

Continuous Quality Improvement

February 2021

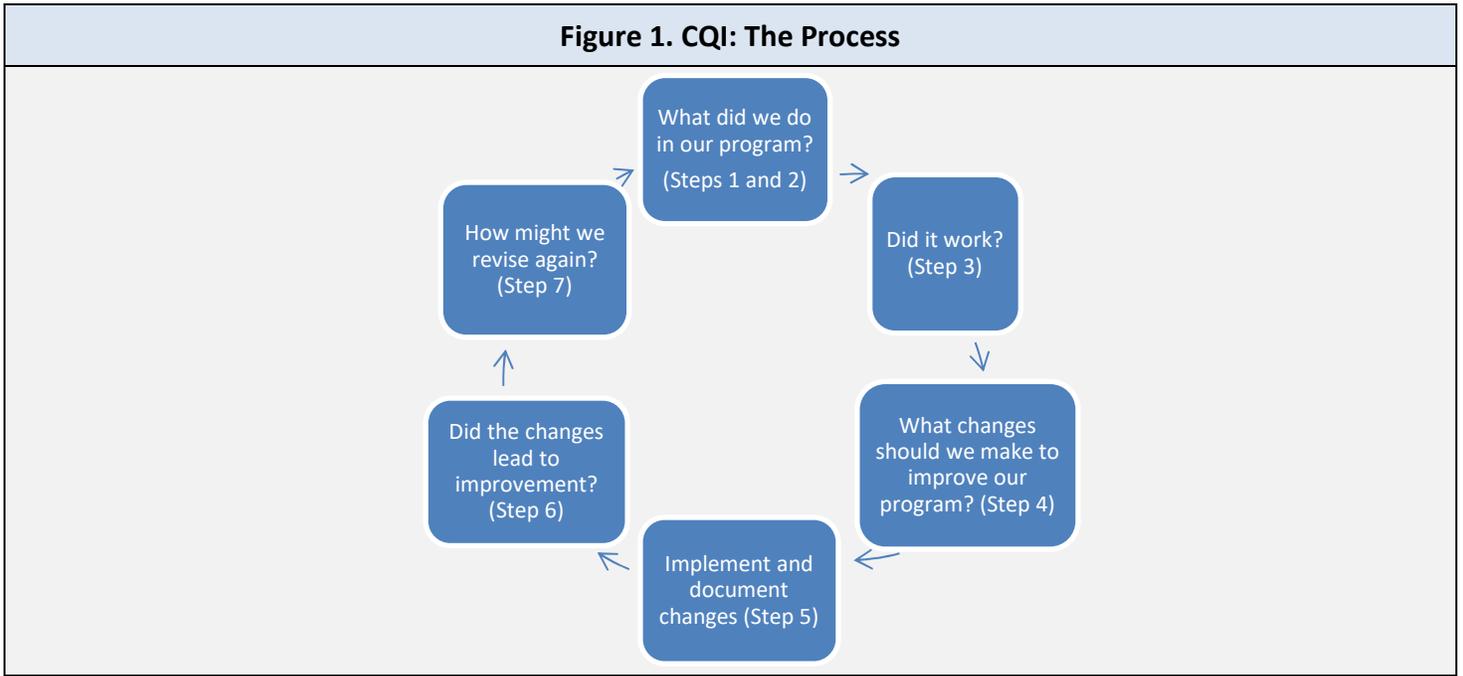
Continuous quality improvement (CQI) is a systematic approach and cyclical process that involves collecting data to make improvements to a program with an emphasis on future results (Rackow, Deal, & Fromknecht, 2013). Specific steps in the CQI cycle are outlined in **Table 1**. CQI requires a commitment to using data to improve program performance and is a framework through which program implementers can systematically address challenges that may or may not be immediately apparent. It also requires the development of an intentional feedback loop and system of accountability to ensure that all levels of the program are working smoothly (Lesesne et al., 2011). CQI can be used to make positive changes even when things are going well with a program.

Table 1. Specific Steps in the Continuous Quality Improvement Process

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Step 1	Identify a need/issue/problem and develop a problem statement.
Step 2	Define/describe the current situation by breaking down the problem into component parts, identifying major problem areas, and developing a target improvement goal.
Step 3	Analyze the problem to identify the root causes of the problem.
Step 4	Develop an action plan that outlines ways to correct the root causes of the problem and specific actions to be taken.
Step 5	Implement the action plan.
Step 6	Learn by looking at the data and determine if the problem and its root causes have decreased; identify whether the target has been met.
Step 7	Revise and try something new if the problem wasn't solved.

Source: Office of Adolescent Health, n.d., Department of Children and Family Services, State of Louisiana, 2012).

