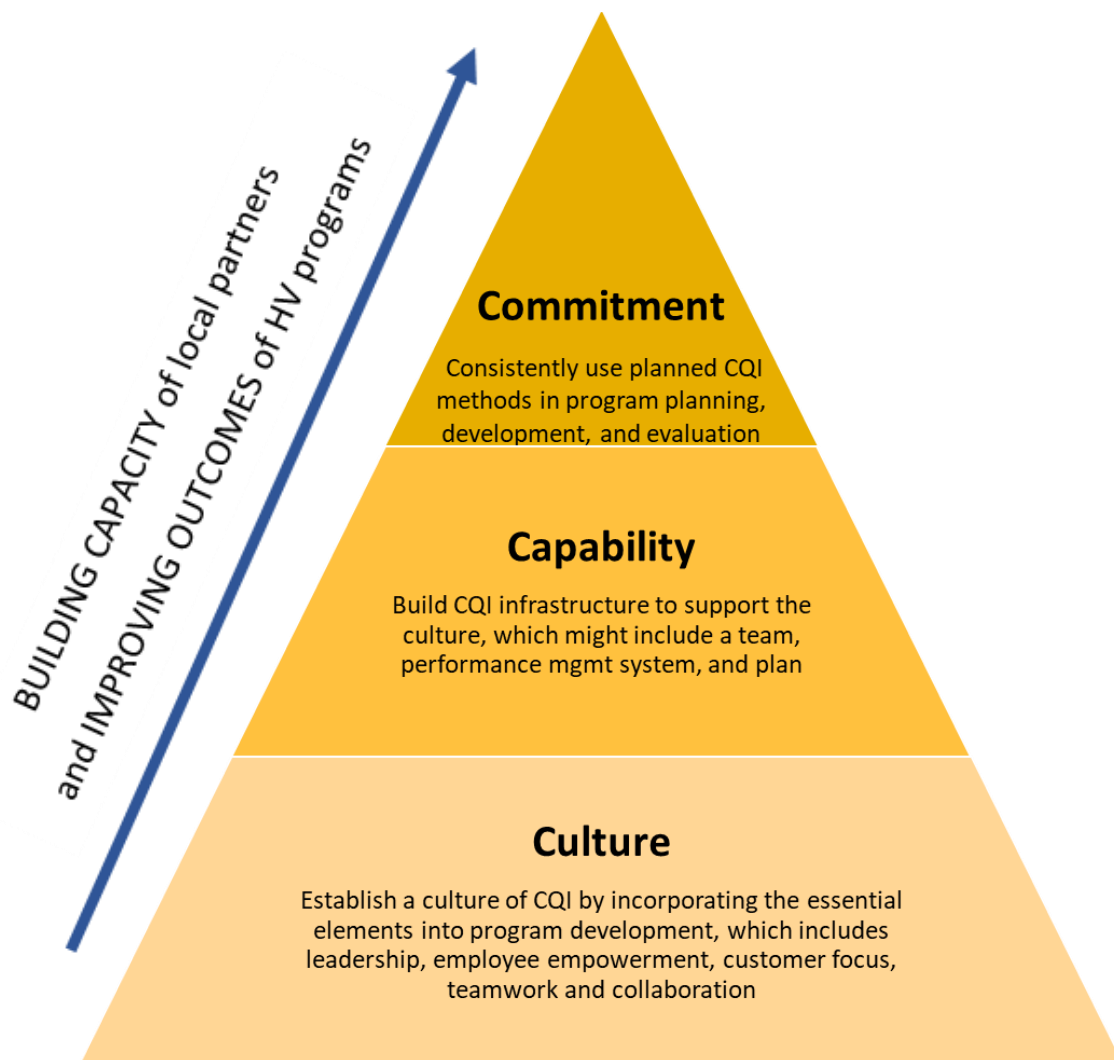


# Family Home Visiting Continuous Quality Improvement (CQI) Toolkit

## Summary

The goal of CQI at the Minnesota Department of Health (MDH) Family Home Visiting (FHV) program is to improve outcomes by building capacity of local partners through:

- Establishing a culture of CQI,
- Building CQI infrastructure and,
- Applying CQI methods to daily practice



## What is Continuous Quality Improvement (CQI)?

**Continuous Quality Improvement (CQI)** is a deliberate, defined process which is focused on activities that are responsive to community needs and improving population health. It is a continuous and ongoing effort to achieve measurable improvements in the efficiency, effectiveness, performance, accountability, outcomes, and other indicators of quality.

