

Lessons from the Field: Using Performance Data to Inform CQI

Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program awardees report data on program performance for eligible families in the legislatively mandated benchmark areas of: (1) improvements in maternal, newborn, and child health; (2) prevention of child injuries, child abuse, neglect, or maltreatment and reductions of emergency room visits; (3) improvements in school readiness and child academic achievement; (4) reductions in crime or domestic violence; (5) improvements in family economic self-sufficiency; and (6) improvements in the coordination and referrals for other community resources and supports.

Continuous quality improvement (CQI) is a systematic approach to improve program services and increase positive outcomes for children and families. An effectively implemented CQI plan can be a successful method for improving performance measure progress in a data-driven way. Awardees are encouraged to use performance data to inform CQI activities to achieve targeted improvements in home visiting services.

The Home Visiting Performance Measurement and Continuous Quality Improvement Technical Assistance Center (HV-PM/CQI) interviewed three MIECHV awardees to understand how they use performance data to inform CQI activities. This resource highlights the integration of performance data into CQI processes using case-specific examples from Florida, Illinois, and Wisconsin.

Lessons will focus on:

- » building an effective CQI team
- » choosing a topic
- » developing a SMART aim
- » using data
- » improving readiness to begin your CQI project

BUILDING A CQI TEAM

The essential foundation for a successful CQI project is a supportive, multi-level, interdisciplinary team. Convening teams at both the 1) state/territory and 2) local implementing agency (LIA) level can optimize outcomes.

State/Territory CQI Teams

State/territory CQI teams provide leadership, coaching, and guidance to LIA teams operating in each community. State/territory teams can maximize their reach by engaging experts to support CQI on the ground. For example, both Florida and Wisconsin engage partners with content expertise in their CQI topic area to draft aims and identify change ideas. This ensures aims and change ideas are feasible and align with best practice. Florida also contracts with a trained improvement advisor to offer support throughout the project and provides additional hours during peak periods. Some state/territory CQI teams, such as Wisconsin, also include LIA members to ensure coordination across levels.

Local CQI Teams

Local CQI teams lead agency-level CQI tests, report results to state/territory CQI teams, and contribute on-the-ground experience to guide the project. The size of local CQI teams may vary, depending on LIA size. Consider including at a minimum: a **CQI team lead** responsible for maintaining project momentum, a **recorder** to document tests of change and prepare monthly reports, and a **data analyst** to track progress towards the goal. One staff member could serve multiple roles in smaller LIAs or multiple staff members could share these roles in larger LIAs. Engaging staff at multiple levels, such as supervisors, home visitors, and administrative staff, is important for identifying potential ideas to test, interpreting results, and improving buy-in.

CHOOSING A TOPIC

Performance data can help teams select and refine CQI topics. Awardees employ a variety of strategies for selecting topics.



Annually, **Florida** state CQI staff take a deep dive into their performance data to identify the top challenges across their program. They 1) examine data by LIA to identify common challenges, 2) review at multiple time points to identify enduring issues, and 3) eliminate topics easily addressed through technical assistance, such as data quality or data system issues. LIAs then compare their performance data to state-level data to further refine and identify a reasonable target for their SMART aim.



In **Illinois**, state CQI staff encourage LIAs to choose topics to promote engagement in local change efforts. LIAs are encouraged to review their performance data and select topics with the following considerations: 1) opportunity to show improvement; 2) relevance to their target population; and 3) frequency of data collection. Topics with more frequent data collection maximize the opportunity to test ideas and see change as described in the quote on the next page.

To Learn More:

Continuous Quality Improvement Toolkit

[Module 2: Using Data to Drive CQI and Identify Topics](#) helps participants—

- » Define quality data and importance of data in CQI
- » Learn how to identify topics for CQI projects
- » Understand how to use data to inform CQI work

[Module 3: Creating the CQI Culture and Forming a Team](#) helps awardees and LIAs—

- » Create an agency culture that supports CQI
- » Form a team to carry out CQI activities

Checklist for Selecting a Topic for CQI

1. Begin with a review of your performance data:

- Examine data over time to identify gaps in performance and establish a baseline
- Break out data by LIA to understand the range of performance
- Select one or two areas that show room to improve

2. Assess the readiness of your team and organization to address the selected topic(s):

- Consider how the topic aligns with current priorities or initiatives at your organization
- Evaluate the topic's capacity for change (e.g., assess the gap between current practice and best practice)
- Identify existing resources (e.g., staff time, organizational support) dedicated to this topic

- Gauge buy-in through discussion and feedback with a diverse range of stakeholders

3. Evaluate the potential impacts of improvement in this area:

- Reflect on possible benefits to families
- Discuss the “business case” for improvement (e.g., will it result in smoother processes, a stronger workforce, or greater job satisfaction)

4. Look for evidence that change will lead to improvement:

- Seek out existing change packages and key driver diagrams that show how others have closed the gap
- Identify high performing LIAs in this area that can contribute change ideas

“Depending on the age of the child, there could be a lot of well-visits a child would be due for. Programs [measuring this topic] were able to see that the interventions they tried worked and showed in their numbers, whereas a topic like IPV (intimate partner violence) in a site with smaller population would see less movement.”

