SRAENE
Sexual Risk Avoidance Education
National Evaluation

November 2022

Continuous Quality Improvement (CQI) Training Modules

Introducing CQI

What is CQI? CQI is a process for identifying and describing challenges; developing, testing, and assessing solutions; and monitoring progress toward improvement goals. More simply:

It's **continuous**. Because we can always improve in some way, this is an ongoing process of learning and refining with no end point.

It focuses on **quality** implementation. If your team monitors only change in performance without focusing on the how and why of implementation processes, you won't know how to interpret change in performance or how to improve on it.

The goal is **improvement**. You want to see change in performance for the better. Even if you haven't yet achieved your goal, if you are moving in the right direction, that's a success you can build upon for further refinement.

How to use the CQI training modules

This set of training modules is designed to accompany the Sexual Risk Avoidance Education (SRAE) CQI Plan Template, which is a tool to help your team to plan and implement continuous quality improvement to strengthen programming. The modules contain foundational information about key steps in the CQI process, as well as workbook-style questions to support your team in applying the steps to your program.

The series of modules begins with a focus on building a strong infrastructure and then walks through each step in the CQI process and describes how those steps align with the elements of the SRAE CQI Plan Template.[1]

[1] The CQI Plan Template and other content in the modules were informed by a similar template developed for the Office of Family Assistance to be used by Healthy Marriage and Responsible Fatherhood (HMRF) grantees.

OPRE
FYSB Family & Youth Services Bureau
Mathematica Progress Together
Public Strategies

Contents

Training Module 1

Continuous Quality Improvement Series

Introduction to Continuous Quality Improvement (CQI)

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.

What is CQI?

CQI is a process for identifying and describing challenges; developing, testing, and assessing solutions; and monitoring progress toward improvement goals. Programs will have more success conducting CQI if they have a strong infrastructure to support it, including strong program monitoring processes and a culture that supports learning and innovation. This module situates CQI within a larger performance management process (that includes program monitoring plus CQI) and provides suggestions for developing strong monitoring processes and fostering a learning culture.

Contextualizing CQI – CQI as part of a performance management plan.

Performance management is an overall process of using data and evidence for improvement that includes both program monitoring and CQI. Program monitoring consists of defining outcomes and how to measure them, collecting data and evidence to track these, and learning through ongoing review. CQI is a systematic process for learning about challenges and developing solutions to address them. The four steps within the performance management cycle are next described. The first three steps—define, measure, and learn—support effective program monitoring, while the final step—improve—focuses on CQI

Define: *What are your priority outputs and outcomes?* Outcomes are what you want to achieve as a program. Outputs focus on the actions your program takes to achieve the outcomes (for example, the number of a type of service provided).

Measure: *What data and information do you need to monitor outputs and outcomes and how will you collect it?* Consider how you will track whether you are achieving outputs and priority outcomes based on benchmarks you set, what tools you will use to collect information (survey, administrative data, etc.), and what staff will be responsible for tracking key data points and the timing of data collection.

Learn: How will you use the data to review priority outcomes? It can be helpful to develop a data sharing plan to identify how you will share and learn from data. For example, you could specify:

- Who needs to see specific data points (audience)
- What data points/outcomes you will share
- How often you will share the data
- Your method for sharing the information, and
- The purpose for or intent behind sharing the data

Below, Table 1 provides an example of a data sharing plan, which can help your team keep track of who needs to see which data points or outcomes and when.

