Training Module 4

Continuous Quality Improvement Series

Understanding root causes

This module aligns with CQI Step 1: Planning—Describe a challenge facing your program

This module is part of a series of guidance resources and tools on continuous quality improvement (CQI) developed as part of the Sexual Risk Avoidance Education National Evaluation (SRAENE). The series includes a template to guide CQI work, a set of modules providing detailed information on the steps included in CQI, a tool programs can use to assess their CQI practices and processes, and a brief describing the development process used for the series and lessons learned from a set of Sexual Risk Avoidance Education grant recipients that used the tools during a pilot. For all resources in this series, as well as other resources developed as part of SRAENE, please visit the SRAENE website.

For more products, visit the CQI page on the SRAENE website.

After identifying a challenge, you might be tempted to start generating a list of solutions. But this approach misses a crucial step in the improvement process, which is to develop a thorough understanding of the problem first.

A key step in understanding a challenge is to identify root causes, or the underlying drivers of a problem. This is an important step to ensure you are developing solutions that address the cause of a problem, rather than a symptom of it. For example, imagine you notice poor engagement ratings on youth satisfaction surveys. Poor engagement is not the problem but, rather, a symptom of the problem. Underlying causes or drivers of the issue could relate to the curriculum, your facilitators, the structure of the sessions (such as the types of activities or balance of lecture and discussion), or distractions during sessions (for example, maybe you hold sessions during lunch hour when it's hard to maintain the focus of youth), as examples. You should understand what is driving the poor engagement before developing a solution.

If root causes aren't readily apparent, you could draw on a few techniques to learn more about the challenge before identifying its causes:[1]

- **Look for patterns.** You may have examined data to better define your challenge (module 3). With the help of your team's data lead, explore those data points and patterns to identify root causes. For instance, if you identify engagement as a challenge, is engagement a challenge in all groups or limited to certain subgroups, such as males? If you notice in

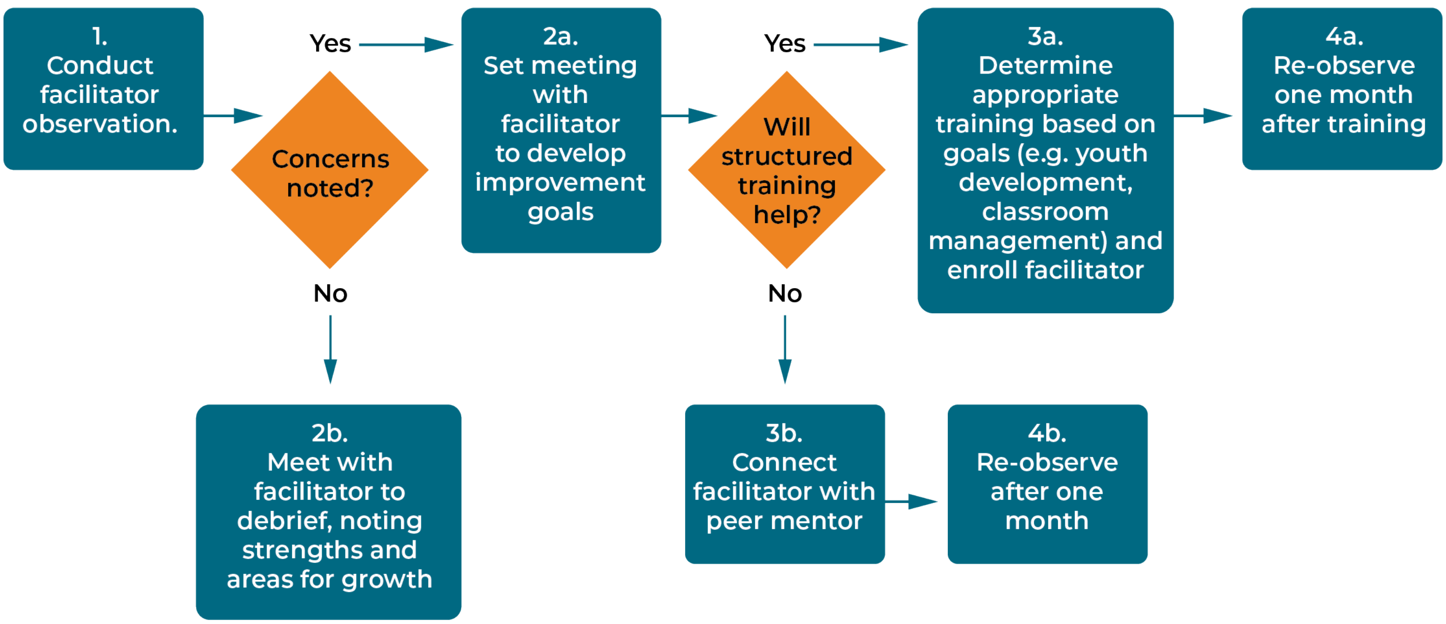
> **"If I had an hour to solve a problem, I'd spend 55 minutes thinking about the problem and 5 minutes thinking about solutions."**
>
> **—Albert Einstein**

[1] Byrk, A., L. Gomez, and A. Grunow. Learning to Improve: How America's Schools Can Get Better at Getting Better. Cambridge, MA: Harvard University Press, 2015; Langley, G., et al. The Improvement Guide: 2nd ed. Chichester, England: Jossey Bass Wiley, 2009.

examining participant satisfaction survey data that males rate the program as less engaging than females do, this is a disparity you can explore more through talking to male participants. Looking at data is often a starting place to generate further questions and investigation into root causes.