Figure 1. CQI: The Process



How CQI Differs from Process Evaluation

Although process evaluation may be conducted independently of program activities by internal staff or consultants, CQI should be conducted as part of routine program activities by program staff or internal evaluation staff; CQI should not be conducted by an external contractor or consultant. Additionally, process evaluation is designed to answer specific questions about program implementation, acceptability, and/or relevance and addresses values and priorities of stakeholders. CQI, on the other hand, is designed to ensure that the program (1) meets or exceeds quality standards and benchmarks to continuously improve service delivery and (2) addresses professional standards and benchmarks (PEER Center, 2009).

CQI Frameworks

There are several approaches and CQI frameworks that an organization might follow to establish and develop a CQI process; these include Getting to Outcomes (Chinman et al., 2016) and Plan, Do, Study, Act (AHRQ, 2015).

Framework	Description
Getting to Outcomes (GTO)	This is a program management tool that uses a 10-step process toward program management and includes the Plan, Do, Study, Act model to ensure CQI. GTO walks programs through the lifecycle of programming (planning, implementation, and evaluation) through the lens of quality improvement. It has been used in programs working with young people, home visiting programs for parents and children, and in adolescent pregnancy prevention programs. This framework is easy to follow and can be used by organizations both well versed and new to outcome evaluation and quality improvement. A specific GTO manual for teen pregnancy prevention programs is available at: https://www.rand.org/content/dam/rand/pubs/tools/TL100/TL199/RAND_TL199.pdf
Plan, Do, Study, Act (PDSA)	This is a structured, cyclical process for developing and implementing change. “Plan” means to collect and analyze data and develop solutions. “Do” means to implement one of the proposed solutions. “Study” means to measure any changes as the result of the proposed solution that was implemented. “Act” means to adopt the solution of standard practice or start over. This framework has been used with both programs and larger systems and can be very broadly applied. https://innovations.ahrq.gov/qualitytools/plan-do-study-act-pdsa-cycle

Why Is CQI Important?

CQI is critical to the continued growth and improvement of your program. It helps to (1) identify components of your program that are working well and those that are not, (2) decide how to adjust your plan and implementation to move closer to your goals and desired outcomes, and (3) ensure future successful implementation and increase buy-in from stakeholders, including staff involved in the process.

Figure 2 presents key characteristics of CQI. CQI focuses on results, involves input from multiple levels of staff and stakeholders, requires teamwork and continuous review of progress, and involves timely changes in response to needs identified during review. CQI provides program managers a systematic way to monitor their project (Lesesne et al., 2011); an opportunity to show staff how their feedback is being addressed, which helps to build trust and relationships; and a mechanism to identify staff needs for professional development and other forms of support. Implementing CQI can help staff use their time more efficiently; by catching problems early and preventing future problems, staff spend less time rectifying mistakes (Lesesne et al., 2011). CQI also enables staff to document clearly any needs for additional resources or professional development. CQI helps to fine tune your program so that it meets the needs of your target population effectively and efficiently, thus maximizing the chances of attracting future funding (Lesesne et al., 2011). Finally, CQI helps to identify issues that might need to be addressed for your program to achieve desired outcomes.

Figure 2. Key Characteristics and Benefactors of CQI	
What are the key characteristics of CQI?	Who benefits from CQI, and how?
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%; padding: 5px;">Results oriented</div> <div style="width: 50%; padding: 5px;">Input from all levels of staff and stakeholders</div> </div>	<div style="display: flex; align-items: flex-start;"> <div style="width: 30%; padding: 5px; border: 1px solid #ccc; border-radius: 10px; background-color: #4a7ebb; color: white; text-align: center;">Program managers</div> <div style="padding: 5px;"> <ul style="list-style-type: none"> Program monitoring Increased staff satisfaction Professional development </div> </div>
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%; padding: 5px;">Teamwork</div> <div style="width: 50%; padding: 5px;">Continuous progress review</div> </div>	<div style="display: flex; align-items: flex-start;"> <div style="width: 30%; padding: 5px; border: 1px solid #ccc; border-radius: 10px; background-color: #4a7ebb; color: white; text-align: center;">Staff</div> <div style="padding: 5px;"> <ul style="list-style-type: none"> Increased efficiency Needs addressed </div> </div>
	<div style="display: flex; align-items: flex-start;"> <div style="width: 30%; padding: 5px; border: 1px solid #ccc; border-radius: 10px; background-color: #4a7ebb; color: white; text-align: center;">Target/priority population</div> <div style="padding: 5px;"> <ul style="list-style-type: none"> Needs addressed Sustainable programming Barriers addressed </div> </div>
<div style="text-align: center; padding: 5px; border: 1px solid #ccc; border-radius: 10px; background-color: #4a7ebb; color: white; width: fit-content; margin: 0 auto;">Making timely adjustments to improve outcomes</div>	<div style="display: flex; align-items: flex-start;"> <div style="width: 30%; padding: 5px; border: 1px solid #ccc; border-radius: 10px; background-color: #4a7ebb; color: white; text-align: center;">Stakeholders</div> <div style="padding: 5px;"> <ul style="list-style-type: none"> Increased transparency and efficiency Opportunity to learn about program impact Increased engagement </div> </div>

