

Step 9 Continuous Quality Improvement (CQI)

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Focus question

How will we continuously improve the quality of the program?

Step 9 CQI takes you through an intentional process of discovering what can be improved so that things work even better the next time you offer this or another teen pregnancy prevention program. Of course, we hope that most things turned out the way you thought they would, demonstrating good processes and outcomes. Even so, you probably discovered that some things didn't turn out as you'd hoped.

We've based the tasks in this step on a common business strategy called continuous quality improvement (CQI). CQI takes what you've learned as you evaluated your planning, implementation, and outcomes and then applies it to the continuous improvement and growth of your programming. It's a simple,

but systematic work review to see what changes you could make to improve your program the next time around.

It means, simply, that you constantly collect and use information to make adaptations to your program so that it works better over time. Although CQI can be used to identify areas in need of improvement, it's more than just a process of finding and fixing problems. It shows you what's working well so that you can build on it and repeat your successes. Asking questions, discussing the possible answers, reaching agreement, and communicating decisions are all part of a cyclical, healthy, and useful CQI process.

CQI also helps build the sustainability of your program. The more you can repeat your successes and improve the planning, implementation, and evaluation of your program at every stage, the more you increase your chances of sustaining your work on a number of levels. Engaging in an on-going CQI process keeps you current and responsive to changes going on around you and within your organization. Being responsive and adaptable is important to keeping your good work going.

Materials

You've probably already compiled all of the materials you will need to do a CQI review in your three-ring binder:

- Completed Step 1 **Resource Assessment** and **Priority Needs Filter** tools
- Completed Step 2 **BDI Logic Model** and **SMART Desired Outcomes** tools
- Completed Step 4 **Program Fit Assessment** tool
- Completed Step 5 **Capacity Assessment** tool
- Completed Step 6 work plan, **Work Plan** tool, and **Culturally Appropriate Programs Checklist**
- Completed Step 7 **Process Evaluation** showing successes and challenges of delivering your program
- Summaries of staff and participant satisfaction surveys (if performed)
- Completed Step 8 **Outcome Evaluation** and data summary from fidelity monitoring

To complete this step, you'll need:

- Copies of the Step 9 **CQI Results** tool on the CDC Teen Pregnancy website



Step 9 checklist

Upon completing Step 9, your organization will have conducted CQI assessments of your work and come up with an associated plan for improvement.

- Document successful program activities
- Assess program activities that did not work well overall or for specific groups
- Identify areas for improvement
- Create strategies for improvement
- Increase buy-in within your organization by soliciting and acting on the suggestions of program staff



FYN tackles Step 9

Before FYN implemented and evaluated MPC for the first time, the work group already knew they wanted to conduct a formal continuous quality improvement review of everything they had done so far. They hoped that a CQI review would show what had worked well, what had not worked out as planned, and where FYN could make improvements the next time they ran MPC.

Led by the FYN program director, the adult and youth facilitators, FYN staff and administrators, and work group members met to review how things had gone. They drew upon the materials saved in their three-ring binder, including program information and evaluation results, and walked through the **CQI Results** tool together.

Reasons for conducting CQI

Programs that are implemented multiple times are frequently subject to some kind of review to ensure that the intended benefits are still being achieved. Funders want evaluation results to demonstrate that their funds are well spent, and those involved with implementing programs want to know they are having the desired impact. Even if adequate resources exist to thoroughly study the impact of programs, however, very few get all components correct the first try.

Continuous quality improvement (CQI) is one important aspect of evaluation that can be used to improve a repeated program's effectiveness. You have already done a short form of CQI by performing needed **midcourse corrections** during the implementation. You now have an opportunity to make more substantial improvements in program performance before you repeat it. We sometimes call this **strategic CQI** because it involves a broader approach to improvement. Being conducted *after* a round of your program has been implemented, strategic CQI is also a great opportunity to learn from previous implementation efforts in which program processes and outcomes were well documented (Wilson et al. 2009).

Benefits to the program

Document program components that worked well. Tracking success helps to ensure that future implementations also will be successful.

Assess program components for elements that did not work well. Recognizing weaknesses and failures helps to clarify improvements you can make.

Support program staff by obtaining and using feedback. Useful critique promotes growth and an increasing ability to produce more effective programs.

Benefits to the organization

Support staff and organizational values. CQI is the right thing to do for those interested in offering the most effective services possible for their clients. Participating in CQI activities can also energize people by reflecting on their work and having input into programming moving forward.

