The National Expansion of the Collaborative Improvement and Innovation Network (CoIIN) to Reduce Infant Mortality: Early Successes and Lessons Learned

2016 CityMatCH Leadership & MCH Epidemiology Conference Symposium

**Moderator:**
Vanessa Lee, MPH

**Presenters:**
Zhandra Levesque, MPH
Aviel Peaceman, MPH
Christina Ratleff, MPH
Welcome and Introductions

Vanessa Lee, MPH
Infant Mortality CoIIN Coordinator
Maternal and Child Health Bureau
Health Resources and Services Administration
Symposium Objectives

1) Increase understanding of the CoINN concept, design and process

2) Describe data process, successes and challenges

3) Share recommendations from the perspective of state/local participants

4) Increase awareness of the tools, materials, and resources available to support state/local efforts
IM CoILN Concept, design and process

Zhandra Cesar Levesque, MPH
Associate Project Director
NICHQ
IM CoLLN one-year extension

- MCHB has funded NICHQ to continue this work in order to sustain the current infrastructure that supports state and jurisdictional teams engaged in the Infant Mortality CoLLN

- The LN aims were scheduled to be completed by July of 2016, the extension moves the “finish line” to July of 2017

- CoLLN remains voluntary and its purpose will still be to serve as a resource to states in their ongoing efforts to reduce infant mortality

- Strongly encourage states to continue to focus on the work in progress in the LN they are currently participating in. If state has achieved LN aim, we suggest the team plan to continue ongoing efforts to assure these improvements are sustained
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 (ColIN) to Reduce Infant Mortality.

Collaborative Improvement and Innovation Network

Is a...

*platform* and *methodology*
for participants to engage in *collaborative learning* together as *virtual* ‘cyberteams’,
around a *common aim*,
applying *quality improvement* methods,
to *spread and scale* policy and program innovation
- which in turn *accelerates improvement* in strategies that contribute to desired *outcomes*. 
Infant Mortality Collaborative Improvement & Innovation Network (IM CoIIN)

- Fosters collaboration, cooperation and openness with diverse stakeholders
- Catalyzes work through highly motivated volunteers
- Enhances value of data to inform state strategy
- Emphasizes attention on infant mortality at state level
- Enhances productivity through a state-driven approach
- Builds will and support among state leaders

Questions or comments? Contact us @ CoIIN@NICHQ.org
Collective Impact:
1. Common Agenda
2. Mutually Reinforcing Activities
3. Shared Measurement
4. Continuous Communication
5. Backbone Support
National Infant Mortality CoIN
Common Agenda: More First (+++) Birthdays
Reduce infant mortality

Pre-/Inter-conceptional actions

Prenatal actions (Pregnancy to Birth)

Neonatal actions (Birth up to 28 Days)

Post-neonatal actions (28 – 365 Days)

Potential Strategic Priorities

Enhance access to & quality of care for women before & between pregnancies
Promote education, screening, referral & treatment for women with high risk conditions
Prevention, identification, & management of chronic disease in women of reproductive age
Address impact of social determinants of health
Improve family capacity to protect & promote their own health
Improve health risk screening and successful service and treatment referrals for all pregnant women
Increase access to and quality of prenatal and maternal care
Improve family capacity to protect & promote their own health
Address impact of social determinants of health
Ensure quality of care for newborns
Create a perinatal regionalized system of care
Improve family capacity to protect & promote their own health
Address impact of social determinants of health
Multi-system approach ensuring families engage in safe sleep practices
Increased rate of breastfeeding continuation and exclusivity
Ensure primary and secondary prevention of fatal injuries
Address impact of social determinants of health

Domains

Engage leadership at the Federal, State, and Local Level across all sectors
Align state & local initiatives, systems & information sharing
Enhance public awareness & family & community engagement
Improve access to and quality of care & services in clinical & public health settings
Improve state-level data quality, collection & timely & effective use
Address impact of social determinants of health through public health & health care policy & program development.
Integrating Innovation to Improve Birth Outcomes
Learning Networks
(n= number of states)

Improve **Safe Sleep** Practices
(n = 40)

Reduce **smoking** before, during and/or after pregnancy
(n = 24)

Pre & Interconception Care
Promote optimal women’s health before, after and in between pregnancies during Postpartum Visits & Adolescent Well Visits
(n = 31)

Social Determinants of Health
Incorporating evidence-based policies/programs & place-based strategies to improve equity in birth outcomes
(n = 19)

Prevent **Pre and Early Term Births**
(n = 24)

Risk Appropriate Perinatal Care (Perinatal Regionalization)
Increase the delivery of higher-risk infants and mothers at appropriate level facilities
(n = 12)
Define Scope and Nature of the Problem

Aims
- Establish quality improvement Aims for each Strategy.

