Lessons on Home Visiting Program Implementation from the Collaborative for Improvement and Innovation Network (HV CoIIN)

Promoting wide-scale adoption of evidence-based strategies with Continuous Quality Improvement methodologies

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First national quality improvement collaborative in home visiting
Breakthrough Series Collaborative

A method of improvement for the extension & adaptation of existing knowledge that facilitates multiple adjustments to achieve a common goal.
Purpose

- Close the Gap between what we know works and what is happening on the ground
- Build leaders of Quality Improvement – Sustainability
- Achieve results faster
- Demonstrate effectiveness of home visiting in large scale implementation
Improvement Science
Two Types of Knowledge

*Subject Matter Knowledge*: professional knowledge, content-related knowledge

*Profound Knowledge*: Interactions between systems, variation, theory of knowledge and psychology of change
The Lens of Profound Knowledge

Appreciation of a system

Psychology

Theory of Knowledge

Understanding Variation

Values
Improvement Science

Two Types of Knowledge

**Improvement**: Learn to combine subject matter knowledge and profound knowledge in creative ways to develop effective changes for improvement.
Breakthrough Series Collaborative
(9 – 24 Months)

January - May, 2014
Throughout the Learning Collaborative, each improvement team will:

• Learn to test changes and adapt them to work in their specific context, before implementing the changes.

• Collect data on a limited number of indicators each month to monitor and demonstrate improvement.

• Accelerate learning by sharing experiences during Learning Sessions and Action Periods.

*Shared Aims, Shared Measures*
Participants
12 states & tribes
30 implementing agencies using 5 evidence-based models
36 quality improvement teams
3500 families
Subject Matter Knowledge: BTS Faculty Identify the gaps

- Over half of children with developmental concerns not caught until school enrollment
- Of 10-13% of children with developmental delays, only 2-3% receive appropriate services

**Figure 1: Results from the Translating Evidence-based Developmental Screening study**

- Screened: 1034
- Failed Screen: 202
- Referral: 101
- Intake: 63
- MDE: 42
- Eligible: 31
- Services: 24
The gaps are...

...results of systems and processes that are not designed according to the needs.

“Every system is perfectly designed to get exactly the results it gets.”

-Paul Batalden, MD
Subject Matter Knowledge: BTS Faculty
What can we do to bridge the gaps?
Key Driver Diagram: HV CoLLIN Developmental Screening

**SMART Aim**
Increase by 25% from baseline the % of children with developmental or behavioral concerns receiving assessment or intervention in a timely manner.

Children who need it receive developmental services.
Key Driver Diagram: HV CoIIN Developmental Screening

**Primary Drivers**

- **Reliable and effective systems for surveillance & screening**
- **Reliable and effective systems for referral & follow-up**
- **Home visitors supported to address development in the target population**
- **Families Engaged in Promotion of Healthy Development**

**SMART Aim**
Increase by 25% from baseline the % of children with developmental or behavioral concerns receiving assessment or intervention in a timely manner.
**Key Driver Diagram: HV CoIIN Developmental Screening**

**Primary Drivers**
- Reliable and effective systems for surveillance & screening
  - Identification of appropriate developmental and behavioral screening instruments, applied correctly
  - Periodicity to capture key milestones
  - Screening conducted within context of surveillance
  - Screening results interpreted in context of all HV knows about family / environment
  - Timely, specific and sensitive communication of results to families
- Reliable and effective systems for referral & follow-up
  - Closed loop of communication for +screen: referral, access, feedback
  - Care coordination with community partners and resources (e.g., primary care, child care, preschool, Help Me Grow, etc)
- Home visitors supported to address development in the target population
  - Home visitors with knowledge of state’s comprehensive early childhood system & processes
  - Home visitors with knowledge and competency in developmental and behavioral surveillance, screening, sharing results, anticipatory guidance, referral and follow up
  - Use of data to improve practices
  - Timely and Effective Supervisory Support
  - Families’ direct impact on development supported & maximized (through stimulation, strengthening of protective factors, etc)
  - HV engages family-led conversation regarding development at every home visit
  - Referrals & linkages HV recommends are acceptable to family (geographically, culturally appropriate)