A **CQI plan** is an organization’s roadmap for improving its services, processes, capacity, and outcomes. It guides the organization and its key collaborators and stakeholders through the process of monitoring services and using data as part of everyday practice to improve outcomes. A CQI plan allows you to describe your approach to CQI, assess your capacity to carry out CQI, summarize past CQI efforts, and identify lessons learned.

Continuous Quality Improvement is often mistaken for Quality Assurance (QA), but these are two distinct concepts. Quality assurance asks, “Do we have a good program?” while quality improvement asks, “How can we make our good program even better?” Take a look at this table that describes some of the key differences:

Quality Assurance	Quality Improvement
Reactive	Proactive
Good enough	Best possible
Point in time evaluation	Continuous evaluation
Led by management	Led by staff
Responsibility of few	Responsibility of all
Setting or meeting minimum standards	Constantly working to meet and exceed standards
Judgmental (pass/fail)	Educational (learn from success AND failure)
Regulatory oversight (mandated)	Culture shift (always seeking to improve)

## MDH CQI Support and Technical Assistance

The Minnesota Department of Health (MDH) Family Home Visiting (FHV) program offers Local Implementing Agencies (LIAs) assistance in using Continuous Quality Improvement (CQI) methods to improve outcomes for family home visiting services. This support includes, but is not limited to:

- Consultation
- Training
- Facilitation
- Coaching
- Peer learning opportunities
- Technical assistance
- Data collection, reporting, and analysis

## CQI Training Modules

MDH FHV recommends these free training modules to help local agencies build CQI knowledge and capacity. This training kit is designed specifically for MIECHV Program Awardees. There are nine modules, which may be delivered individually or as part of a multiday training activity for home visiting staff.

### CQI Training Kit for MIECHV Program Awardees

- [Module 1](#): Introduction to CQI
- [Module 2](#): Using Data to Drive CQI and Identify Topics
- [Module 3](#): Creating the CQI Culture and Forming a Team
- [Module 4](#): Creating SMART Aims
- [Module 5](#): Understanding the PDSA Process and Measurement
- [Module 6](#): Process Maps
- [Module 7](#): Root Cause Analysis Tools
- [Module 8](#): Key Driver Diagrams
- [Module 9](#): Reliability Concepts and Sustaining Gains

Each module contains a facilitation guide, PowerPoint slides with facilitation notes, and handouts and activities for participants.

## CQI Guiding Principles

The MDH FHV Section is committed to the principles of CQI and supports efforts at both the state and local levels to improve the effectiveness and delivery of family home visiting services provided to families with young children.

These guiding principles include:

- A focus on improving services from the client's perspective
- Meaningful engagement at all levels is required for success
- Recognition that all processes can be improved
- Continual learning using an "all teach, all learn" philosophy
- Decision-making is improved by using both data and team knowledge
- CQI data is used for learning and improvement, not for judgment or supervision

## Starting a QI Project

The following steps are helpful for programs initiating a new QI project:

1. Select a topic
2. Form a CQI team
3. Determine a CQI method
4. Write a project charter

## Select a Topic

Issues that are ripe for improvement within your program may include those that:

- Data indicators reveal a gap between current measures and reference benchmarks
- Have a high level of interest and change readiness for improvement among stakeholders
- Have efforts already underway that you could leverage
- Best practice knowledge exists that is evidence-informed but not widely put into place
- Have examples of better results demonstrated in real-life situations
- Have potential for such results, if expanded, to have a profound effect for the families served

## Form a CQI Team

Making CQI work involves strategic team effort, requiring planning and a dedicated staff with sufficient time and resources. Here are some important concepts to keep in mind when forming a CQI team.