Strategies
- Identify state-level opportunities to achieve Aims.

Build and Sustain Cyberteams

Measures
- Select measures to track progress towards Aims over the next 12-18 mo.
Leveraging National Partners
Data process, successes and challenges
Shared Measurements

- All participants collect data on common measures
- Align efforts & share accountability
- Tracks progress & informs if changes are making an improvement
Why do we need measurement in IM CoIIIN?

• It’s how we know if we’ve accomplished our aims at the state and national level!

• Learn what’s working, where, and why

• Data is for learning not judgment

• We can see where states are submitting outcome measures and celebrate one another’s successes while also overcoming our challenges together
<table>
<thead>
<tr>
<th>Data Technical Assistance to date</th>
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<tbody>
<tr>
<td>Individual technical assistance to states</td>
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<tr>
<td>Develop &amp; continue to improve Data Capacity Toolkit</td>
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<tr>
<td>Bi-monthly Newsletters w/ targeted Data Lead newsletter</td>
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<td>Blogs on data</td>
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<tr>
<td>Data Open Forums / Office Hours</td>
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<tr>
<td>Action Period Calls with monthly sections on data</td>
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<td>Data workgroup engaging national and partner organizations</td>
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<td>Data Use Agreement to foster data sharing/ Data Leadership letter</td>
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<tr>
<td>Engagement with partners to provide state and group level TA</td>
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<td>Customized Data Dashboard for each state / jurisdiction</td>
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Appreciation for data

• Widespread appreciation for the importance of improvement data

• Several states accessed timely and provisional data for the first time

• Majority (~70%) feel they can augment their state’s capacity to use data to track progress and drive improvements

• States report that data has enabled them to
  – better guide the conversation
  – Monitor changes and make improvements
  – Engage stakeholders
“Reviewing and sharing quarterly data is motivating and allows for targeted improvements. Working with the [IM] CoiIN has tremendously improved how we use data.”

– Data Lead
“Whole QI thing adds new aspect that has changed the way I look at things public health, because my background is in epi, I didn’t have a lot training in QI. Very important aspect. In future QI will become more engrained in public health in general.”

– IM CoILN Coordinator
“CollIN has provided an additional venue for all of us to strengthen ties with our Medicaid staff, which has carried over to other projects.” Data Lead
Recommendations from the perspective of state/local participants

Christina Ratleff, MPH
Senior Program Manager, Women’s and Infant Health
AMCHP
By July 2016, reduce prevalence of preterm and early term singleton births. States will:

1. Decrease non-medically indicated births between 37 0/7 weeks of gestation through 38 6/7 weeks of gestation by 20%
2. Increase the percent of pregnant women on Medicaid with a previous preterm birth who receive progesterone to 40%
3. Achieve or maintain equity in utilization of progesterone by race/ethnicity

Support providers in timely, reliable and effective screening, identification and prevention of pre-term birth

Eliminate barriers to access, administration and adherence to progesterone

Increased patient, family and community understanding of and demand for progesterone and carrying to full term

Public and private payment policies aligned with aims

Build capacity of and support for hospitals and providers to reduce EED
Successes

- **Pilot Site Engagement and Success**: Change in clinic process and protocol for screening women for previous preterm birth and referring for intervention/prescribing progesterone

- **Optum OB Homecare Partnership** (Alere Health) to improve birth outcomes among high-risk obstetric patients through targeted home visitation services that provide patient-centered medication management (17-P administration and compliance) and obstetric care coordination

- **Kansas Hospital Association/Kansas Healthcare Collaborative Partnership** to further reduce EED has resulted in aligned activities and efforts (decline from 17% to 4%)

- **Provider Survey** distributed in March (results being analyzed) to assess attitudes, beliefs, and utilization of progesterone as an intervention to prevent recurring preterm birth.
Challenges

• Capacity and time to dedicate to the pilot sites especially related to QI, data collection, PDSA cycles

• Unable to report on the CoILN progesterone measure—lack of access to linked Medicaid-Vital records

• Lack of hospital policies, protocol, and standard forms for scheduling that collect gestational age and indication for delivery (to determine medically indicated)

• Lack of reliable data source to determine the EED rate for KS (plans to link discharge and birth records)

• Limitations associated with one pilot site and (lack of diversity) smaller percent of Medicaid population served
Next Steps

• Link Hospital Discharge and Vital Birth Record data to create consistent mechanism to determine state EED rate

• Signed agreement between KDHE Public Health and Health Care Finance (Medicaid) for data sharing

• Expand pilot sites (one site currently sustaining and reporting data) to reflect broader geographic area and population diversity.

