure they commit to practicing and promoting safe sleep recommendations.
- Standardize provision of Safe Sleep education and training for providers, including OB, Pediatrics, nursing staff, discharge planners, home visitors, clinic staff, etc.
- Develop strategic alliances and cooperative partnerships to endorse AAP safe sleep recommendations and promote safe sleep (e.g., WIC, AARP, Sororities, Civic Groups, students, volunteers).
Improve Perinatal Regionalization

LEADS: Wanda Barfield, Division of Reproductive Health, CDC; Kate Menard, Society for Maternal-Fetal Medicine

DATA EXPERT: Mary (Dabo) Brantley, CDC

STAFF: Caroline Stampfel, AMCHP; Morissa Rice, MCHB
Improving Perinatal Regionalization

**Aim:** Increase the percent of mothers delivering at appropriate facilities (including infants <32 weeks gestation and/or less than 1500 grams) to 90% or by 20% above baseline in Regions IV and VI by August 2014

**Examples of Key Drivers**

- **Leadership at the Federal, State and Local Level:** Engage leaders (e.g., ACOG, AAP, State Medicaid and hospital associations) to advocate for changes in perinatal regionalization.

- **Capacity and Capability for Comprehensive Systems:** Meet with Level I and Level II hospitals to review VLBW data and to discuss options for improvement, i.e. develop transport systems, increase hospital reimbursement for antenatal care and transport.

- **Data Collection, Monitoring and Innovation:** Engagement to adopt 2012 AAP guidelines for risk-appropriate care to improve assessment and monitoring regionalization.
Enhance Interconception Care in Medicaid

LEADS: Rebekah Gee, Director, Medicaid Director, LA; Stephen Cha & assisted by Lekisha Daniel-Robinson, CMS; Al Brann, Emory University, GA

METHODS EXPERT: Kay Johnson, Johnson Group Consulting, Inc.

DATA EXPERT: Cheryl Robbins, CDC

STAFF: Brent Ewig, AMCHP; Deb Wagler, MCHB
Enhancing Interconception Care (ICC) in Medicaid

**Aim:** Modify Medicaid policies/procedures in 5-8 Southern states by August 2014 to improve access/financing of postpartum visits and ICC case management for women who have experienced a Medicaid financed birth that resulted in an adverse pregnancy outcome.

Examples of Key Drivers

- **Capacity and Capability for Comprehensive Systems:** e.g. Improve coverage/reimbursement for postpartum care; Incentivize Medicaid providers/health plans to provide postpartum visits or ICC; Build upon existing contracts with Medicaid managed care plans, modify Interagency Agreements or other MOU.

- **Changes and Enhancements in Policy and Financial and Other Policy/Payments:** Enhance use/design of postpartum visit; Extend Medicaid case management/targeted case management to ICC target group; Use integrated care models.
CoIN-Wide Outcomes

**Infant Mortality**
- From 2011-2013, 3% decline in overall infant mortality
- 7 states achieved IMR reductions, 3 states had declines of 10% or more
- 6 states reduced disparity by 25%

**Preterm Birth**
- From 2011 Q1 to 2014 Q2, 11 of 12 reporting states showed declines; overall 6% decline
CoIN-Wide Outcome: Infant Mortality

- 7 States achieved IMR reductions
- 3 States had declines of 10%+
- 6 States reduced disparity by 25%+

Black-White Rate Ratio

2011: 2.22
2013: 2.05 (↓ 14%)

* Includes provisional birth/death certificate data
CoIN-Wide Outcome: Preterm Birth*

11 of 12 States had declines
5 States had declines of 10%+
3 States reduced disparity by 15-30%

* Includes provisional birth certificate data; <37 weeks’ gestation
Excludes 1 State that did not submit 2014 data
Overall CoIIN Challenges and Lessons Learned

- Adaptation of QI principles and tools to public health
- Building and maintaining the cyberteams; sustaining linkages to state IM teams
- Infrastructure investments for more real-time data
- Importance of documenting process measures (e.g. policy and strategy implementation)
- Flexibility - CoIIN is not one-size fits all
CoIIN Successes

- Collaborative learning
- Partnership and leadership
- Data sharing with some real-time data
- Rapid cycle improvement
Region V Infant Mortality CoIIN
Strategy Areas & Aims

Early Elective Delivery
• By January 1, 2016, CoIIN Region V states will reduce non-medically indicated singleton deliveries 37 to <39 weeks gestational age to less than 5% or by 20% from baseline levels.

Preconception Health/Interconception Care
• Improve frequency & content of Post Partum Visits and Adolescent Well Checks by 20% by January 2016 from state baseline to 90th HEDIS percentile
SIDS/SUID/Safe Sleep

• By January 2016, all states in Region V will implement or expand safe-sleep policies and/or education programs that promote safe-sleep practices* aimed at addressing SUID reduction. Practices will include, as core elements, a focus on safe sleep environment, smoking cessation and/or breastfeeding. These practices may be addressed in one or more of the following settings to include (but not limited to): hospitals; public health programs/clinics; child care settings, and/or primary care or other health care clinics/practices.

Social Determinants of Health

• By Jan 2016, each state in Region V shall develop and begin implementation of a Statewide Action Plan that incorporates evidence-based policies/programs and place-based strategies to improve social determinants of health and equity in birth outcomes.
Update on National Expansion

• Infant Mortality Summits for Regions I-III, VII-X and the Pacific Basin were conducted this summer
  - Infant Mortality action plans
  - Key strategic priorities – Town Hall
• CoIIIN strategy team topic areas near final
• Alignment/integration with Regions IV, V and VI
CoIIN: Summary

• A state-driven HRSA-coordinated partnership to accelerate improvements in infant mortality

• CoIIN is a platform designed to help states:
  • Innovate and improve their approaches to reducing infant mortality and improving birth outcomes through communication and sharing across state lines;
  • Use the science of quality improvement and collaborative learning to improve birth outcomes.

• Part of a portfolio of Public/Private and MCHB efforts to improve birth outcomes.
Developed and implemented in ongoing partnership with the states and:

- Abt Associates
- AMCHP
- ASTHO
- CDC
- CityMatCH
- CMS
- March of Dimes
- NGA
- NICHQ
- NIH
- Other public and private partners
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THANK YOU!

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