An effective team can vary in size and composition. Ideally, teams consist of 5-10 members; teams that are too small often don't have all the right people on board to be effective, and teams that are too large may have trouble making decisions.

Teams should include representatives from all groups affected by the CQI aim, including management or leadership, supervisors, frontline staff and clients/parents.

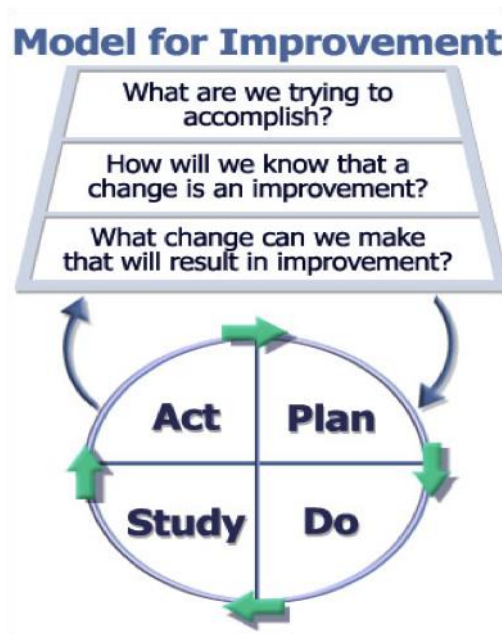
## Potential CQI Team Members

- **Administrator/Senior Leader:** This administrator or leader from the home visiting agency is responsible for providing leadership, support and advocacy on behalf of the team. They actively guide the work of the team and are available for troubleshooting barriers.
- **Manager/Front-line Supervisor:** The person responsible for providing direct supervision to MIECHV-funded home visiting staff.
- **Home Visitor(s):** One or more staff that are actively working with families.
- **Data Specialist:** The person responsible for data entry/analysis.
- **FHV Nurse Consultant:** MDH staff person assigned to your region who provides practice expertise and QI support.
- **Parent Leader:** A current or former client who received home visiting services within the last twelve months.

## Determine a CQI Method

The **Model for Improvement** (Figure 1) is a simple, yet powerful framework that uses a systematic approach to rapid cycle testing. This model consists of two parts: addressing three fundamental questions and then engaging in tests of change using the Plan-Do-Study-Act cycle. This is a highly-effective method for public health work that helps programs accelerate improvement, stimulate meaningful progress over time, and promote long-term success.

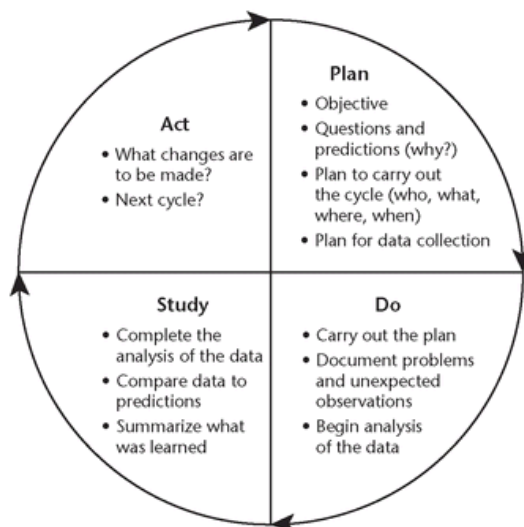
**Figure 1. Model for Improvement**



Source: Langley, G.J., Nolan, K.M., Nolan, T.W, Norman, C.L., & Provost, L.P. (2009). *The improvement guide: A practical approach to enhancing organizational performance* (2nd Ed.). San Francisco: Jossey-Bass. P.24.