- **Map the system.** If your challenge involves sequential steps, process maps can be a useful tool for identifying at which step(s) the process is breaking down. For example, you might suspect that poor facilitation is a driver of your engagement challenge. Figure 1 shows a sample process map for observing facilitation quality and troubleshooting performance issues. To develop the map, you would bring together relevant staff to share how they currently undertake the process and reconcile differences. Write questions under each step about potential obstacles or thoughts for strengthening the process (*in the following example, these are noted in a bulleted list)*. For a more in-depth overview on developing process maps, see this resource.

Figure 1: Example process map reflecting a programs' current process for conducting facilitator observations



In this example, at each step, your team might ask questions, such as:

Step 1. Conduct facilitator observation: Does the program have a clear rubric for assessing strong facilitation?

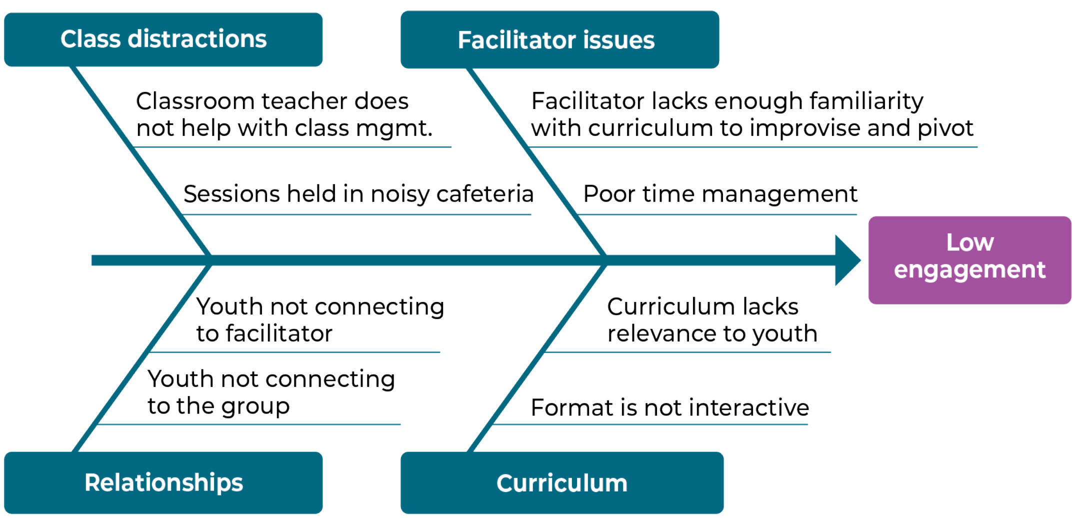
Step 2a. Develop staff improvement goals: How are improvement goals developed? How do supervisors obtain buy-in with facilitators on improvement goals?

Step 3a. Determine appropriate training: How easy or hard is it for facilitators to access needed training? Do facilitators find the trainings to be useful and relevant?

Step 3b. Connect facilitator with peer mentor: Are peer mentors clear about expectations for mentors? Do the mentor and mentee facilitators have time to meet? What approaches do mentors use to share strong practices for facilitation (for example, teach-backs)?

- **Understand participants' experience.** Often the best source of information to learn about a challenge is the experiences of those affected by it. You can learn about experiences by examining information you have for a participant (for example, enrollment, attendance, and logs of outreach from staff) or talking directly with participants, partners, facilitators or other stakeholders involved with the issue.
  - **Sample of one.** Using program data, examine in detail the journey of one participant through your program, from recruitment or enrollment to program exit. Although this experience is unique to the participant being studied, it could help to uncover issues and opportunities for change that would be relevant for all. You might observe, for instance, that when the participant missed a session, outreach from the facilitator did not consistently occur as specified in the program manual.
  - **Empathy interviews.** Go beyond your CQI team to understand challenges. Empathy interviews come from the world of product design, as they are used to understand the experiences of product users. Program participants are the users of your program and can share with your team how they experience it. To better understand an engagement challenge, you might interview a participant who was very satisfied with the program and another who was not to understand their individual experiences. For guidance on conducting empathy interviews, see [this resource](#).

Figure 2: Fishbone diagram example – low engagement



When you have learned more about your challenge, you can use some common tools to facilitate a conversation with your team and document root causes. A fishbone diagram, for example, is a tool to help your team map your understanding of the causes of a challenge (see Figure 2). Below are links to common tools to support root cause analysis:

- [Fishbone diagrams](#)
- [5 Whys](#)
- [Problem tree analysis](#)

Completing the CQI Plan Template

Identify the key root causes that you will work to address in the second column of the **Step 1: Planning** table in the CQI Plan Template. It is useful to prioritize root causes by importance to narrow the focus in developing your strategy.

What are some of the root causes of your challenge?

Get specific about the challenge	What are the root causes of your challenge?	What is your SMART improvement goals?	What data could you use to assess progress?
Our community-based sites are struggling to recruit youth into the core SRAE workshops. Our goal for the community sites is 40 youth per quarter; in the past three quarters, we have averaged 22 youth per quarter. We are struggling the most with older youth, as 17–20-year-old youth comprise just 25% of our total served in community sites. This is a problem because rates of teenage pregnancy are above the national average in our community and, in a needs assessment, our program identified a lack of pregnancy prevention program options for this age group in our community.	**Curriculum:** • Content is not appealing to older youth **Recruitment:** • Current outreach locations are not suitable for finding older youth • Marketing materials and outreach strategies aren't appealing to older youth **Program structure:** • The program is held during times when many older youth have other activities/sports		

**Note that the greyed-out boxes are completed in subsequent modules.*

Title: Continuous Quality Improvement Training Modules

November 2022

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Contract Number: HHSP233201500035I/HHSP23337031T

Suggested citation: Buonaspina, Annie, and Brittany Tabora. "Continuous Quality Improvement Training Modules." Washington DC, Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.