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

Background:
A collaborative innovation network, or “COIN” has been defined as a “cyberteam of self-motivated people with a collective vision, that innovatively collaborate by sharing ideas, information, and work enabled by technology.”¹ A COIN moves beyond the traditional dissemination of information, by engaging self-motivated participants from multiple settings in the full spectrum of change implementation – from defining the problem, to crafting an intervention, to implementation and evaluation and, finally, to the diffusion and adaptation of effective innovations in new settings. The Collaborative Improvement and Innovation Network or “CoIIN” to reduce infant mortality contains an additional “I” which stands for “improvement” and was added to the traditional COIN to reflect the quality improvement framework being applied to the initiative.

CoIIN builds on the success of an Infant Mortality Summit held in January 2012, at which the 13 states in Public Health Regions IV and VI developed plans to reduce infant mortality. From these efforts, five common priority strategies emerged as well as the desire to share best practices and lessons learned. In response, MCHB, in partnership with the Association of Maternal and Child Health Programs (AMCHP), the Association of State and Territorial Health Officials (ASTHO), CityMatCH, the March of Dimes, Abt Associates, and Federal partners including the Centers for Disease Control and Prevention (CDC) and the Centers for Medicare & Medicaid Services (CMS) supported the development of a CoIIN to facilitate collaborative learning and adoption of proven quality improvement principles and practices across these 13 states to reduce infant mortality and improve birth outcomes. The five Priority Strategies to reduce infant mortality and improve birth outcomes for the Regions IV/VI CoIIN are:

- Reduce elective delivery at <39 weeks;
- Enhance interconception care in Medicaid;
- Increase smoking cessation among pregnant women;
- Promote safe sleep to reduce SIDS/SUID; and
- Expand perinatal regionalization.

Teams formed around each of these 5 strategies comprised of representatives from all 13 southern states and led by content, data, and methods experts in each of the five areas in addition to support staff from MCHB and partner organizations. Teams are provided training/technical assistance, an online collaborative workspace, and a data dashboard to track progress towards a shared aim.

Partners to the development and implementation of CoIIN have grown and the initiative has now spread to the six states within Public Health Region V. It remains a state-driven initiative that continues to extend to Public Health Regions I-III and VII-X in 2014. The National Institute for Children’s Health Quality (NICHQ) has been funded by HRSA/MCHB to support the national expansion of the Infant Mortality CoIIN and provide technical assistance to the remaining states/Regions.

More information about CoIIN is available at the following website:
http://mchb.hrsa.gov/infantmortality/coiin/

Purpose:
Almost two years ago the first ever National Strategy to address infant mortality was announced by the US Department of Health and Human Services (HHS). This monumental call to action included a partnership with State officials “to find out what works [to reduce infant mortality] and scale up the best interventions to the national level.” CoIIN informs and contributes to this national effort, as well as advances state and local infant mortality reduction efforts.

The purpose of CoIIN is to reduce infant mortality and disparities in birth outcomes by providing states with a mechanism to jointly work together on common key strategy areas contributing to infant mortality/poor birth outcomes and show measurable improvements. Overall CoIIN aims to reduce infant mortality and disparities in infant mortality rates, however regional CoIIN Strategy Teams focused on specific topics/issues that contribute to infant mortality have specific aims such as reducing early elective deliveries by 33% or reducing rates of smoking in pregnant women by 3%.

Collaborations/Partnerships with other organizations:
A major component of CoIIN is its collaboration with various agencies, organizations, and leaders. While not an exhaustive list, CoIIN partners include: the Association of Maternal and Child Health Programs (AMCHP), the Association of State and Territorial Health Officials (ASTHO), Abt Associates, CityMatCH, the March of Dimes, NICHQ, the National Governor’s Association (NGA), the National Healthy Start Association, the Secretary’s Advisory Committee on Infant Mortality (SACIM), and Federal agencies such as the Centers for Disease Control and Prevention (CDC), the Centers for Medicare & Medicaid Services (CMS), the Agency for Healthcare Quality and Research (AHRQ) and the National Institutes of Health (NIH).

Early findings/lessons learned:
Shared leadership, collaboration and partnership across States, within States, and between the States and Federal/non-Federal agencies or organizations is critical to the success of CoIIN. Early findings from the CoIIN in Regions IV/VI suggest that it can successfully serve as a mechanism for states to accelerate improvements in infant mortality reduction strategies. The CoIIN Strategy Teams of Regions IV and VI are still working towards their aims until August 2014, but preliminary data is showing that there has been about a 28% total decline in non-medically indicated early term deliveries, translating to approximately 68,000 early, elective deliveries averted since quarter one of 2011 (based on provisional birth certificate data; excludes women with pre-existing conditions). Furthermore, Regions IV and VI have seen about a 6% total decline in smoking during pregnancy across the two regions – translating to approximately 12,000 fewer women smoking in pregnancy since quarter one of 2011 (based on provisional birth certificate data reflecting smoking in any trimester; 3 States using unrevised birth certificate). While not all of this decline can be attributed to the Infant Mortality CoIIN, CoIIN has provided a platform and infrastructure to accelerate and sustain momentum and improvement in these strategy areas across the two regions.

Applying quality improvement methods to public health/population-based problems can be a challenge due to the lack of real-time data required for measuring improvement and making rapid changes. CoIIN has highlighted the need for timely data and has motivated states to further examine their data capacity and linkages to promote data quality and timeliness.