Figure 1: Performance management cycle

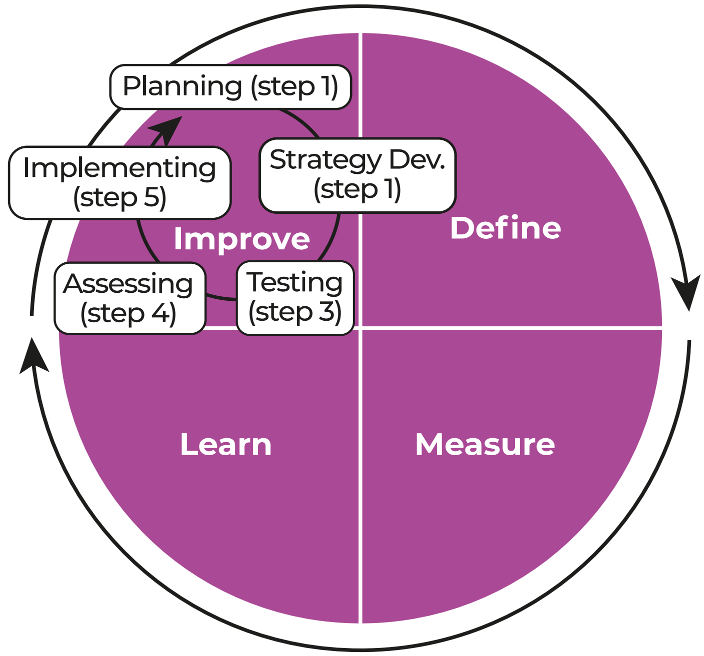

Table 1: Sample data sharing plan

Audience	Data source	Frequency	Methods for sharing information	Purpose
Frontline facilitators	Aggregated data from fidelity logs	Biweekly	Report emailed to all facilitators; discussed in supervision	Troubleshoot fidelity issues
Site partners	Results from youth satisfaction surveys	Twice a year	Data shared via biannual meetings with partners/staff	Discuss improvements; demonstrate progress
Participants	Aggregated results from pre-post survey	Quarterly	Results shared during participant focus groups	Assist with interpreting results

Improve: *When you identify an issue via program monitoring (or through other means, such as ongoing feedback loops with staff, partners, or clients), how will you address it through your CQI process?* The SRAE CQI Plan Template walks grantee teams through one approach to continuous improvement. Teams may also use other approaches; see the SRAE CQI pilot brief for broader principles of strong CQI. In the modules that follow, you can explore:

- **Step 1: Planning** (defining a challenge; developing a SMART improvement goal; understanding root causes)
- **Step 2: Developing strategies** (improvement strategies and rationale)
- **Step 3: Testing** (introduction to road testing; learning questions; data collection and analysis plan)
- **Step 4: Assessing** (assessments and reflection questions)
- **Step 5: Implementing** (communication plan considerations and monitoring progress)

CQI culture.

A culture that supports CQI – for example, one in which leadership set expectations for data use and learning and invest in staff capacity – is an important element of the infrastructure needed for an effective CQI system. Specific factors that can foster a culture of curiosity include:

- **Leadership**
  - Leading by example by using evidence to drive organizational decisions
  - Sharing data on priority outputs and outcomes widely; celebrating successes and solicit ideas for improvement
  - Fostering an environment in which it is safe to fail; both successful and failed strategies contribute to learning about what works; staff need to feel safe and empowered to suggest ideas for improvement
- **Organizational expectations**
  - Building expectations for using data and evidence for decision making into job descriptions
  - Setting expectations when bringing staff on board to engage in program monitoring and CQI
- **Staff capacity to engage in CQI**
  - Ensuring staff have time and resources to use data and engage in CQI
  - Providing staff training on program monitoring and CQI

For a self-assessment on learning culture and other elements that support CQI, see the SRAE CQI self-assessment.

Defining your core CQI team

This module aligns with the Information and Coordination section of the CQI Plan Template.

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.

Your CQI team is primarily responsible for overseeing and implementing the steps in the CQI cycle. Although other staff in your program should be involved in parts of the CQI process—for example, brainstorming solutions to test—the designated CQI team will carry the work forward. Use the CQI team table in the **Information and coordination** section of the CQI Plan Template to ensure you have team members who can fulfill the role of team leader, improvement advisors, and data lead, as described in Table 2. In addition to filling key roles, consider the perspective each person will bring to the team. This resource from the Community Engagement Toolkit can help ensure you're including diverse voices in your CQI work.

Considerations for setting up a team.

Make time to set team agreements or draft a charter to be clear on expectations and procedures. What might you include in an agreement to guide the CQI team?

- **Specify goals for the CQI team and set boundaries**. For example, if your program is conducting a local evaluation, how does the work of the CQI team complement, not duplicate, the work of those overseeing the evaluation? Will the CQI team also be responsible for monitoring program outcomes, or does that responsibility fall to other staff? (for more on this, see "the broader context" section below)
- **Outline participation and internal team communication expectations.** For example, how often will you meet and when?
- **Designate roles and responsibilities.** For example, what are the responsibilities of improvement advisors?
- **Outline communication plans with program stakeholders.** For example, who needs to be made aware of CQI findings and when?

For additional resources related to CQI teams, including an agreement template, visit the public HMRF grantee resources site.

Table 2: Roles and responsibilities of the core CQI team

Role	Who?	Responsibilities
Team leader	This should be someone who has an understanding of the program's goals and has the influence and interest to lead these efforts. Often it will be someone (or two people) in a program leadership role.	Organizes and oversees the CQI process (including developing improvement goals, identifying challenges, developing solutions, monitoring implementation and testing) and communicates progress
Improvement advisors	Facilitators should have representation on your team as improvement advisors. Improvement advisors could also be program partners (such as school representatives), youth participants or parents or guardians, or other community stakeholders (such as service providers and others who can speak to broader need and demand in the community).	Develop targets and improvement goals; contribute to understanding challenges and identifying root causes; support development of improvement strategies; support staff outside the team on implementing new strategies; monitor implementation and testing
Data lead	This should be an internal or external evaluator, data analyst, or any staff member with strong analytic skills.	Oversees data collection; analyzes data to measure progress on goals; presents results to core CQI team and others; monitors implementation and testing

Training Module 3

Continuous Quality Improvement Series

Defining the challenge

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.