—Illinois CQI Lead



Wisconsin engages multiple LIAs in the same topic for CQI. Topic selection begins with LIA and state staff submitting proposals for potential projects. State CQI staff compile and share LIA- and state-level performance data to inform topic selection. The state team, which includes representatives from all LIAs, then meets to discuss and narrow the list based in part on: 1) strength of proposal, 2) alignment with performance measures, and 3) opportunity for improvement across multiple LIAs. The state team then votes and the topics with the most votes are selected.

DEVELOPING A SMART AIM

CQI utilizes Specific, Measurable, Attainable, Relevant, and Time-bound (SMART) aims to guide project activities. Performance measures can be a helpful starting place for developing SMART aims.



LIAs in **Illinois** set targets for performance measures as their SMART aims. To identify a target, LIAs are encouraged to 1) review demographics of the participants they work with for the specific measure, 2) understand the specific challenges these participants experience, and 3) decide how ambitious they want to be, taking experience and culture of their providers into consideration. For example, *“By September 30, 2019, the percent of primary caregivers enrolled in home visiting who receive an observation of parent-child interaction using a validated tool will increase from 57% to 78%.”*



In **Florida** and **Wisconsin**, state/territory CQI teams develop SMART aims with the support of experts, LIAs, and community partners. Their SMART aims are often based on relevant performance measures, although sometimes differ slightly to align with local practice or state standards. For example, **Wisconsin** included sleep surface in their safe sleep SMART aim based on recommendations from state experts, information LIAs collected from families, and the American Academy of Pediatrics guidelines. Their SMART aim states: 30% of infants are always placed to sleep in a safe sleep environment (alone, on their back, and in a crib, bassinet or Pack ‘n Play™ without toys or soft bedding).

USING THE DATA

Regularly reviewing data is essential to CQI. Awardees use data at the LIA and state/territory level to track the progress of their CQI projects. In the CQI context, it is important to build a positive culture around data sharing to ensure CQI data is used for learning and improvement, rather than judgment or accountability.

Strategies for Data Collection

In **Florida** and **Wisconsin**, where multiple LIAs are working on the same topic, LIAs uniformly report data in Excel spreadsheet templates provided by the state team. These Excel data trackers automatically generate run charts

To Learn More:

