Continuous Quality Improvement

Part 3: Turning Data into Action for PAF Programs

What's Covered

This is the last of three briefs on continuous quality improvement (CQI). It teaches how to use data to drive improvements to your PAF program. The first CQI brief, "Basics for Pregnancy Assistance Fund Grantees," can be used as a primer or review of what CQI is. For help with data collection, consult the second CQI brief, "Gathering Data to Improve PAF Programs."

Special Features of this Brief

To help bring these concepts together, we added a series of "Grantee Case Study" boxes to show the decision-making process in action. These case study boxes feature a fictional grantee that has collected data and is now deciding what changes to implement. At the end of this brief, we have also added templates so you can apply the skills discussed.
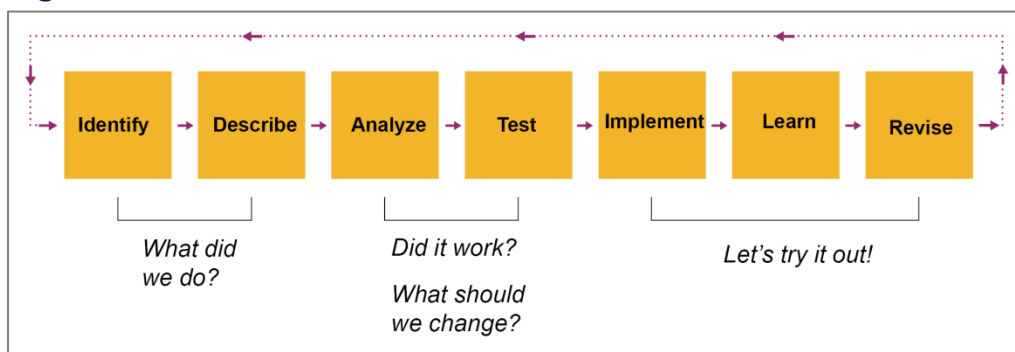
Who Is This For?

These briefs are intended to be used across agencies, departments, and organizations, as well as at the state, regional, and local level. Overall, this brief assumes that the audience has at least some familiarity with CQI, either having read the previous briefs or been engaged in a CQI effort. We will use the term "organization" to describe the entity which is organizing the CQI effort throughout.

Recap of and Location in the CQI Process

As emphasized in the previous briefs, continuous quality improvement (CQI) is unique from other data collection activities, such as program evaluation or reporting, because it uses the collected data to make changes to the program. Once you have gone through the process of collecting your data to "identify" and "describe" your program, you move from the "analyze" phase into the "test" and "implement" phases. See Figure 1 for a review of the basic CQI process.

Figure 1. The Basic CQI Process

Identify → Describe → Analyze → Test → Implement → Learn → Revise

What did we do?

Did it work? What should we change?

Let's try it out!

Prioritizing Program Changes

Organizations collect data in order to answer specific questions; in the case of CQI, those questions relate to your program's quality. These questions strive to "identify" and "describe" your practices as well as any issues around those practices. As noted in the second brief, narrowing your organization's questions to focus on specific aspects of your program can streamline your CQI efforts. Still, unless you only focused on one specific part of your program, you likely found multiple areas where your program could improve. You will most likely address all of these areas over time; however, it is usually neither feasible nor beneficial to try and address all of the improvements at once. Typically, the changes you can and will want to make fall into at least one of these three categories:

- **"Essential" changes**: pieces of your program that, according to your logic model, directly lead to many short-term outcomes or provide numerous outputs that connect to outcomes
- **"High-impact" changes**: pieces of your program that may overlap across different organizations (if combining efforts) or activities as well as those that amplify the program's reach
- **"Low-hanging fruit" changes**: pieces of your program that would be quick to change because they require small adjustments in practice; ideally these would have at least a moderate potential for impact (and it's fine if that impact is cumulative across changes)

Every organization's needs and capacities are unique, which means that what you think is a "low-hanging fruit" and "essential" change may not be so for another organization. There is no right or wrong way to prioritize which issues to address in a CQI effort. However, discussing the data with your CQI team and organization's leadership can help. These questions can help guide your thinking:

- Is this change something that is within our power to adjust (i.e., not a policy or something tied to the broader environment)?
- How much time do we have to make and implement this change?
- Where does this change fit within our logic model?
- If we do not make this change now, how much will it negatively affect the program?
- Will making this change enable us to make other changes more easily later?
- Do we have monetary, staff, and/or other resources available to invest in the change?
- What do our key stakeholders (e.g., funders, participants, staff, etc.) want to prioritize?

Check out the first "Grantee Case Study" box on the next page to see how a grantee might consider these questions. As a reminder, the grantee featured in the "Case Study" boxes is fictional. You can try for yourself, using the first appendix, "What are your priorities?"

Setting Objectives for Your Changes

Once you decide where you want to see improvement, you need to define what changes and what level of change you expect to see. In other words, your CQI team should set objectives for progress. Objectives help put continued data collection in context by providing a reference point to see whether you are getting closer to or farther from your outcomes.