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When you identify a programmatic challenge, a good first step is to craft a challenge (or problem) statement to describe the challenge in detail. This may require examining data for your program to learn more about the challenge. More specificity will help to you to refine your challenge statement. For instance, instead of identifying that *recruitment is a challenge, your team could develop more targeted insights by exploring for whom is recruitment a challenge or when and where do challenges with recruitment develop.* Explore data on your program to understand who is being recruited and who is enrolling in the program, and then assess how this compares to your program's recruitment and enrollment goals and expectations.

For example, you might learn that your program is doing very well at recruiting younger youth but struggling to attract older youth to the program. Your more specific question would be "Why is the program struggling to recruit older youth?" Specifying the challenge will set the team up to develop more targeted solutions.

Your CQI team should pick one challenge or issue to focus on at a time, as this enables the team to focus its attention on resolving one issue and avoid spreading team members too thin. Consider which issue is most pressing or most hampering your ability to operate an effective program.

Completing the CQI Plan Template

If you are using the CQI Plan Template, start by entering your high-level challenge in the Information and coordination section of the CQI Plan Template. This should be a brief description of the challenge identified. Use the questions below to get specific about your challenge and be clear on why it needs to be addressed.

What is the challenge? Start by considering your high-level challenge in the box below. You can enter this into the Information and coordination section of the CQI Plan Template.

Next, break down the challenge. Consider, for example, for whom is this a challenge? When does the challenge present itself? Where does the challenge present itself? If you have data to support the challenge, include it in the description of your challenge. *Example: The program has trouble recruiting older youth.*

How does this challenge affect the people involved? Rather than focusing on abstract challenges, it can be helpful to identify t*he effects of the challenge on people. Example: Older youth have the potential to benefit from the program but aren't being reached.*

Why is it important? Thinking about the effects, explain the importance of the challenge to specify any consequences of not addressing the issue. This will help your CQI team to get on the same page about the importance of addressing the issue. *Example: Our program identified a need for SRAE programming in the community for younger and older teens, but it is particularly acute for older youth. If the program is not able to reach these youth, they will continue to engage in risky behaviors that limit their potential.*

Pull together the information and enter your challenge description in the first column of the **Step 1: Planning** table. Below is an example illustrating the level of detail that is helpful to include about your challenge in the CQI Plan Template.

Step 1: Planning.

Get specific about the challenge	What are the root causes of your challenge?	What are your SMART improvement goals?	What data could you use to assess progress toward the goal?
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.			

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

Understanding root causes

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

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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

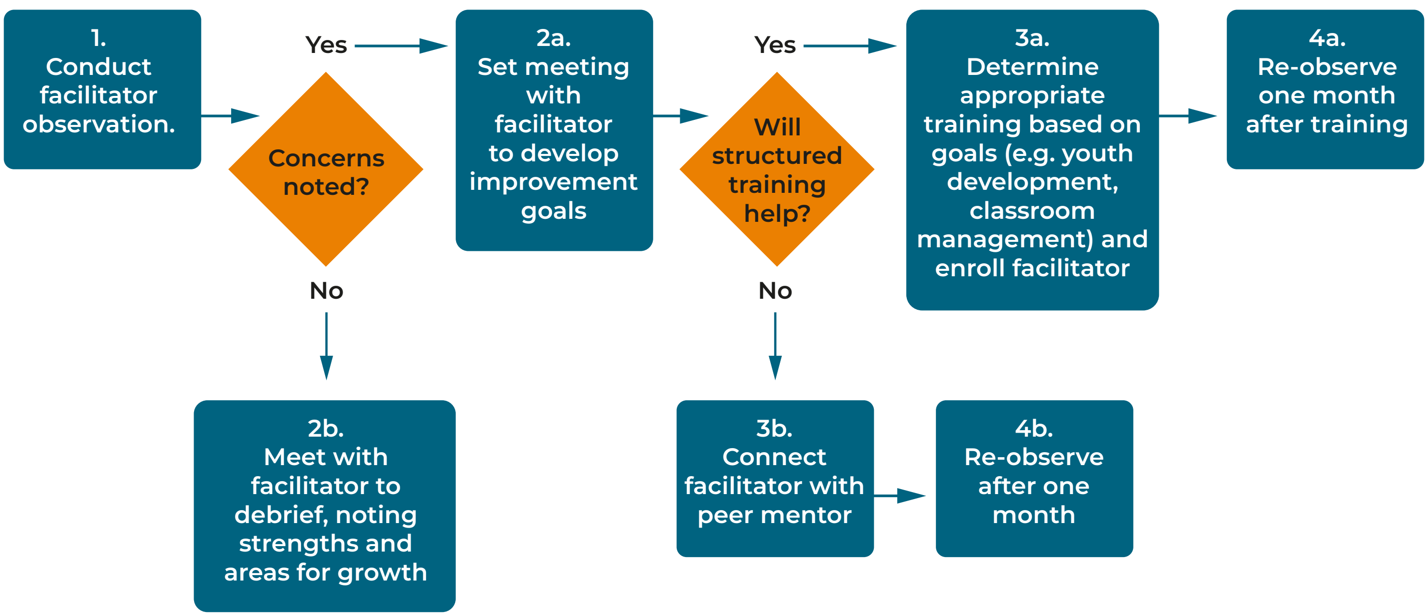
> **"If I had an hour to solve a problem, I'd spend 55 minutes thinking about the problem and 5 minutes thinking about solutions."**
>
> **—Albert Einstein**

