

Implementing Continuous Quality Improvement

A RETAIN Practice Brief

Overview

Continuous quality improvement (CQI) is an effective way to build quality into service delivery. There are multiple CQI frameworks to choose from, such as Plan-Do-Study-Act, Six Sigma, and Lean Management Principles, to name a few. Each CQI framework comes with its own specific components and processes, and choosing a framework depends upon the organization's goals and objectives, size of the effort, and amount of data available.[1] Additionally, implementation practices are flexible and transferrable to various CQI frameworks. The aim of this practice brief is to provide Retaining Employment and Talent after Injury/Illness Network (RETAIN) states with actionable ideas and practices for sustaining CQI. This brief serves as a companion piece to RETAIN Resource: Continuous Quality Improvement Strategies, which AIR developed for RETAIN states to use.

What is CQI?

CQI is the process of identifying and analyzing strengths and problems and then testing, implementing, learning from, and revising solutions.[1]

Implementing CQI: General Practices

The purpose of CQI is to develop a productive work environment by identifying the practices that are working as well as the practices that need improvement.[2] This process, which requires a foundation that supports long-term sustainability, includes four foundational components:

- Establishing a team
- Developing a plan
- Mapping efforts
- Sharing results

Establishing a CQI Team

Most important to CQI sustainability is the establishment of a team tasked with improving (project or organizational) efforts, which include reviewing data and identifying areas in need of improvement.[3] The CQI team should be composed of staff from all organizational areas involved in service delivery. The CQI team can also benefit from the perspective of stakeholders to help guide the prioritization of CQI efforts.[1] The team should also designate a leader or

champion who is committed to building capacity for ongoing improvement efforts.[3,4] Having a team with different perspectives is one of the most important aspects to consider when establishing an effective CQI team.[3]

Who should comprise the RETAIN CQI team?

- **Team Leader (champion)** who speaks to the day-to-day efforts regarding CQI and serves as the liaison to other relevant stakeholders in communicating the CQI team's work.
- **Workforce/Business Representative** who speaks to the operationalization of proposed changes from the perspective of businesses and how that may affect improvement efforts.
- **Data Representative** who speaks to the ways in which revisions may affect or reflect data needs or data management but who is not part of the ongoing team. This individual may be occasionally asked to review CQI efforts from this independent and objective perspective.
- **Healthcare/Clinical Representative** who speaks to the operationalization of proposed changes, including legal issues, from the perspective of healthcare partners.
- **Worker Representative** who has a strong understanding of RETAIN participants' viewpoints and can speak to the ways in which CQI efforts affect workers from program outreach through Return to Work.

CQI Team Resource:

- Creating Quality Improvement Teams and QI Plans (AHRQ)[3]

Developing a Plan

To effectively carry out improvement efforts, the CQI team must develop a plan to help guide service delivery improvement efforts.[5] The CQI should include the following general components:

- A clear mission to guide the work
- Measurable goals and objectives
- Methods and tools that will be used
- Identification of the support needed to maintain ongoing CQI work
- A data collection plan for tracking, assessing, and guiding improvement
- Procedures for monitoring the CQI plan and assessing progress[5]

Key Highlights

- Guide service delivery improvement efforts
- Encompass general components regardless of the CQI framework
- Describe team member roles and responsibilities
- Include strategies for bringing new staff on board

In addition to these general components, a CQI plan should describe individual team roles and responsibilities and how those roles contribute to overall improvement efforts.[3,5] Having a successful CQI plan also requires strategies for training new staff, especially those involved in data collection.[1] Both components—the explicit delineation of roles, and a clear plan for bringing any new staff on board—may already be captured in other areas of operation including RETAIN work plans, partner memoranda of understanding, process maps, and logic models.

RETAIN State Examples

State Example 1: Established a partnership with a community health center to help develop a CQI plan for the entire program. In doing so, the community health center achieved the following:

- Met with all healthcare, workforce, and Return to Work (RTW) partners;
- Created a statement-of-work charter and a process map for the provider recruitment process;
- Developed a process map for the RTW coordination process; and
- Facilitated conversations with the state team using the process maps to identify areas for improvement in their processes.

State Example 2: Established several process improvement strategies, including the following:

- Collecting recruitment and enrollment data to generate reports, enabling the team to drill down on the recruitment and enrollment details;
- RTW case managers meeting weekly to discuss strategies and challenges regarding projects and processes; and
- Using the RETAIN Recruitment-to-Enrollment Pipeline Dashboard Tool.

CQI Plan Resources:

- Creating Quality Improvement Teams and QI Plans (AHRQ)[3]
- Creating a Continuous Quality Improvement Plan (James Bell Associates)[5]

Mapping Efforts

The CQI team will play a key role in determining the project's implementation and data collection efforts. A theory of change model can help to map out those efforts.[i] Logic models and driver diagrams are two approaches that may be used in the CQI process for exploring factors that need to be addressed in order to attain your goals and objectives.[6] Each approach has its own unique actions for execution.