Polish the organization reputation. Funding and sustaining an organization may depend on how much an organization demonstrates to the community that it can provide quality services consistently over time.

Boost service delivery and help maintain consistently high quality. Organizations have to invest time and money to satisfy funder and regulatory requirements for data collection. Systematically studying and using data makes good business sense and provides important information on which to base service improvements, thus helping to increase the return on the investment required to collect the data in the first place.

Promote an understanding of program and organization dynamics. CQI participants become more skilled in anticipating and responding to changes in demand for services or resources.

Show ways to use data for smarter, targeted choices. Learning to collect, study, and use data helps organizations better understand the link between internal goals and outcomes. CQI thus informs organizational processes for reaching those goals and outcomes.



Key point

CQI offers an opportunity to make more substantial improvements in the program's performance before you repeat it.

Information to get you started

Now that you've implemented your program, it's unlikely that everything worked exactly as planned. You may not have obtained all the outcomes you had hoped for. You may have run into barriers and challenges along the way that you didn't anticipate. This is all normal. CQI can help you surmount those issues so that your program can grow and improve.

You can use what you learn to adjust and improve your program. Program staff that learn from evaluations and feedback will implement increasingly more effective programs. For example, there may have been challenges with implementation, participant retention, or issues related to fit. CQI tasks can help you decide how to adjust your plan and its implementation so that you continue to move closer to your goals and desired outcomes. They will help you articulate:

- What worked
- What didn't
- What should be changed

The process takes you through a review of your results by having you answer a few key questions associated with the eight preceding steps.



Step 1 Needs & Resources

Are our data still relevant?

Are the needs we're addressing still the most important ones?

If not, do we need to perform another assessment?

Have there been significant shifts in our resources?



Step 2 Goals & Outcomes

Which of our goals and desired outcomes have we achieved and which ones have we not achieved?

Do we need to adjust or change our desired outcomes or reconsider which participants we're trying to reach?



Step 3 Best Practices

Which strategies are producing our desired outcomes and which ones aren't?

Do we need to find new strategies to achieve our unmet desired outcomes?



Step 4 Fit

Do we need to change our assessment of fit with regard to our participants?

Does the program still fit with our organization and stakeholders?



Step 5 Capacity

As we review what's working and what isn't, do we still have adequate fiscal capacities to support the program?

Do we still have adequate staff capacity (e.g., training, qualifications, time) to maintain program fidelity?



Step 6 Plan

Was our implementation plan adequate?

Were our process and outcome evaluation plans adequate?

How well did we follow our work plan?



Step 7 Process Evaluation

Did we implement the program with fidelity?

What mid-course corrections did we make, if any?

Were our process and outcome evaluation plans adequate?



Step 8 Outcome Evaluation

Did we reach our desired outcomes?

Were our process and outcome evaluation plans adequate?



Note

If you're interested in delving even more deeply into the CQI process, look on the CD for **CQI_description.pdf**, an extract from the Healthy Teen Network CQI and Program Sustainability Training.

How to implement a CQI review

The CQI review process is a straightforward, systematic review of your work to see what changes you could make to improve your program the next time around. When you look at those questions for each step, it sounds more complex than it really is. Actually, when you sit down to look over all that you've learned and accomplished, you're asking yourself one basic question:

What can we do better?

Keep in mind that adjustments to improve the functioning of your program need not be major. You may find, for example, that enhancing staff training in their use of some evaluation tools will help you capture more useful detail. Such adjustments can be made as you move ahead with other successful elements of your program.

Prepare the review

Start by establishing a CQI review group from members of your program work group. To ensure that all the tasks get done and changes get implemented, designate one person to lead the group.

Next, engage your program staff in discussions about the CQI process. Help them understand what's coming so that they'll be ready to offer input, which you'll incorporate into your CQI documentation.



Note

Be thoughtful as you plan CQI meetings in which you discuss challenges. Limit participation to those individuals whose input is essential. Emphasize the team approach and a balanced point of view in CQI discussions so that no one feels blamed for something that didn't work. Critique the program based on data; don't critique the people.

The last bit of preparation before you begin is to gather up all the information you want to review (see Materials, p. 9-2). If you don't already have everything you need assembled in a three-ring binder, now is the time to do it.



Memory flash

CQI starts with actions taken in Step 1 Needs & Resources:

Establish a work group.