The **Plan-Do-Study-Act (PDSA) Cycle** (*Figure 2*) is a method for rapidly testing a change by developing a plan to test (Plan), carrying out the test (Do), observing and learning from the results (Study) and determining what modifications should be made to the test (Act). This method allows for nimble adaptations to be made in response to the existing environment and accelerates learning and improvement.

**Figure 2. Plan, Do, Study, Act Cycle**



## Write a Project Charter

A **project charter** is an important document used to describe and launch the improvement project by establishing a common vision for the work. It summarizes the questions that your team is answering using the Model for Improvement:

- 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?

Write a **project charter** that includes at a minimum:

- Problem statement / call to action
- SMART goal(s)
- Data and measures
- Quality improvement method
- Timeline
- Team members and roles

## Managing a QI Project

The following resources can be helpful to teams managing a QI project:

1. Data Tracking System
2. Project Planning and Monitoring
3. Quality Improvement Tools
4. Practical Strategies for Managing the Work

## Data Tracking System

**Measures** are key data indicators that are used to evaluate performance and track improvement. Regular review of data is essential to determining if the progress of an improvement project is on track and if goals of an improvement project have been met. There are two key types of measures:

### Outcome Measures

- Measure system level performance or the “what” that we are trying to achieve
- Tied to aim statement / SMART goals
- Did we achieve what we set out to?

### Process Measures

- Relate to the “how” of improvement and what key processes are changing to bring about improvement
- Tied to key objectives and change ideas
- Are we going in the right direction?

For a typical quality improvement project, teams should identify at least 1 outcome measure that would be used for your SMART aim and approximately 3-5 process measures to evaluate progress along the way.

Teams should create a data tracking system for how they will regularly collect, report, and review data.

## Project Planning and Monitoring


There are four key phases to a quality improvement project. These include development, testing, implementation, and sustainability. There are tools available to help your team plan strategically for each phase. These may be called a [project planning form](#), [action plan](#), work plan, or implementation plan. A [Gantt chart](#) is also commonly used. These living documents help your team break down a high-level SMART aim into a logical set of smaller goals and actions. Your team can use them to establish timelines, tasks, and individuals responsible for completing the work. Team members can then use [PDSA Forms](#) to document and report on their efforts. These tools are reviewed during team meetings to assess the status and monitor progress of the actions needed to move the project forward.

## Quality Improvement Tools

The MDH Center for Public Health Practice provides a [Public Health & QI Toolbox](#). Your team can access nearly 40 quality improvement tools, which includes step-by-step instructions on how to use each tool.

See the below image “Which Tool When?” (see Figure 3) for a list of some of the most commonly used QI tools and when they might work best during your process.

**Figure 3. Which Tool When?**



**WHICH TOOL WHEN? – Quality Improvement Resources**

Plan			Do	Study	Act
Define	Assess	Analyze	Improve		Sustain
What is the problem? What results do we want?	What is happening? Where should we focus?	Why is it happening? What are the root causes of problem?	How can we fix it? What solutions should we implement? Did the solutions achieve our desired results?		What adjustments should we make? How will we sustain results?
Tools	Tools	Tools	Tools		Tools
<ul style="list-style-type: none"> <li>• Project Charter</li> <li>• Team Norms</li> <li>• Aim Statements</li> <li>• Driver Diagram</li> <li>• Voice of the Client Techniques</li> </ul>	<ul style="list-style-type: none"> <li>• Flowchart (Process Map)</li> <li>• Check Sheet</li> <li>• Focused Conversation</li> <li>• Pareto Chart</li> <li>• Data / Statistics</li> </ul>	<ul style="list-style-type: none"> <li>• Brainstorming</li> <li>• Cause and Effect (Fishbone) Diagram</li> <li>• 5 Whys</li> <li>• Affinity Diagram</li> <li>• SWOT Diagram</li> <li>• Focused Conversation</li> <li>• Surveys</li> <li>• Interviews</li> <li>• Focus / Advisory Group</li> </ul>	<ul style="list-style-type: none"> <li>• Brainstorming</li> <li>• Ranking and Voting</li> <li>• Impact-Effort Plot</li> <li>• Check Sheet</li> <li>• Pareto Chart</li> <li>• Run Chart</li> <li>• Focused Conversation</li> <li>• Surveys</li> <li>• Interviews</li> <li>• Focus / Advisory Group</li> </ul>		<ul style="list-style-type: none"> <li>• Storyboard</li> <li>• Flowchart (Process Map)</li> <li>• Data / Statistics</li> <li>• Dashboard</li> <li>• Protocols</li> <li>• Training</li> <li>• Onboarding</li> </ul>