[i] A theory of change is an illustration of how and why a desired change is expected to happen in a particular context.[11]

Logic Model Steps

- Identify the problem and whom it affects the most.
- Determine program inputs (i.e., resources needed for success).
- Determine key program outputs (i.e., the actions that staff will take and the products they will develop).
- Identify program outcomes.
- Develop a logic model outline.
- Identify external factors that may inhibit progress.
- Identify program indicators
(Source: Compass, n.d.[7])

Driver Diagrams Steps

- Identify project aims or outcomes.
- Define the key drivers in the system necessary to achieve aims.
- Logically cluster the drivers into groups to see if they represent a common driver.
- Link project activities and key components in the system.
- Define how progress and results should be measured.
- Work backwards from project aims and targeted outcomes if needed.
(Sources: Centers for Medicare & Medicaid Services, 2013[8]; NHS Health Scotland, n.d.[6])

Note. Consider revising and adapting your current RETAIN program logic model for use within the CQI process.

CQI Mapping Resources:

- How to Develop a Logic Model (Compass)[7]
- Driver Diagram (Institute for Healthcare Improvement)[10]
- Defining and Using Aims and Drivers for Improvement (Centers for Medicare & Medicaid Services)[8]

Sharing Results

Key Highlights

- Document progress
- Share goals and performance data with entire team/stakeholders
- Connect data to stories of positive human impact
- Celebrate successes to help reinforce your mission

Communicating results and progress is an important component of CQI, regardless of the framework. CQI teams should document progress through activity logs, meeting minutes, and other tools.[5] Additionally, they should share goals and performance data with the entire team—including external stakeholders. Progress can be shared through all-staff meetings, routine sharing of CQI findings, and storyboards (i.e., illustrating data in way that tells a story) or other pre-existing methods of internal team and external stakeholder information sharing.[5] If possible, try combining data with stories that have influenced the lives of real people.[1] Also remember to celebrate success, which can help reinforce your mission and is an important aspect of working together to improve outcomes.[1]

Key Highlights Recap

Regardless of the CQI framework that you ultimately choose, there are general implementation practices that can be applied to help guarantee success. After selecting a CQI framework that works best for your mission and goals, make sure to establish a team, develop a plan, map the efforts, and share the results.

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Endnotes

[1] Office of Adolescent Health, U.S. Department of Health & Human Services. (n.d.). *Continuous quality improvement: Part 1: Basics for pregnancy assistance fund programs.* Washington, DC: Author. Retrieved from https://rhntc.org/sites/default/files/resources/oah_cqi_basics_resource_2016-09-20.pdf

[2] Kennedy, T. (2017). *Continuous quality improvement* [presentation]. Retrieved from https://www.researchgate.net/publication/317292961_Continuous_Quality_Improvement_CQI

[3] Agency for Healthcare Research and Quality [AHRQ]. (2013). Module 14: Creating quality improvement teams and QI plans. *Practice facilitation handbook*. Rockville, MD: Author. Retrieved from https://www.ahrq.gov/sites/default/files/publications/files/practicefacilitationhandbook.pdf

[4] Hunter, S. B., Ebener, P. A., Chinman, M, Ober, J. A., & Huang, C. Y. (2015). *Promoting success: A getting to outcomes guide to implementing continuous quality improvement for community service organizations.* Washington, DC: RAND. Retrieved from https://www.rand.org/pubs/tools/TL179.html

[5] James Bell Associates. (2016). *Creating a continuous quality improvement plan.* Arlington, VA: Author. Retrieved from https://www.jbassoc.com/wp-content/uploads/2018/03/Creating-CQI-Plan.pdf

[6] NHS Health Scotland. (n.d.). Driver diagrams. Retrieved from http://www.healthscotland.com/OFHI/Resources/resources_driverdiagrams.html

[7] Compass. (n.d.). *How to develop a logic model.* Retrieved from https://www.printfriendly.com/p/g/nqJLzV

[8] Centers for Medicare & Medicaid Services, Center for Medicare and Medicaid Innovation, Learning and Diffusion Group. (2013). *Defining and using aims and drivers for improvement.* Baltimore, MD: Author. Retrieved from https://innovation.cms.gov/files/x/hciatwoaimsdrvrs.pdf

[10] Institute for Healthcare Improvement. (2017). *QI essentials toolkit: Driver diagram.* Boston, MA: Author. Retrieved from https://www.med.unc.edu/ihqi/files/2019/06/QIToolkit_DriverDiagram.pdf

[11] Center for Theory of Change. (n.d.). *What is a theory of change?* New York City, NY: Author. Retrieved from https://www.theoryofchange.org/what-is-theory-of-change/