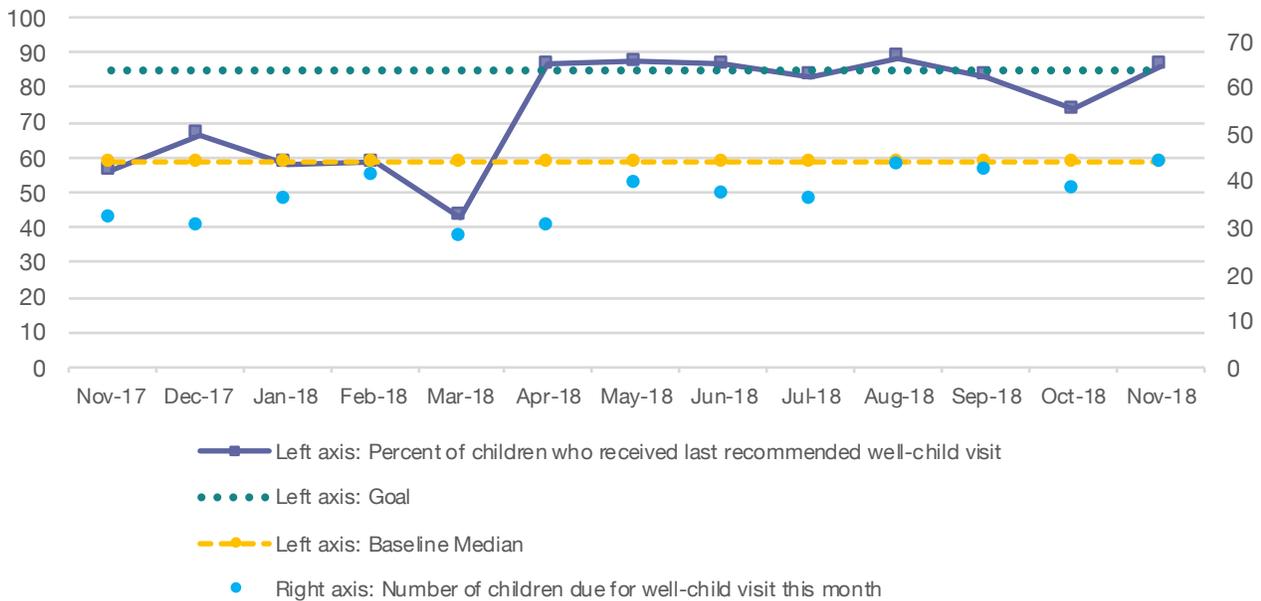
Continuous Quality Improvement Toolkit

[Module 4: Creating SMART Aims](#) can be used to—

- » Identify the elements of a SMART aim
- » Evaluate SMART aims
- » Create a SMART aim

for LIAs to view progress as data are entered over time. LIAs submit data to the state team on a monthly basis in addition to narrative reports describing their tests of change. In **Illinois** and **Wisconsin**, LIAs use reports generated by their data system to simultaneously track progress on their CQI work and monitor their performance measures.

Exhibit 1. Example run chart: % of children enrolled in home visiting who received their last recommended well-child visit



In this example, approximately 60% of children enrolled in home visiting received their last recommended well-child visit at baseline. Following tests of change through a yearlong CQI project, a shift to around 85% was observed. The team successfully met their goal and will continue to track this measure, looking for indications that the gains are being sustained.



Incorporating balancing measures can help keep regular programming on track during CQI projects. Balancing measures are used to check for possible negative impacts of innovation on other program elements. For example, in **Florida**, LIAs report on home visit completion in addition to their SMART aims to ensure services are not suffering due to CQI work. The state team also conducts baseline, mid, and end point surveys to measure home visiting staff knowledge, confidence, and system awareness to determine coaching and support needs.

Strategies to Promote Peer Learning

Awardees review data with LIAs in various ways. To promote peer data sharing and learning, some state/territory CQI staff aggregate LIA-level data from Excel data trackers to prepare a state-level progress summary. Some awardees share both the state summary and individual site progress during group data sharing calls. Awardees that implement peer data sharing focus on building a culture of quality to use data for improvement.

“In general, our philosophy is to be transparent with data....CQI data is presented at the site-level. This is a point of debate among states. Some are reluctant to do that, while others see it as public knowledge....We have created a culture where data is not used as a shaming tool....It is information and we support them in improving in those areas.” —Florida CQI Lead



Illinois conducts individual coaching calls with each LIA to review their CQI progress. During these calls, LIAs are encouraged to 1) share about the CQI work they have done in the past month, 2) discuss challenges and successes experienced while running small tests of change and collecting data, and 3) plan for the next month's CQI tests. LIAs come together periodically for peer sharing calls, where they have the opportunity to share successful change ideas and data collected during the course of their projects.

IMPROVING READINESS TO BEGIN YOUR NEXT PROJECT

Performance data can provide a foundation for systematically approaching CQI projects in MIECHV programs to achieve targeted improvements in home visiting services. In addition to the examples presented in this brief, the CQI resources listed below support awardees to improve their readiness to begin a CQI project. If you would like additional assistance related to CQI, contact your HRSA Project Officer and HV-PM/CQI Technical Assistance Specialist.

Additional Resources

- » [**Continuous Quality Improvement Toolkit: A Resource for Maternal, Infant, and Early Childhood Home Visiting Program Awardees:**](#) This CQI Toolkit is designed to help awardees work with local agencies to build capacity in CQI. The toolkit contains nine modules, which may be delivered by CQI staff as a single module or as part of a multiday training activity.
- » [**Presenting Data for Continuous Quality Improvement Purposes:**](#) This brief explains the importance of data visualization in supporting CQI. It reviews ways to share data with program stakeholders frequently and effectively using charts and graphs to illustrate program functioning, areas for improvement, and the effect of tested changes.
- » [**Updating Your FY 2019 Continuous Quality Improvement Plan:**](#) This brief can help you develop a CQI plan and communicate it to others in your organization. It explains key areas the plan should cover as well as additional best practice recommendations. This brief also includes a sample outline and template for drafting or updating your plan.
- » [**FY 2019 Maternal, Infant, and Early Childhood Home Visiting Program Continuous Quality Improvement Plan Update:**](#) This resource is a guide to assist awardees in 1) reporting on their CQI activities from September 2017 through January 2019 and 2) updating their CQI activities for FY 2019 per the FY 2018 Funding Opportunity Announcement (FOA) requirements.