• 17P Initiative kickoff meeting in Wyandotte County for service in Kansas City and surrounding areas

• Tracking and reporting on the Home Visiting measure

• Align messaging and materials on EED and progesterone in prenatal classes and provider practices/clinics
**Aim Statement**

By July 2016, we will reduce tobacco & nicotine dependency in women in their reproductive years. Our goals are to:

1. Increase the percentage of women who stop smoking prior to pregnancy relative to the state baseline by 10%
2. Increase the percentage of women who stop smoking during pregnancy relative to the state baseline by 10%
3. Increase the percentage of women who maintain cessation after deliver by 10% relative to the state baseline
4. Increase the number of women enrolled in Quitline in reproductive years by 10% relative to state baseline
5. In pilot sites: increase the percentage of smoking women who are referred to smoking cessation counseling and programs like Quitline by 95% or higher

**Primary Drivers**

- **Supportive local and state level policies that prevent starting, support stopping, and staying tobacco free for all women in childbearing years**
- **Collaborative, community based partnerships with resources and psychosocial supports for smokers and former smokers**
- **Women in child bearing years avoid smoking, or stop and stay quit**
- **Providers recognize role in asking, assessing, coaching and supporting women to stop and stay quit.**
- **Public sensitivity to and awareness of women not smoking, avoiding, and ceasing all forms of tobacco and nicotine in childbearing years**
Successes

• **Smoking Cessation Toolkit** developed and implemented in pilot sites/shared with all MCH local agencies

• **Baby & Me Tobacco Free (BMTF)**, an evidence-based intervention targeted to pregnant women who smoke was implemented in 10 collaborative communities in 2015 (partnership with March of Dimes)

• **Tobacco Program Partnership** strengthened—regular assessment and coordination of shared areas of work; training and education

• **WIC Research Project** in partnership with the University of Kansas Medical Center to assess capacity for clinics to screen, refer, and follow up

• **Provider Survey** distributed in June to assess screening and referring protocols as well as existing programs and interventions available in the communities
Challenges

- Capacity and time to dedicate to the pilot sites especially related to QI, data collection, PDSA cycles

- Continue to be smokers who do not accept referral to evidence-based smoking cessation programs

- BMTF sites are in need of technical assistance related to enrollment and follow up

- KS Quitline data and reports are limited (what is tracked and what reports we can generate on our own)

- Medicaid coverage/reimbursement for Nicotine Replacement Therapy and cessation counseling conducted in local health department settings
Next Steps

• Expand pilot sites (currently have two sites using the toolkit and reporting data monthly)

• Enhance technical assistance and increase training opportunities for cessation programs; create mechanism for ongoing communication among sites.

• Increase consistency and confidence among BMTF sites to increase enrollment

• KanQuit (Quitline) webinars with local agencies and providers to discuss program, services, and TA

• Integrate all tracking/reporting elements into the current data collection system (like smoking screening form)

• Enlist support of Pediatricians to screen for maternal depression and smoking during child well visits
Kansas: Recommendations for State Teams

• Take the time to build relationships and infrastructure first to support long-term change and sustainability

• Intentionally align activities/areas of work/programs as necessary to maximum resources and impact

• Take advantage of CoIIN all tools, resources, supports—including calls and webinars when possible.

• Communicate regularly with the state team, pilot sites, and all partners about CoIIN work and progress

• Engage Epidemiologists/Data Leads in all aspects to ensure understanding and support engagement

• Improve utilization of site data for continuous quality improvement and to inform state plans.
IM CoLLIN tools, materials, and resources
What does the IM CoIIN offer?

- Online Community (CoLab)
- Virtual Learning Sessions & Thematic Webinars
- Data Dashboard to Track Progress
- Monthly Learning Network Calls
- Technical Assistance (TA) from QI Advisors & SMEs
- In-person Meeting, July 2015
Supports

Technical Assistance

• Support core methods
  – Collaborative Learning
  – Collaborative Innovation
  – Quality Improvement

• Support data needs

• Support communication/sharing/marketing/skills

• Facilitate connections with partner organizations and affiliated initiatives

• Build knowledge & capacity through free webinars
Marketing Materials
IM CoIIN Infant Mortality Awareness Month Campaign

**GOAL:** Leverage IM Awareness Month to bring awareness to the high U.S. infant mortality rate while helping empower women to prepare for healthy pregnancies

**TACTIC:** Develop and disseminate tools to both support and leverage IM CoIIN teams and partners to spread the message in their markets and among their stakeholders

**AUDIENCES:** IM CoIIN project team members, partners, funders

**OUTCOMES (do/feel)**
- Promote IM Month and their state and/or organization’s work as part of IM CoIIN via local media and social channels
- Use the NICHQ-prepared marketing materials and toolkit
- Feel supported by the marketing toolkit and other supports from the NICHQ IM CoIIN team