Collect data. You probably have already gathered most of the material you need.

Make sure everyone involved in the CQI review obtains the relevant material before they arrive at the review session. That way they can get up to speed in advance, which will save time in the meeting. You could also distribute copies of the **CQI Results** tool ahead of time so that people know which issues to think about.



Tool

The **CQI Results** tool is located at <http://www.cdc.gov/teenpregnancy/about/index.htm>. The fictional FYN illustrates its use.

Complete the review

It may take more than one session to complete the CQI review. Depending on the amount of advance preparation you've done, you might be able to complete your review in a long meeting, or you might want to use several meetings or even a daylong retreat to digest everything.

Let the **CQI Results** tool guide you through your materials and select data. The tool is divided into three parts. Because CQI uses a stepwise process, we ask that you carefully follow the tool instructions to accomplish the following:

Needs & Desired Outcomes

1. Match needs identified in Step 1 Needs & Resources with corresponding Measurable Evidence Statements from the **SMART Desired Outcomes** tool in Step 2 Goals & Outcomes.
2. Rate the success and impact (e.g., indicate whether any perceived change was Positive, Negative, or None [didn't occur at all]) with each measure using data in the Step 8 Outcome Evaluation.
3. Determine whether or not further action is required to revisit the program to address negative impacts or missed targets.

Outcome Evaluation

4. Use information in the Interpretation column of the Step 8 **Outcome Evaluation** to indicate the impact of each evidence measure with respect to the desired outcome and the amount of change.



Key point

If you find that there are new needs in the community, you'll have to come up with new goals and desired outcomes targeting those needs as well as different programming, fit and capacity assessments, plans and evaluations.

Process Evaluation

5. Copy data from the Step 7 **Process Evaluation** into the Dates and Participation Targets and Attendance sections, calculating the percent of your priority population that actually attended and the percent of actual participants included in the evaluation.



Tip sheet

Your **Fidelity Tracking** tip sheet from Step 7 may come in handy here.

Planning Program Improvements

6. Make decisions about changes the group needs to institute before implementing the program again. Even if you don't present the exact same program, the information here can inform further programming decisions.



Save it

Save the completed **CQI Results** tool with all your other program documentation. Whether you recreate the current program or choose something else, this information will help you achieve optimum results in the future.



FYN completes the CQI process

Using the **CQI Results** tool, the FYN work group documented its results. Generally, the group agreed that the need for the program still existed and that their goals and outcomes remained the same. MPC, as adapted and implemented, suited the 8th grade participants in the middle school, but FYN wants to expand the use of the curriculum to other grades in the middle school. FYN knows that adapting MPC to fit with younger students will require some work, however, and expansion may take more resources than they currently have.

The more immediate concern with regard to resources was discovering that it took more time and effort than the staff had anticipated to recruit and train peer facilitators. FYN remained committed to having peer facilitators and planned to use the lessons learned to include more time and support for recruitment and training.

Everyone agreed that the time spent developing a detailed, phased in work plan that included process and outcome evaluation plans was time well spent. It paid off in high quality program implementation and good data collection. Next time, FYN wants to concentrate on improving the outcomes that were not met while maintaining those that were.

Although FYN anticipated that involving peer facilitators could be positive for the youth involved, the peer facilitators themselves reported a significantly increased confidence level and improved leadership skills. The FYN program director wants to enlist these peer facilitators next year to help train new peer facilitators. She also wants to see if there is some way to measure the impact of their leadership on the participant experience.

FYN concluded its CQI process by incorporating several changes into the work plan for the next cycle of MPC implementation.



