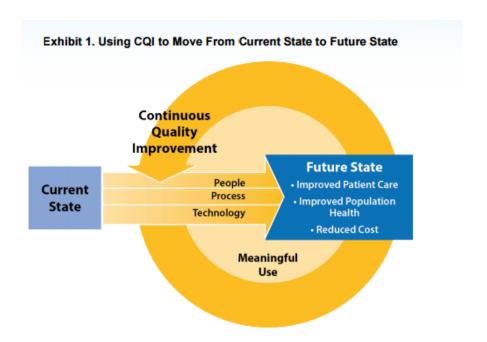# Toolkit for Implementing a Process Evaluation for Continuous Quality Improvement

*Introduction*

Continuous Quality Improvement (CQI) is a systematic process designed to lead to measurable improvement in human and social services agencies.  One methodology for carrying out CQI is called the Plan-Do-Check-Act (PDCA) cycle.

This toolkit was created as a practical guide to assist nonprofits with developing a PDCA cycle for program improvements. This toolkit is designed to provide CQI tools and resources that may be used by organizations to help them do the following:

➢ Determine their stage of readiness to implement a PDCA cycle.
➢ Provide guidance and examples for how to conduct a needs assessment.
➢ Highlight an overarching CQI process using the PDCA cycle with resources at each stage of the cycle.



Exhibit 1. Using CQI to Move From Current State to Future State

*Needs Assessment Phase*

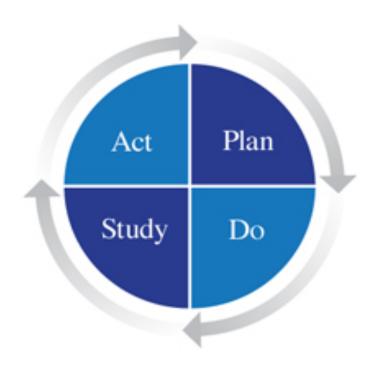Before a PDCA cycle should be initiated, a nonprofit should determine the following:

➢ What problem or issue are you trying to improve and/or address?

➢ What is the nature and scope of the problem?

➢ Are there specific patient populations or groups for whom the problem is most acute?

➢ Are there mechanisms to track and analyze data related to the problem/issue?

> ➤ Who should be part of the process evaluation team?
>
> ➤ What strategies or solutions can be considered for mitigating the problem? Is there evidence from the literature that these strategies will be effective?

*PDCA Cycle*

The PDCA Cycle follows a four-step, continuous process for identifying and tracking the improvement of a problem or a process.

1) Plan:  This involves identifying a goal or a purpose, formulating a theory, defining success metrics, and putting a plan into action.

2) Do:  This is the stage where the components of the plan are implemented.  At this stage, the agency will have identified the strategies or actions they will take to try to address the problem.

3) Check: During this phase, outcomes are monitored to test the plan for signs of program and success, as well as problems and areas for improvement.

4) Act: This step closes out the initial cycle, integrates what was learned throughout the process, which can be used to adjust the goal and/or modify the strategy or actions.  The four steps are repeated over and over as part of a continuous quality improvement cycle.

In order to follow the PDCA cycle, the following implementation steps can be helpful:

> <u>Form the team</u>. Including the appropriate people on a process improvement team is critical to a successful effort. The practice (or provider) must determine the team's size and members. Practice staff persons are the experts at what works well in the practice and what needs to be improved. Include them in identifying and planning the implementation of the strategies.

> <u>Set objectives</u>. This step answers the question: What are we trying to accomplish? Objectives should be specific, have a defined time period, and be measurable (see Appendix A). Objectives should also include a definition of who will be affected and who the stakeholders may be.

> <u>Establish measures</u>. This step answers the question: How will we know that a change is an improvement? Outcome measures should be identified to evaluate if objectives are met.

> <u>Select changes</u>. This step answers the question: What changes can we make that will result in improvement? The team should consider ideas from multiple sources and select changes that make sense.

> <u>Test changes</u>. First, the changes must be planned and downstream impacts analyzed to assess whether they had the desired outcome or output. Once the changes are implemented, the results should be observed so that lessons learned and best practices can be used to drive future changes.

> <u>Implement changes</u>. After testing a change on a small scale, learning from each test, and refining the change through several PDSA cycles, the team may implement the change on a broader scale—for example, for a pilot population or on an entire unit.

> <u>Spread changes</u>. After successful implementation of a change(s) for a pilot population or an entire unit, the team can disseminate the changes to other parts of the organization.

**APPENDIX A.  SMART Objectives**

The SMART criteria help to ensure that the goals your facility establishes are specific, easy to measure and monitor, and timebound.  Here is a description of each SMART criteria:

*1. Specific*: This criterion stresses the need for a specific goal rather than a more general one. This means the goal is clear and unambiguous; easy to determine if goal is met or not met. A specific goal will usually answer:

- What do I want to accomplish?
- Specific reasons, purpose or benefits of accomplishing the goal
- Who is involved?
- Identify a location
- Identify requirements and constraints

*2. Measurable*: The second criterion stresses the need for concrete criteria for measuring progress toward the attainment of the goal. If a goal is not measurable, you will not know whether a team is making progress toward successful completion. Measurable goals will answer questions such as:

- How much?
- How many?
- How will I know when it is accomplished?
- Indicators should be quantifiable

*3. Attainable*: The third criterion stresses the importance of goals that are realistic and also attainable.. An achievable goal will usually answer the question How?

- How can the goal be accomplished?
- How realistic is the goal based on other constraints?

*4. Relevant*: The fourth criterion stresses the importance of choosing goals that matter. A goal that supports or is in alignment with other goals would be considered a relevant goal. A relevant goal can answer yes to these questions:

- Does this seem worthwhile?
- Is this the right time?
- Does this match our other efforts/needs?
- Are you the right person?
- Is it applicable in the current socio- economic environment?

*5. Time-bound*: The fifth criterion stresses the importance of setting goals within a time-frame, giving them a target date. A time-bound goal will usually answer the question When?:

- What can I do six months from now?
- What can I do six weeks from now?
- What can I do today?

**APPENDIX B: PDCA Worksheet**

**Date:**                                                                                    **PDSA Cycle #**

**Outcome Measure: (Project Goal)**

**PDSA Cycle Aim: (make a SMART goal)**

| Evaluation Measure for this Aim: (use standardized data, easily obtainable if possible) | | | | |
|---|---|---|---|---|
| Measure | Description | Data Source | Target Performance | Current Performance |
|  |  |  |  |  |
|  |  |  |  |  |

| PDCA Cycle Team | | | |
|---|---|---|---|
| Name | Title/Dept | Role | Responsibilities |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**PLAN:**

| List of tasks to set up change | Person Responsible | Deadline |
|---|---|---|
|  |  |  |

**DO:**          Describe what actually happened when you implemented the strategies or change

**STUDY:**          Describe the measured results and how they compared to the predictions

**ACT:**          Describe what modifications to the plan will be made for the next cycle from what you learned