In addition to those available through the MDH Public Health & QI Toolbox, MDH FHV recommends the following two resources to help with specific challenges shared by numerous teams:

- [Implementation Checklist](#) created by HV CoIIN to assist teams when it’s time to implement changes on a wider scale.
- [Parent Leadership Toolkit](#) created by HV CoIIN to assist teams with establishing a process for regularly engaging clients in program CQI efforts. The HV CoIIN Parent Leadership Toolkit is available free of charge and you will receive a copy for download after completing a simple request form.

### Practical Strategies for Managing the Work

It can be burdensome for many leaders and employees to take on quality improvement projects when they already have very heavy workloads. MDH FHV recommends the following article and resource from the Institute for Healthcare Improvement to help teams identify strategies that can make QI projects feel more manageable and assimilated within their existing day-to-day practices.

[IHI Five Practical Strategies for Managing Successful Improvement Projects](#)

[15 Concrete Ideas to Manage an Improvement Project](#)



## Concluding a QI Project

The following steps are helpful when ending a QI project:

1. Sustaining the gains
2. Spreading improvements
3. Celebrate successes
4. Harvest lessons learned
5. Tell your story

### Sustaining the Gains

It is important to find ways to incorporate your successful changes into hardwired processes to ensure sustainability. You might do this by creating or revising protocols, procedures, practice guidelines, new hire training, ongoing competencies, and check-ins on the topic during individual supervision and all-staff meetings. It is also best practice to continue tracking, monitoring, and discussing your data measures for at least six months. MDH FHV recommends the [Sustainability Worksheet](#) created by HRSA to support your sustainability planning efforts.

### Spreading Improvements

Spread is defined as the intentional and methodical expansion of the number and type of people, teams or organizations incorporating the improvements. Teams should share their lessons learned and newfound best practices with others who could benefit from it. This might include peers, other home visiting models (both evidence-based and traditional), other departments, and community and regional stakeholders who are serving similar populations.

### Celebrate Successes

It is important to take the time to celebrate the successes of your project. You can do this in a variety of ways, but make sure that team members are recognized for their valuable contributions and commitment to seeing the project through. Celebration is often overlooked in a busy work environment, but it is essential to building buy-in of CQI efforts, motivating staff to lead and participate, and maintaining momentum for improvement work and outcomes.

### Harvest Lessons Learned

A key component of concluding a QI project is harvesting the lessons learned. Your team will want to consider not just the topic itself that you worked on, but also how you worked on it as a team. Did you have the right people at the table? Did you have measures that effectively informed your work? Were you working with a realistic timeframe? Did you have the resources and support you needed to be effective? Discussing and documenting these types of questions and feedback will put your team in a better starting position when launching your next QI project.

## Tell Your Story

Your team worked hard! You went above and beyond to improve something that you cared about in your work. Make sure that others know about it and can learn from it. Teams should consider creating the following types of resources to tell your story: executive summary, project report, topic brief, topic toolkit, and/or a storyboard. A [storyboard](#) is a poster that provides the viewer a visual representation and high-level summary of a project. It is an attractive display and concise tool for effectively presenting a team's work to a variety of audiences.

## Contact

If you have questions regarding this document or continuous quality improvement efforts within the MDH Family Home Visiting Section, please email [health.fhvcqi@state.mn.us](mailto:health.fhvcqi@state.mn.us).

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