CQI Results

Program: Making Proud Choices Compiled by: Alisha Date: June 11, 2016

Needs & Desired Outcomes

Need Addressed	Measurable Evidence Statement	Outcome Evaluation Result	Action
1.	<i>By the end of the program, 15% of MPC student participants will decrease the frequency of sexual intercourse, as reported on post-tests.</i>	<input checked="" type="checkbox"/> Reached <input type="checkbox"/> Missed <input type="checkbox"/> Exceeded Change: <input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> None	<i>No</i>
2	<i>MPC participants will increase knowledge of HIV/STI prevention, transmission, and protection by 20%, as reported on post-tests.</i>	<input type="checkbox"/> Reached <input checked="" type="checkbox"/> Missed <input type="checkbox"/> Exceeded Change: <input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> None	<i>Yes</i>
...			
8	<i>MPC participants will increase knowledge of problem-solving/ negotiation by 20%, as reported on post-tests.</i>	<input type="checkbox"/> Reached <input checked="" type="checkbox"/> Missed <input type="checkbox"/> Exceeded Change: <input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> None	<i>Yes</i>
...			
22	<i>MPC participants will increase goals, dreams, and beliefs (belief that sexual involvement might interfere with one's goals and dreams for education and career), by 30%, as reported on post-tests.</i>	<input type="checkbox"/> Reached <input checked="" type="checkbox"/> Missed <input type="checkbox"/> Exceeded Change: <input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> None	<i>Yes</i>
...			
30	<i>MPC participants will increase condom use skills and self-efficacy, by 25%, as reported on post-tests.</i>	<input type="checkbox"/> Reached <input type="checkbox"/> Missed <input checked="" type="checkbox"/> Exceeded Change: <input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative <input type="checkbox"/> None	<i>No</i>

Process Evaluation

Dates and Participation Targets

Program dates _____

A. Total priority population: 252

Age/Grade: 8th

Other characteristics: _____

Attendance

B. Total program participants who attended every session 22

Did you maintain fidelity (offer activities according to program requirements)? Yes No

If No, what percent of the program was actually delivered? _____

Process evaluation results

Divide the total at C. by the total at A.

Divide the total at C. by the total at B.

C. Total participants in evaluation: 25

% of target: 10% (C÷A x 100)

% of actual: 88 (C÷B x 100)

Evaluation participants (check all that apply): Facilitators or staff Participants (all) Participants (some) Others peer facilitators

How well does the evaluation represent the population served? (check on): Not at all well Somewhat well Very well

Planning Program Improvements

CQI Questions	Response	Changes for the Next Time
<p>1. Do we need to do another needs assessment? How relevant and current to our participants is the data?</p>	<p><i>No, we just need to be able to accommodate the whole cohort of 8th graders.</i></p>	<p><i>Grow the program</i></p>
<p>2. Do we need to change goals & desired outcomes or potential participants? Target different behaviors? Address other determinants (see BDI logic model)?</p>	<p><i>No, the original overall goal of decreasing frequency of sexual activity and increasing use of condoms for sexually active youth is still relevant</i></p>	
<p>3. Should we consider another evidence-based program? Or are there other improvements we need to make?</p>	<p><i>No. MPC worked well with our youth population, and so for now. We are interested in continuing the work we started with these youth, by continuing to offer sex education programs throughout their high school tenure. We would like to complete this entire GTO process for our youth who have already completed the MPC program, to identify needs, select and implement another evidence-based program, and evaluate it. We are also interested in differentiating the programs we offer based on age/grade.</i></p>	
<p>4. Does the program still philosophically and logistically fit our organization, stakeholders, and participants? If not, why not? What adaptations could be made?</p>	<p><i>Yes, the program continues to meet the needs of many young people as well as those of the parents and the community, but early research indicates that there is a significant developmental difference in how 9th graders (ages 13-14) learn vs. how teens 16 and older learn.</i></p>	<p><i>We would like to complete this entire GTO process for our youth who have already completed the MPC program, to identify needs, select and implement another evidence-based program, and evaluate it. We also want to differentiate the programs we offer based on age/grade.</i></p>

CQI Questions	Response	Changes for the Next Time
<p>5. Do we have the resources and capacities to do the program well? Has there been a shift in resources? Are new staff capacities needed?</p>	<p><i>The most demanding part of the program is time and effort needed to recruit and train volunteer peer facilitators needed to assist in delivering the curriculum. Because we used groups slightly larger than originally used with MPC, we followed the suggested adaptation of using peer facilitators as well.</i></p>	<p><i>We might reconsider this adaptation. MPC is still proven to be effective without peer facilitators, if the groups are small enough. This however, would require more salaried staff support. We will continue to research this option.</i></p>
<p>6. How well did we plan? Any suggestions for improvement?</p>	<p><i>We followed the 10 steps of GTO, which helped us considerably in our planning. In our work plan specifically however, we might add more detail to capture the preparation adult and peer facilitators need to do, beyond initial curriculum training.</i></p>	<p><i>Plan for more preparation time for adult and peer facilitators.</i></p>
<p>7. How well did we follow our work plan? Did we implement the program with fidelity? What are the main conclusions from the process evaluation?</p>	<p><i>Adult and peer facilitators followed the curriculum quite well. As this was their first time using this curriculum, we expect them to be even better facilitators the next time we implement the program.</i></p> <p><i>We did find the staff fidelity logs to be a helpful instrument in understanding implementation successes and challenges, although sometimes we did wish there was more detail there.</i></p>	<p><i>We'll continue to train facilitators, as well as support them more in their preparation to facilitate.</i></p> <p><i>We plan to prepare more staff training on using these logs so that we can obtain even more detail next time.</i></p>

