

Home Visiting Collaborative Improvement and Innovation Network

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"Somebody said once that you don't need to predict the future when you can create it. The Home Visiting Collaborative Improvement and Innovation Network (HV CoIIN) is the first-ever national improvement collaborative in home visiting at a time when home visiting may or may not become national policy. Contributions of the HV CoIIN can help decide such an outcome. It provides us a once-in-a-lifetime opportunity to make a difference in the ability to attain the American Dream for generations of children to come."

- Carlos Cano, May 2014

The Maternal and Child Health Bureau's (MCHB) Division of Home Visiting and Early Childhood Systems has launched a Home Visiting Collaborative Improvement and Innovation Network (HV CoIIN). Initiated in September, 2013 through a three-year cooperative agreement with Education Development Center, Inc. (EDC), the mission of the HV CoIIN is to achieve breakthrough improvements in select process and outcome measures, including benchmark areas legislatively mandated for the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program, while reducing or maintaining program costs. The mission also includes developing the means to spread the initial learning and improvements more widely within participating organizations and to other MIECHV grantees and local implementing agencies.

HV CoIIN Framework

The HV CoIIN is a time-limited learning activity (18–24 months) that brings together and supports a group of MIECHV grantees and teams from local implementing agencies (LIAs) to seek improvement in topic areas that are of concern to home visiting and that are "ripe" for improvement. The ultimate goal is to identify evidence- and experience-based practices that result in breakthrough change if implemented consistently and with fidelity.

The HV CoIIN also encourages front-line workers, supervisors, and administrators to develop innovative practices for improving outcomes where robust evidence is not yet established. This dual purpose explains the two “I’s” in the acronym (HV CoIIN) for the project: improvement and innovation.

The “I’s” in HV CoIIN

Improvement: The HV CoIIN seeks *improvement* in key topics that are ripe for change, using evidence- and experience-based practices.

Innovation: The HV CoIIN supports *innovation* in areas that are of great concern to home visiting but for which robust evidence-based practice is not yet available.

The improvement component of the HV CoIIN follows the Breakthrough Series Collaborative model.¹ This model, developed in 1995 by the Institute for Healthcare Improvement (IHI), has demonstrated several decades of proven success across the healthcare field, has been applied to child development projects in several settings worldwide, and is now being adapted for home visiting. The model provides a mechanism for participants to:

- adequately use the most cutting edge and current research in on-the-ground practice;
- develop leaders of change;
- engage in rapid-cycle improvement to accelerate progress across outcomes; and
- integrate collaborative innovation and improvement into everyday work habits, as opposed to treating innovation and improvement as separate processes.²

As seen in Figure 1 below, the Breakthrough Series (BTS) model has several key process elements.

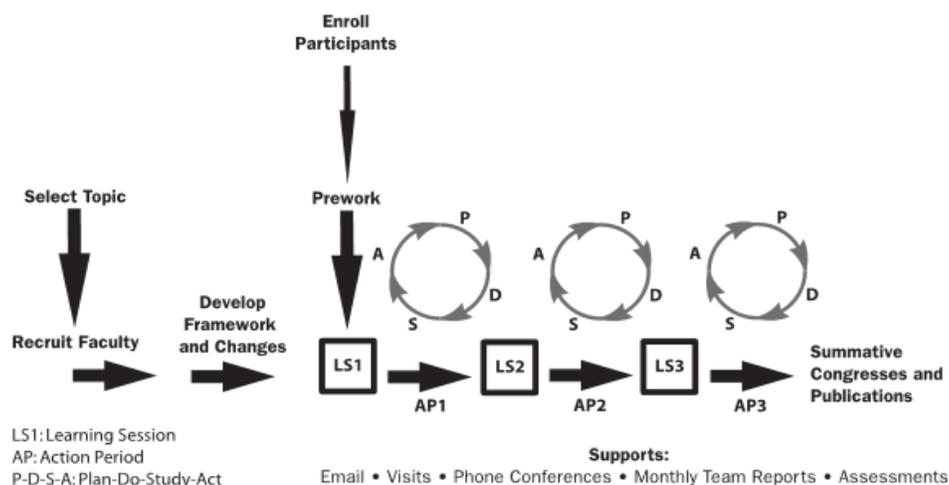


Figure 1. Institute for Healthcare Improvement Breakthrough Series Model

In September of 2013, the MCHB Division of Home Visiting and Early Childhood Systems, convened a group of subject matter experts who validated three topics for improvement that are aligned with MIECHV benchmarks and that reliably demonstrate benefit:

- initiation and duration of breast feeding;
- early detection and service provision for developmental delays; and
- alleviation of maternal depression.