**Secondary Drivers**
- Protocol for surveillance and screening standards (tools, periodicity, referral, follow-up)
- Tracking system for surveillance, screening & referral
- Regular training for HVs on policy and protocols, practices and use of tools
- Parent views/concerns about child’s development elicited and addressed at each home visit
- Program develops formal connections with community services (i.e., MOU’s)
- Developmental & behavioral screening passport (0-5, Watch Me Thrive!)
- Protocols or decision tree for case management re: positive screen or red flag to include follow-up
- Training/education of HV’s in Dev, systems & best practices
- Ongoing supervision on use of surveillance and screening (e.g., video-recordings of screenings using ASQ/ASQ:SE)
- Home visitor has access to their own data for use in QI
- Timely Access to tools/Reminder system
- Reflective and administrative Supervision
- Anticipatory guidance & education to families regarding development
- Protocols for addressing parent concern with home visiting activities
- HV seek feedback from parents on use of referred services

**SMART Aim**
- Increase by 25% from baseline the % of children with developmental or behavioral concerns receiving assessment or intervention in a timely manner

**Engage Families in Promotion of Healthy Development**
- HV CoIIN Home Visiting Collaboration Improvement and Innovation Network
Breakthrough Series Collaborative (9 – 24 Months)

Figure 2. Breakthrough Series Model

Subject Matter Knowledge

Select Topic

Enroll Participants

Develop Framework and Changes

Recruit Faculty

Prework

LS1: Learning Session
AP: Action Period
P-D-S-A: Plan-Do-Study-Act

Supports:
Email • Visits • Phone Conferences • Monthly Team Reports • Assessments

January-May, 2014
Breakthrough Series Collaborative
(9 – 24 Months)

Figure 2. Breakthrough Series Model

Profound Knowledge

Subject Matter Knowledge

Select Topic
Recruit Faculty
Develop Framework and Changes

Enroll Participants
Prework

AP1
AP2
AP3
LS1
LS2
LS3
Summative Congresses and Publications

Supports:
Email • Visits • Phone Conferences • Monthly Team Reports • Assessments

LS1: Learning Session
AP: Action Period
P-D-S-A: Plan-Do-Study-Act

January-May, 2014
What are we trying to accomplish?

What change can we make that will result in improvement?

How will we know that a change is an improvement?

Model for Improvement

Act

Plan

Study

Do

Langley, et al. p96
Philadelphia Nurse-Family Partnership
PDSA

Emily Haines BSN, RN

Our CQI team
Our program administrator,
Supervisors (2 NFP, 1 PAT)
Home visitors (2 NFP, 1 PAT)
2 administrative support staff
SMART Aim
Increase by 25% from baseline the % of children with developmental or behavioral concerns receiving assessment or intervention in a timely manner

Primary Drivers
PD1. Reliable and effective systems for surveillance & screening
Identification of appropriate developmental and behavioral screening instruments, applied correctly
Periodicity to capture key milestones
Screening conducted within context of surveillance
Screening results interpreted in context of all HV knows about family / environment
Timely, specific and sensitive communication of results to families

PD2. Reliable and effective systems for referral & follow-up
Strong links and care coordination community partners and resources
Closed loop of communication for +screen: referral, access, feedback

PD3. Home visitors supported to address development in the target population
Home visitors with knowledge of state’s comprehensive early childhood system & processes
Home visitors with knowledge and competency in developmental and behavioral surveillance, screening, sharing results, anticipatory guidance, referral and follow up
Use of data to improve practices
Timely and Effective Supervisory Support

PD4. Engage Families in Promotion of Healthy Development
Families’ direct impact on development supported & maximized (through stimulation, strengthening of protective factors, etc)
HV engages family-led conversation regarding development at every home visit
Referrals & linkages HV recommends are acceptable to family (geographically, culturally appropriate)

Secondary Drivers
C1. Protocol for surveillance and screening standards (tools, periodicity, referral, follow-up)
C2. Tracking system for surveillance, screening & referral
C3. Regular training for HVs on policy and protocols, practices and use of tools
C4. Parent views/concerns about child’s development elicited and addressed at each home visit