CQI Questions	Response	Changes for the Next Time
<p>8. How effectively did the program help us reach our desired outcomes?</p>	<p><i>We found that the youth who completed the MPC program were more likely to decrease sexual activity, and among those who were sexually active, they were more likely to increase use of condoms.</i></p> <p><i>One unintended, but positive outcome was the increased confidence level in the student leaders as well as improvement in the skills.</i></p> <p><i>While some outcomes were not reached according to our initial outcome objective statement percentages, we realized some participant knowledge and attitude was higher at baseline, and positive change did still occur.</i></p>	<p><i>With just a few changes in our recruitment, training, and program support, we believe we can continue to deliver this program.</i></p> <p><i>With completion of GTO for MPC “graduates,” we believe we can expand this program.</i></p> <p><i>We did realize that we want to make improvements to our outcome objective statements, as well as our survey tools. We want to be able to better capture data relevant to our outcome objective statements, and we want to better capture a range of change (i.e., ask questions using a range/scale rather than yes/no, to capture changes in degree, from baseline). We also want to modify our outcome objective statements to better reflect participant baseline knowledge and attitudes, as well as be more realistic.</i></p>

Applying Step 9 when you already have a program

If you have been delivering a program for some time now, reviewing what you have done to date is a very important step. Using CQI, you can note the successes and challenges you've encountered and examine your program's effectiveness at achieving your goals and desired outcomes. Gather all the information you have available and work with your staff to conduct a CQI review process using the tools provided, because CQI can:

- Reveal ways to keep improving the program so it continues getting better
- Allow you to update your program as circumstances or research changes
- Clarify the factors that contribute to your successes.
- Build confidence among those involved in your program, from staff and volunteers to funders, community supporters, and key stakeholders

Sustainability at this stage

Clearly continued performance improvement will help you better sustain your efforts. CQI can help identify ways to improve the alignment of your program with participant needs, improve program implementation, and identify resources for maintaining or even expanding your work. It can even lead to ways of finding resources.

Lessons learned

Next, in Step 10 Sustainability you'll consider how to maintain and improve your CQI efforts as part of your overall plan for sustainability.

Here are some questions to think about, regarding any lessons learned during CQI that will help you as you proceed:

What factors are out of our control?

Have circumstances or contexts in our community changed and affected our work?

Have the needs of our participants changed; if so, in what ways?

Do larger funding or staffing issues need to be addressed?

The key questions we suggested for your CQI review relate very closely to the specifics of your work and the program you've implemented. In your conversations, however, you may also want to talk about your collective awareness and experience with factors influencing your work, which may be out of your control. By helping you focus on what you can realistically do about those issues within your control, these conversations could help inform the answers to the CQI questions and clarify the path you need to take to improve your work.

Does it make sense to expand CQI throughout our organization?

We hope the advantages of using CQI with a specific program are clear. A commitment to agency-wide continuous quality improvement has obvious internal benefits (e.g., highlighting your successes, improving your work, etc.). We also hope you see some advantages to expanding the CQI process into other areas of your organization, because you may reap benefits outside the organization as well. Community members and other stakeholders, such as funders, will appreciate an organization that is consciously looking for ways to improve its performance.



Save it

Keep taking notes about your findings in the Lessons Learned tool.

Getting ready for Step 10



Throughout this guide we've suggested ways you could think about sustaining your program at each stage of its development. In Step 10, we'll summarize the information and help you get into it more deeply and intentionally.

Before you move on, you might want to take a little time to digest what you've learned. You could hold a meeting with key members of your staff, volunteers, participants, or stakeholders to talk about your conclusions. If you're confident that the program's impact has been completely positive, by all means, proceed directly to Step 10 Sustainability. If, however, your CQI assessment suggests you should make significant changes to your program or change the program you're delivering, we recommend that you carefully consider the alternatives. You may need to go back and re-do some tasks in previous steps.