This expert group also identified family engagement as a topic for innovation, an area of great interest for the home visiting field but where evidence is thin—and for which the HV CoIIN can provide new insights.

Following the meeting of experts, EDC was awarded the collaborative agreement and shortly thereafter recruited two groups of experts: those most knowledgeable about the research and subject matter, and those most experienced in implementing the specific practices to lead the project. See Table 1 below for a list of the HV CoIIN leadership team members and faculty.

HV CoIIN Topics

For Improvement

- Initiation and duration of breast feeding
- Early detection and service provision for developmental delays
- Alleviating maternal depression

For Innovation

- Family engagement

The staff and faculty have worked together with program sites and other partners to develop several important resources that drive the HV CoIIN work:

- a charter for each improvement topic and the innovation topic;
- a Key Driver Diagram for each improvement topic and the innovation topic;
- a Change Package for each improvement topic.

Additionally, staff and faculty provide technical assistance and ongoing guidance throughout the HV CoIIN process.

Along with the HV CoIIN staff and faculty, additional experts are brought in regularly to help develop the HV CoIIN process, to share ideas for improving outcomes, to assist with aligning efforts to the models being implemented across home visiting, and to ensure that MIECHV quality benchmarks are considered. Experts include model developers, MIECHV technical assistance providers, evaluators and project officers, state and local MIECHV implementers, and others identified by participants. Member experts at

times may also serve as guest lecturers and may assist with coaching on a particular subject.

Table 1
HV CoIIN Leadership Team and Faculty

HV CoIIN Leadership Team
Project Sponsor: David Willis, Director of the Division of Home Visiting and Early Childhood Systems
Project Officer: Carlos Cano, Senior Advisor, Division of Home Visiting and Early Childhood Systems
Project Director: Mary Mackrain, Education Development Center, Inc.
Improvement Advisor: MaryCatherine Arbour, Associate Physician for Research Division of Global Health Equity Brigham and Women's Hospital
Faculty Chair: Jon Korfmacher, Associate Professor, Erikson Institute
CoIIN Consultant: Peter Gloor, Research Scientist, Massachusetts Institute for Technology
External Evaluator: Deborah Perry, Associate Professor, Georgetown University
Faculty by Topic Area
Breastfeeding: Sally Fogerty, Education Development Center, Inc.; Elaine Fitzgerald, National Institute for Children's Health Quality; and Katherine Shealy, Center for Disease Control and Prevention.
Developmental Surveillance and Screening: Paul Dworkin, Help Me Grow; and Brenda Jones Harden, University of Maryland.
Maternal Depression: Darius Tandon, Northwestern University; Linda Beeber, University of North Carolina; Anne Duggan, Johns Hopkins University; and Nancy Topping-Tailby, Education Development Center, Inc.
Family Engagement: Deborah Daro, Chapin Hall.

HV CoIIN Participants

In January 2014, Education Development Center, Inc., in collaboration with the MCHB Division of Home Visiting and Early Childhood Systems, released a notice to the MIECHV listserv inviting applicants for the HV CoIIN. Numerous grantees responded to this voluntary opportunity, and a final cohort was selected in February 2014.

This cohort includes 13 grantees: ten states, two tribes, and one not-for-profit. As part of the application process, these MIECHV grantees were asked to identify local implementing agencies (LIAs) that were interested and ready to take part in this important project. Thirty-six LIAs among the thirteen grantees were identified.

These LIAs have formed quality improvement teams that lead the improvement and innovation work in their own organizations. The project recommended that the teams, at a minimum, be comprised of:

- Agency level lead;
- Day-to-day supervisor;
- MIECHV Home visitor(s); and
- Family recipient(s).