**MEASUREMENT**
- Qualitative feedback from states/partners on
- Media coverage generated by state teams and partners
- Social media sharing by state teams and partners
Campaign Elements

• Primary: pre and interconception care strategies
• Secondary: All IM CoIIN strategic focus areas
• Website: Access to all campaign tools and materials
• Toolkit:
  – Press release, messaging points, and media outreach tips
  – Turn key social media posts for Twitter, Facebook, and LinkedIn
  – Turn key content for digital posting in newsletters, blogs and resource links
  – Partner campaign resources
  – Infographic to share in presentations, on websites, in social media
• Focused media relations and outreach
Early Results

• Media interest:
  – Becker’s Hospital Report
  – Modern Health Care
  – Boston Mom’s Blog
  – Fox News’ Healthy Mama’s Blog
  – Huffington Post
  – Ongoing interest in research and statistics
The depth and diversity of the project allow us to touch on many different subjects:

1. **Top requested content:**
   - Medicaid Strategies to Promote Increased Access to Long-Acting Reversible Contraception (LARC) [679]
   - Medicaid Strategies to Promote Full-Term Births [669]
   - ABCs of Safe Sleep Education Reduced Sleep-Related Infant Deaths in Tennessee [534]

2. **Strategies:**
   - Share resources created by teams and partners
   - Highlight successes and innovation; such as our Underserved Population series
   - Include new voices and experts
Enhancing Quality Improvement Capacity
After completing this course, you will be able to:

- Describe the necessary ingredients for improvement
- Identify the components of an aim statement
- Write an aim statement
- Describe the three types of improvement measures
- Describe the use of run charts in improvement
- Understand the components of a run chart and the information it provides
- Describe the types of changes that result in improvement
- Follow the steps in a Plan-Do-Study-Act cycle to test a change
- Describe the key components of an implementation strategy
- Describe the Breakthrough Series learning collaborative framework for spread

SUSTAINABILITY TOOLS

QUALITY IMPROVEMENT 101
Quality Improvement 101

**Project Objective**
- Provide a self-directed course introducing quality improvement science concepts to motivated individuals
- Course Objectives: After completing Quality Improvement 101, users will be able to:

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Infant Mortality CoIIIN Prevention Toolkit

Your strategy guide toward reducing infant mortality in your state

LET'S GET STARTED

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Sustainability Tools

INFANT MORTALITY CoIIIN PREVENTION TOOLKIT
Objective

• The Infant Mortality CoIIN Prevention Toolkit is an online strategy guide for reducing infant mortality in the U.S. The toolkit brings the IM CoIIN change package to life, allowing users to drill down to specific drivers and change ideas, read case studies from states as well as watch videos from state teams sharing their experience with making changes that improved infant mortality rates.

• For each IM CoIIN improvement area, users will find:
  – Case Studies
  – Key Documents, Drivers and Change Ideas
  – Expert Videos
  – Resources
Case Studies

NICHQ Infant Mortality CollIN Prevention Toolkit

- Improve Safe Sleep Practices
- Prevent Preterm and Early-Term Births
- Pre- and Interconception Care
- Smoking Cessation
- Social Determinants of Health
- Risk-Appropriate Perinatal Care

Directions: Select a Learning Network to start exploring information gathered from state health organizations.
Join the Community!!

Sign up to receive newsletters and access the IM CoILN Collaboratory (CoLAB)
Making a big difference!

IM CoILN is changing public health practice. The impact will extend far beyond the official IM CoILN period with a new way of doing business – breaking silos, increasing synergies, using data and QI methods that will deeply benefit all public health areas.
What are you doing in your state or city to have more first birthdays?
Virtual Learning Session 4:

• Date: October 19th -20th from 1-4 pm ET each day

• Optional breakout sessions: 12-1 pm ET each day
  – Perinatal Periods of Risk (PPOR) – The Importance of Local Data to Engage Stakeholders (CityMatCH)
  – Health Department Partnerships to Improve Health Equity (March of Dimes)
  – ROI and Birth Outcomes (AMCHP)
  – Integrating Healthy Start and IM CoIlN (NHSA)

• Registration now open: [http://www.cvent.com/d/wvq0nw](http://www.cvent.com/d/wvq0nw)
  – Team members should register individually
Contact Information

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Want to join your state’s IM CoIIN team? Reach us at coiin@nichq.org
Thank You!

If we want more babies to reach their 1\textsuperscript{st} birthday, we must not simply \textit{reduce} birth outcome disparities.

We must \textit{eliminate} them.