Getting Started with CQI

The ideal time to begin planning for your CQI process is at the very start of a project; however, it is better to begin any time during the project implementation than to omit CQI altogether. Strategies for implementing CQI include being flexible about how information is reported (e-mail, online, hard copy), paying staff to meet after hours, and showing visible commitment to reporting and learning (Boyle et al., 2012). Some steps to get started with your CQI process include the following:

1. Garner support from both leadership and staff.

- Present a draft CQI plan. The draft plan should help staff learn what they can expect if they participate in CQI. Overlapping this plan with what is currently being done will help staff realize that CQI may not involve a large increase in their work.

- Educate staff/managers about what CQI is and its value. It is important to (1) explain that the CQI process is designed to ensure that all staff are growing as professionals and (2) discuss what is going well, what might need to change, and that CQI is not used to measure individual staff performance.
 - Address concerns explicitly at the outset.
2. **Confirm adequate infrastructure** (e.g., meeting space, access to data, time, and timely access to decision-makers).
 3. **Identify a process to conduct CQI effectively.**
 - Check that data are being collected and that the staff responsible have a plan in place for making sure the data are collected in a timely fashion.
 - Indicate who is responsible for collecting the data, as well as who receives the information and when, for every type of data you want to use in your CQI process.

Implementing CQI

After you have gained support for CQI and worked through some of the steps to get started, you will move into the implementation phase. Conducting the CQI process involves the following steps:

1. Gather information about the program.

Review and synthesize the information, looking for patterns and trouble spots. Consider how these patterns might affect your performance measures.

2. Ensure that staff communicate and meet.

Review your meeting schedule and determine whether you need to add meetings specifically dedicated for CQI. Determine key points at which it will be most appropriate to meet.

Include staff from all levels.

Schedule a debriefing meeting within a few days of the conclusion of any one-time event or workshop.

Meet more frequently to conduct CQI when you are starting a program.

3. Systematically ask the right questions.

Examples of key questions	Examples of questions about information you are collecting	Examples of questions about next steps
<ul style="list-style-type: none"> •Are we on target for meeting performance goals? •What has gone well? •What factors have contributed to successes? •What are the challenges to implementation? •What needs to be improved? Why? How? 	<ul style="list-style-type: none"> •Is there a need for additional information? •Is there information we no longer need? •Is there a need for improvement in data collection tools? •Do we need more time and/or funding to collect this information? 	<ul style="list-style-type: none"> •Who will make changes and by when? •How will we know if changes are successful? •What data will we gather and from whom? •When should we next review changes?

4. Make changes based on what you have learned.

- Develop an action plan to make adjustments based on the answers to the above questions.
- Inform the full team about the changes and why you are making them.
- Continue to monitor progress over time and make additional changes as needed.

Common Pitfalls of CQI

Despite the benefits of CQI, keeping track of paperwork can be cumbersome, and staff might view CQI as a hindrance to their daily work; the process might be perceived as complicated because it entails translation of data into meaningful action, and staff might not be prepared for change.

Strategies for reducing the burden on staff and providing more opportunities to learn through the CQI process include (Hughes, 2008):

- Setting priorities and collectively deciding what type of information would be most useful in the CQI process,
- Integrating measurement into the daily routine,
- Initiating changes on a small scale to test them before implementation,
- Being opportunistic,
- Performing CQI at short intervals, and
- Providing strong leadership to establish organizational commitment and support staff and activities.

Building Enthusiasm for CQI within Your Organization

Remember that CQI helps keep your program current for your participants, resulting in a greater likelihood of achieving desired results. CQI can help your organization work smarter, not harder. It is easier to make small changes than large ones and easier to fix problems before they become too large to manage. To build staff support for CQI, ensuring that the mindset is focused on program improvement is important so that staff trust data will not be used punitively (Rackow, Deal, & Fromknecht, 2013). CQI is a report writer's best friend; it ensures that all changes and successes are documented moving forward, providing valuable material when it comes time to communicate with stakeholders. CQI shows stakeholders that your program is going through an ongoing fine-tuning process to meet the needs of your target or priority population, which may help to support sustainability.

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