To be most effective, you should strive to make SMART objectives. SMART objectives have the following characteristics/answer these questions:

- **Specific** – What change do I want to see?
- **Measurable** – How much change do I want?
- **Achievable** – Can this change happen within our time, resource, and staff constraints?
- **Related** – Does this change connect to program goals and objectives?
- **Time-bound** – By when should this change have occurred?

The "Grantee Case Study" box on the next page continues with the fictional example of ACME Group and how they wrote a SMART objective based on their identified CQI priority. You can try this out for yourself in the second appendix, "What are your SMART objectives"?

> **Grantee Case Study: Writing SMART Objectives**
>
> Since ACME Group decided to focus on improving the quality of their community mentors, they came together as a group to discuss their goals in this area. A deeper dive into the data showed that youth were more satisfied when they saw their mentor regularly. Mentors who did this often had a standing appointment with youth, instead of scheduling meetings ad hoc. Based on this data, ACME Group wrote the following SMART goal:
>
> *By the end of September (one month into the start of a new program year), at least 85 percent of community mentors will have had an initial meeting with their youth and set a schedule for when they will meet throughout the year. This agreement will be logged in our records as a contract between the community mentor and their youth.*
>
> - **Specific** change: mentors having an initial meeting and setting a schedule for regular meetings with their mentees
> - **Measurable** impact and data sources: 85 percent of community mentors; based on documentation through contracts in program logs
> - **Time** frame where change is **Achievable**: end of September
> - **Relation** to program goals and objectives: improves quality of mentoring program by setting a measure of accountability between mentor and mentee and setting a dose

Making Changes

After setting objectives, you can begin making and testing changes to your program's processes and practices to move toward these objectives. You have several options for ideas that can improve your program. Table 1 below shares different sources of information and examples.

Table 1. Sources for Ideas to Change Your Program

Idea Source and Definition	Examples of How to Access These Sources
Literature: previous research, particularly evaluations of similar programs	• Peer-reviewed journal articles • White papers from reputable organizations • Reports on programs from the government
Evidence-based program lists: directories/databases that synthesize the research to identify models shown to positively affect specific outcomes	• HHS Teen Pregnancy Prevention database • SAMSHA: National Registry of Evidence-based Programs and Practices • Blueprints for Healthy Youth Development • Pew Results First Clearinghouse Database
Peer-learning communities: in-person and virtual platforms that an organization can use to connect with programs similar to them (e.g., other PAF grantees)	• Group TA sessions offered by OAH • Grantee discussion board on MAX.gov or LinkedIn • Professional conferences or networking events
Stakeholder input: solicited responses from the target population, top leadership of your organization, partner organizations, or local organizations with similar missions	• Surveys of stakeholders • In-depth interviews with stakeholders • Town halls or public forums

You can draw from several sources to make adjustments to your program. However, you will want to make changes systematically (i.e., testing out one thing at a time) to avoid wasting resources on ineffective practices or, worse yet, practices that negatively impact your program. Similar to how you prioritized the issue your CQI team is addressing, you want to prioritize changes to your program. At minimum, you should assess how well changes fit these three areas:

1. The population you serve
2. The outcome where you are measuring change
3. Any staff, financial, or other resource/environmental constraints, including policies

This last "Grantee Case Study" wraps up the fictional example of ACME Group, focusing on where it got ideas to strengthen its program. Use the third appendix, "Sources for Change" to document your organization's ideas for sources to improve their program.

Grantee Case Study: Testing Changes

The community served by ACME Group felt that a better, standardized training would help them build the capacity of their mentors. They consulted the Blueprints for Healthy Youth Development and found two different program models to be effective mentoring programs that address school attendance. ACME Group spoke to these groups about their training models for mentors. Since these groups' mentors work with younger audiences than the program's mentors, ACME Group talked to developers, other PAF grantees, and their OAH Project Officer about potential adjustments they could make to these models. They introduced this new training model in the summer to orient both new volunteers and returning volunteers with the lowest satisfaction ratings from the previous year.

What Next? Keeping CQI Going

The CQI process does not end once you decide on a change to your program. In the early phases after selecting an adjustment, you may opt to pilot (i.e., use with a small group) the change, checking to see if you are on the right track. If it appears to work, the CQI team will need to coordinate with implementers to make sure that the practice becomes a routine part of your organization's work, with continued monitoring, as needed.

Even after this adjustment is made, CQI keeps going. If it was a relatively short process (e.g., if you opted to address low-hanging fruit) to make adjustments, you may opt to address one of the issues you de-prioritized from your last assessment. You also could choose to conduct a new assessment to see if other issues have since arisen, which could be true in cases where you started a new program cycle and/or cohort of participants. Maintaining a CQI approach will ensure that your program strategically improves and gets closer to achieving its overall mission.