**HV CoIIN Participants:
Thirteen MIECHV
State, Tribal, and Not-
for-Profit Grantees**

- *Arkansas*
- *Florida*
- *Georgia*
- *Michigan*
- *Native American Health Center*
- *New Jersey*
- *Ohio*
- *Pennsylvania*
- *Rhode Island*
- *South Carolina*
- *Virginia*
- *White Earth Home Health Agency*
- *Wisconsin*

Each team is expected to work on one chosen improvement topic and the innovation area of family engagement. Teams learn from the collaborative process and apply small-scale tests to help successful change become part of everyday practice. Senior leaders guide and support the local teams and maintain a critical role in sustaining change. These teams engage in a series of Learning Sessions that give the members iterative opportunities to reflect on and refine their efforts.

Learning Sessions

Learning Sessions are face-to-face meetings that bring together faculty, staff, and improvement teams to exchange ideas, benefit from each other's experiences, and learn quality improvement methods. Three Learning Sessions will be conducted throughout the HV CoIIN collaborative. The first HV CoIIN Learning Session took place in Washington, DC on May 12–13, 2014, with 181 participants in attendance.

Actions Periods

Improvement and innovation occurs during the Action Period after the Learning Session. During the Action Periods, local teams introduce, test, and adapt changes back at their agencies using the Model for Improvement,

which consists of two parts: addressing three fundamental questions, and engaging in tests of change.³

The three questions are designed to set aims, establish measures, and select changes to test:

1. What are we trying to accomplish? The improvement team develops a specific, time-limited and measurable aim statement.
2. How will we know if a change is an improvement? The team identifies process and outcome measures to collect over time in order to track improvement and evaluate progress.
3. What changes can we make that will result in improvement? The team identifies ideas for attempting to effect change.

During a series of testing cycles (“plan, do, study, act”) teams learn to apply key changes within their own programs. For the three improvement topics, the changes the teams will test and implement are drawn from a Change Package recommended by the HV CoIIN staff and faculty experts.

During the Action Period, teams hold monthly phone calls, organized by topic area and thus form three topical learning collaboratives. Expert faculty and staff facilitate these monthly calls. Teams share progress and review data, and faculty and staff engage in teaching (when warranted) on topics and quality improvement methods.

The first Action Period is currently underway, and teams have submitted to the HV CoIIN leadership team initial plans for their first testing cycle.

Measurement and Evaluation

Measurement is a critical part of a successful BTS collaborative. To facilitate learning across participating sites, all teams are required to enter identified data each month into an online repository and to utilize subsequent “run charts” to track progress over time. Faculty and staff review monthly run charts to assess the progress of each team and the overall collaborative toward the shared aim in order to identify opportunities for learning from one another.

HV CoIIN SMART AIMS

- Eighty-five percent of the women who screen positive for depression and access services will report a 25 percent reduction in symptoms in 12 weeks (from first service contact).
- Increase by 25 percent from baseline the percent of children with developmental or behavioral concerns receiving identified services in a timely manner.
- Increase by 20 percent from baseline the percent of women exclusively breastfeeding at 3 months and 6 months.
- Increase by 25 percent the average proportion of expected in-person contacts between home visitor and family that are completed.

Georgetown University is creating and launching an external evaluation of the HV CoIIN implementation process to assess the degree to which:

- the Breakthrough Series Model is an effective process to integrate into home visiting programs;
- participants in the HV CoIIN gain knowledge and skills in continuous quality improvement;
- participants in the HV CoIIN make better use of their existing data for quality improvement; and
- participating programs accelerate their improvement on key benchmarks selected for the HV CoIIN process.

Summary

The HV CoIIN can amplify the contributions grantees, LIAs, researchers, model developers and other advocates of home visiting are making to enhance the life course for infants, young children, and their families. This project will help participating states and LIAs to achieve faster results by closing the gap between what we know and what we do, disseminating evidence-based changes that are shown to work, and encouraging innovative practices to advance the field.

- ¹ Kilo, C. (1998). A framework for collaborative improvement: Lessons from the institute for healthcare improvements breakthrough series. *Quality Management in Healthcare*, 8(4), 1–13.
- ² Institute for Healthcare Improvement. *The breakthrough series: IHI's collaborative model for achieving breakthrough improvement*. (2003). Cambridge, Massachusetts: Institute for Healthcare Improvement. Retrieved from <http://www.ihl.org/resources/Pages/IHIWhitePapers/TheBreakthroughSeriesIHIsCollaborativeModelforAchievingBreakthroughImprovement.aspx>
- ³ Institute for Healthcare Improvement. (2003).

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