Specific Ideas to Test or Change Concepts
C1. Program develops formal connections with community services (i.e., MOU’s)
C2. Developmental & behavioral screening passport (0-5, Watch Me Thrive!)
C3. Protocols or decision tree for for process of red flag/positive screen, referral and follow up
C4. Parent views/concerns about child’s development elicited and addressed at each home visit

EDC, Inc. 2014 July, 2013. This resource was made possible by grant number UF4MC26525 from the Maternal and Child Health Bureau, U.S. Department of Health & Human Services.
Primary Drivers

Reliable and effective systems for surveillance & screening

Secondary Drivers

Identification of appropriate developmental and behavioral screening instruments, applied correctly

Screening conducted within context of surveillance

Screening results interpreted in context of all HV knows about family / environment

Timely, specific and sensitive communication of results to families

SMART Aim
Increase by 25% from baseline the % of children with developmental or behavioral concerns receiving assessment or intervention in a timely manner

Specific Ideas to Test or Change Concepts

Protocol for surveillance and screening standards (tools, periodicity, referral, follow-up)

Tracking system for surveillance, screening & referral

Regular training for HVs on policy and protocols, practices and use of tools

Parent views/concerns about child’s development elicited and addressed at each home visit

Developmental Screening Key Driver Diagram
What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

Incorporate the best practice of eliciting at every home visit parental concerns about their child’s development, learning, or behavior

% of home visits where parental concerns elicited

Add a label to the home visit forms that says “Were parent’s concerns about their child’s learning, development, or behavior elicited? Yes No”

Model for Improvement

Act

Plan

Study

Do

Langley, et al. p96
PDSA Cycle 1- Plan

• Add a label to the home visit forms that says “Were parent’s concerns about their child’s learning, development, or behavior elicited? Yes No”

• Data Collection Plan: Use nurses’ monthly summary sheets: add place to track the number of visits this question was asked
PDSA Cycle 1- Do

• The labels were put onto the sheets by NS 7/25/14
• An email was sent out to all staff explaining the change and why
• Presented at an all-staff meeting
• Was reinforced by supervisors during weekly supervision
PDSA Cycle 1- Study

• Overall the nurses were open to this method and found it helpful to include during their visits.

• Some nurses were getting confused about the wording of the question.
  • Some used the sticker / tracking column to ask the question ONLY if the parent initiated a conversation about a concern, which was not what we were trying to accomplish
  • They said rephrasing the question would help.
PDSA Cycle 1- Act

• Rephrase the question and put a new label on the HV forms until we can have them reprinted again
  – We order 1,000 per month from the printer

• Clarify that this question should be asked and answered in every home visit with every family, whether the parent initiates a discussion about concern for the child’s development or not
PDSA Cycle 2- Plan

• put a new label with rephrased question on the HV forms

• Clarify that this question should be asked and answered in every home visit with every family, whether the parent initiates a discussion about concern for the child’s development or not
PDSA Cycle 2- Do

- New question: CQI team rephrased the question and put labels on the sheets

Yes, I asked  No, I didn’t ask
PDSA Cycle 2 - Study

August:
– drop on the run chart (90% to 50%) reflects nurses understanding improved after we clarifying that this should be asked in ALL visits
– all staff report understanding what they are reporting better
– we’re confident our data is correct, we can see the areas for improvement and where in the process nurses are getting stuck

% HVs this month where parents were asked if they have concerns re: child’s development, behavior or learning

Goal = 95%
What we like about PDSAs

• It’s ok to fail!

• Becomes a learning process

• Has created a culture of quality improvement
  – “staff view challenges as an opportunity to do a PDSA cycle”

• Forces us to evaluate our processes and allows us to find areas for improvement
Challenges

• Learning curve of how quick the cycles can be
  ◦ When something wasn’t working, we had to learn to start a new PDSA cycle quickly with a different approach
  ◦ Requires some time to plan and evaluate the cycle

• Communication: Reminding staff when we are starting a new process
HV CoIIN Bulletin Board
SMART Aim
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PD2. Reliable and effective systems for referral & follow-up
- Strong links and care coordination community partners and resources
- Closed loop of communication for +screen: referral, access, feedback