Key Terms

- SMART objectives: A way of framing the changes you want to see in your program, to ensure that they are specific, measurable, achievable, related, and time-bound
- Literature: Research, particularly evaluations, that can serve as a source of inspiration for program changes
- Evidence-based program lists: Directories/databases that synthesize the research to identify models shown to positively affect specific outcomes
- Peer-learning communities: In-person and virtual platforms that an organization can use to connect with programs similar to their own (e.g., other PAF grantees)
- Stakeholder input: Solicited responses from the target population, top leadership of your organization, partner organizations, or local organizations with similar missions
- Pilot: A test of a change or new program with a small group to check that it works as intended

Resources

- Appendix: Writing SMART Objectives (HHS, Centers for Disease Control and Prevention) – https://www.cdc.gov/tb/programs/Evaluation/Guide/PDF/b_write_objective.pdf
- Developing and Implementing a QI plan (HHS, Health Resources and Services Administration) – https://www.hrsa.gov/quality/toolbox/methodology/developingandimplementingaqiplan/part4.html
- Evaluation Briefs: Writing SMART Objectives (HHS, Centers for Disease Control and Prevention) – https://www.cdc.gov/healthyyouth/evaluation/pdf/brief3b.pdf
- Performance Management and Quality Improvement: Stories from the Field (HHS, Centers for Disease Control and Prevention) – https://www.cdc.gov/stltpublichealth/performance/stories.html
- Promoting Success: A Getting to Outcomes® Guide to Implementing Continuous Quality Improvement for Community Service Organizations (RAND Corporation) – http://www.rand.org/pubs/tools/TL179.html
- QI Programs: The Improvement Journey (HHS, Health Resources and Services Administration) – https://www.hrsa.gov/quality/toolbox/methodology/qualityimprovement/part3.html
- Quality Improvement in Public Health (National Association of County and City Health Officials) – http://www.naccho.org/programs/public-health-infrastructure/quality-improvement
- Straight to the Point: Identifying and Prioritizing Behavior Change Needs (Pathfinder International) – http://pdf.usaid.gov/pdf_docs/PA00HWQ4.pdf

What are your priorities?

Most changes that an organization can make to their programs fall into at least one of three categories:

- **"Essential"**: directly lead to many short-term outcomes or provide numerous outputs that connect to outcomes
- **"High-impact"**: may overlap across different organizations (if combining efforts) or activities as well as those that amplify the program's reach
- **"Low-hanging fruit"**: quick changes requiring only small adjustments in practice

These categories balance the results you want to see against the resources (time, staff, and money/tools) your organization has to invest in making changes. Essential and high-impact changes are more likely to produce bigger results, but low-hanging fruit require fewer resources.

Work with your team and use your data (or copy onto a separate sheet of paper) to fill out the table below with some changes your program could make. If you are not sure of the type of change, you can leave that column blank and use the prompts below to guide your decisions.

Change	Resources Needed	Type of Change
Example: Schedule meetings between mentees & mentors; make sure they happen	*Ex: Form for people to submit schedules and log to check that meetings happen; staff time to fill out forms & follow up*	*Ex: low-hanging, essential*

- Of these changes you just listed, cross off the ones that your organization does not have the resources or ability to change at this moment in time.
- Of the choices that remain, circle those changes that have the potential for the highest positive impact on your programs (based on your logic model).
- Also of these choices (any not crossed out), put a square around those that will be easiest to implement based on your resources.

Are there any overlaps between the choices that are circled or have squares around them? You can further refine your options by consulting the questions in the "Prioritizing Program Changes" section. Based on this exercise, record one to two changes you would like to prioritize for implementation in the next month.

What are your SMART objectives?

Take a look at the changes you prioritized in the "What are your priorities?" activity. This worksheet helps you draft SMART objectives for those priorities. Remember, SMART means specific, measurable, achievable, related, and time-bound.

Priority Change: _____

- **Specific** change: _____

  _____

- **Measurable** impact and data sources: _____

  _____

- **Time** frame where change is **Achievable**: _____

  _____

- Ways it **Relates** to program goals and objectives: _____

  _____

Priority Change: _____

- **Specific** change: _____

  _____

- **Measurable** impact and data sources: _____

  _____

- **Time** frame where change is **Achievable**: _____

  _____

- Ways it **Relates** to program goals and objectives: _____

  _____

Sources for Change

There are multiple sources you can consult:

- Literature: previous research
- Evidence-based program lists: directories/databases that synthesize the research to identify models shown to positively affect specific outcomes
- Peer-learning communities: platforms that an organization can use to connect with programs similar to them
- Stakeholder input: solicited responses from the target population, top leadership of your organization, partner organizations, or local organizations with similar missions

Brainstorm some options in each category to fill in the table below, highlighting which priorities they can help change.

Source to Consult	Type of Source	Priorities Addressed
Example: SAMHSA National Registry of Evidence-based Programs and Practices	*Ex: Evidence-based list*	*Ex: Strengthening mentoring model*