PD3. Home visitors supported to address development in the target population
- Home visitors with knowledge of state’s comprehensive early childhood system & processes
- Use of data to improve practices

PD4. Engage Families in Promotion of Healthy Development
- Families’ direct impact on development supported & maximized (through stimulation, strengthening of protective factors, etc)
- HV engages family-led conversation regarding development at every home visit
- Referrals & linkages HV recommends are acceptable to family (geographically, culturally appropriate)

Secondary Drivers

- Closed loop of communication for +screen: referral, access, feedback
- Strong links and care coordination community partners and resources
- Home visitors with knowledge of state’s comprehensive early childhood system & processes
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Specific Ideas to Test or Change Concepts

C1. Protocol for surveillance and screening standards (tools, periodicity, referral, follow-up)
C2. Tracking system for surveillance, screening & referral
C3. Regular training for HVs on policy and protocols, practices and use of tools
C4. Parent views/concerns about child’s development elicited and addressed at each home visit

C1. Program develops formal connections with community services (i.e., MOU’s)
C2. Developmental & behavioral screening passport (0-5, Watch Me Thrive!)
C3. Protocols or decision tree for for process of red flag/positive screen, referral and follow up

C1. Training/education of HV’s in Dev, systems & best practices
C2. Ongoing supervision on use of surveillance and screening (e.g., video-recordings of screenings using ASQ/ASQ:SE)
C3. Home visitor has access to their own data for use in QI and to tolos/reminders
C4. Support for supervisors in screening process
C5. Reflective and administrative Supervision

C1. Anticipatory guidance & education to families about development based on screening process
C2. Protocols for addressing parent concern with home visiting activities
C3. HV seek feedback from parents on use of referred services

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Primary Drivers

PD2. Reliable and effective systems for referral & follow-up

Secondary Drivers

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C1. Program develops formal connections with community services (i.e., MOU’s)

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Healthy Families Georgia

What is a screening passport?
This pamphlet is your child’s screening record. It is a way to keep track of your child’s screening history and results.

How should I use this screening passport?
- Fill out this passport whenever your child has a developmental screen, or ask the doctor or other provider to fill it out for you.
- Take this screening record, along with any completed milestone checklists for your child’s age, to each check-up with your child’s doctor.
- Talk about screening results with the doctor.
- Ask the doctor to update your child’s record with recent screening results.
- Share this passport with your child care provider, teacher, home visitor, or anyone who provides services for your child.

<table>
<thead>
<tr>
<th>DATE</th>
<th>CHILD’S AGE</th>
<th>SCREENING TOOL USED</th>
<th>PROVIDER</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>“NO”/“LOW RISK”/“ATRISK”</td>
</tr>
</tbody>
</table>

Screening tools and resources at: www.hhs.gov/WatchMeThrive.
Primary Drivers

PD4. Engage Families in Promotion of Healthy Development

Families’ direct impact on development supported & maximized (through stimulation, strengthening of protective factors, etc)

HV engages family-led conversation regarding development at every home visit

C1. Anticipatory guidance & education to families about development based on screening process

C2. Protocols for addressing parent concern with home visiting activities

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Specific Ideas to Test or Change Concepts

Developmental Screening Key Driver Diagram

Secondary Drivers

Marion Adolescent Parenting Program, 2015

Ages and Stages Questionnaire (ASQ-3)

Month:

My Baby can: _________________________________________________________________

________________________________________________________________________

And let’s have fun working on: _____________________________________________

________________________________________________________________________

Date: __________________
HVCoIIIN
Home Visiting Collaborative Improvement and Innovation Network

**Primary Drivers**

PD4. Engage Families in Promotion of Healthy Development

**Secondary Drivers**

- Families’ direct impact on development supported & maximized (through stimulation, strengthening of protective factors, etc)
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**Specific Ideas to Test or Change Concepts**

- C1. Anticipatory guidance & education to families about development based on screening process
- C2. Protocols for addressing parent concern with home visiting activities
- C3. HV seek feedback from parents on use of referred services

➢ HV engages family-led conversation regarding development at every home visit

Parents as Teachers, Pinellas Florida
SMART Aim
Increase by 25% from baseline the % of children with developmental or behavioral concerns receiving assessment or intervention in a timely manner.

Primary Drivers

- Reliable and effective systems for surveillance & screening
- Reliable and effective systems for referral & follow-up

Parents’ concerns elicited
Aim: 95% of visits

Children screened appropriately
Aim: 75% every 6 months

Children referred appropriately
Aim: 70% linked

Home visitors supported to address development in the target population

Engage Families in Promotion of Healthy Development

Aim: 70% of parents with a concern or child with positive screening will be engaged in planned and individualized support for the optimal development of their children.

Shared Measures, Reported Monthly
Show Progress & Facilitate Cross-Team Learning
% HVs this month where parents were asked if they have concerns re: child’s development, behavior or learning

% children with parental concerns or +screen receiving individualized developmental support from HV

% children screened for developmental risk/delay within last 6 months

% children referred to community services who received services within 30 days

% children referred for EI 60-90 days ago evaluated & deemed ‘eligible’ for EI

% children referred for EI who received evaluation within 60 days

% of children with developmental or behavioral concerns identified receiving services in a timely manner

**AXIS KEY**

*Left axis:* scale for blue diamonds & line

*Right axis:* scale for reddish-green dots
% HVs this month where parents were asked if they have concerns re: child’s development, behavior or learning

**Left axis**: %HVs where parents were asked if they have concerns  
**Right axis**: N HVs this month
Guiding Principles for Collaboratives

• All teach, all learn.

• We learn by doing.

• We learn from each other.

• We use data to learn.
Lessons from the HV CoILN
Promoting wide-scale adoption of evidence-based strategies with CQI

CQI transforms implementation teams into protagonists

“We used to wait to have the model tell us what to do. Now we have realized: what a minute! We can do something about this. We look at our data and we ask ourselves what we want to accomplish and how we can improve.”

Jennifer Haberman, Marion Adolescent Parenting Program
Lessons from the HV CoIIN
Promoting wide-scale adoption of evidence-based strategies with CQI

Home visiting interventions that include CQI put parents on improvement teams as equal co-creators of the intervention, with powerful results.

HV CoIIN Pinellas works with substance abusing parents did a PDSA to increase family engagement by celebrating the participants who completed 8 foundational visits.

  Parent: it was the only thing she’d been celebrated for since graduating from middle school.

HV CoIIN NFP site: parent graduate had an idea for increasing engagement by starting a parents’ group. She is running her own PDSAs creating a parents’ group that intentionally includes fathers.
Working with CQI teams in early childhood programs and with parents, special attention to teaching and coaching on data use, practice with PDSAs and hypothesis testing

- observe the data *before* interpreting, “What do I see? What do I wonder?”
- help the team make the data useful to their needs: we plan to test 4000 change ideas. Where should we start?
- provide opportunities to practice in a group with coaching
Lessons from the HV CoIIN
Promoting wide-scale adoption of evidence-based strategies with CQI

This Committee’s Statement of Task:

1. What are the core KAPs that support healthy child development?
2. What evidence-informed strategies to strengthen parenting capacity in various settings have been shown to be effective with parents of young children?

Subject matter knowledge -- this group will get this right
Lessons from the HV CoIN
Promoting wide-scale adoption of evidence-based strategies with CQI

3. What types of strategies work at the universal/preventive, targeted and intensive levels, and for which populations of parents and children?

4. What are the most pronounced barriers...How can programs and systems be designed to remove barriers?

Assumption: these strategies are fixed, can be designed – the challenge is to identify what kind of family this is, and slot in the carefully-designed intervention

What if the challenge in bringing evidence-based practices to scale is more about how to engage the people who are most knowledgeable about families’ circumstances – families themselves and front-line service providers – the opportunity & necessary tools for adapting recommended strategies to their contexts?
Lessons from the HV CoIN

Promoting wide-scale adoption of evidence-based strategies with CQI

What are 3-5 research questions that warrant further investigation?

1. How can we learn more from practice?
   – mixed methods studies
   – n of 1 trials

2. What short-term proxy measures map onto the outcomes that matter most in parenting?
Thank you