[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 2 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 2: 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?

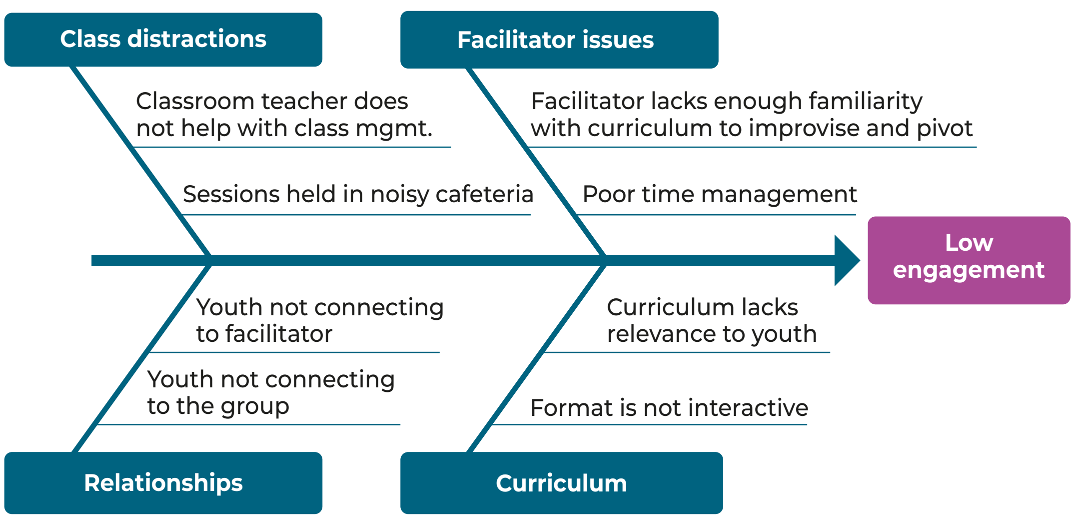
Step 2a. Develop staff improvement goals: How are improvement goals developed? How do supervisors obtain buy-in with facilitators on improvement goals?

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 3: 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 3). 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 preg-nancy 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.*

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Training Module 5

Identifying a SMART improvement goal

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

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A key first step is to specify your improvement goal as a team. This goal should be a response to the question, **what are we trying to accomplish?** An improvement goal needs to be specific, measurable, attainable, realistic, and time-bound (SMART). It should specify how much, for whom, and by when. This goal will serve as your north star as you test different strategies to address your challenge, as it gives you a way to gauge whether the team is making progress.

Example Problem: Youth are not engaged with the programming.

Goal 1: Improve youth engagement with the program

Is it SMART? ✗

Goal 2: Improve youth engagement with the program, as measured via participant satisfaction surveys, from 65 percent of youth rating the program as engaging to 90 percent of youth rating the program as engaging.

Is it SMART? ✗

Goal 3: Improve youth engagement with the program, as measured via participant satisfaction surveys, from 65 percent of youth rating the program as engaging in fall 2021 groups to 90 percent of youth rating the program as engaging in spring 2022 groups.

Is it SMART? ✓

Setting a SMART improvement goal serves two main purposes. First, it helps members of the CQI team agree on what needs to be improved and by when. Second, it creates a measurable target the team can use to assess the success of improvement efforts.

After creating a goal, you should also note what data you can use to determine progress on the goal. Data should be measured over time to understand whether your program is seeing improvement as you undertake your improvement efforts. Seek data sources that are quantifiable and feasible to track at multiple points in time. Avoid data sources are not easy to quantify (e.g., interviews) or feasible to track repeatedly (e.g., long surveys).

> **"Whenever you want to achieve something, keep your eyes open, concentrate, and make sure you know exactly what it is you want. No one can hit their target with their eyes closed."**
>
> **—Paulo Coelho**

For the example above related to youth engagement, you could decide to start tracking a stand-in measure for engagement – for example, the number of students verbally participating in class each session – or use an existing measure – for example, youth satisfaction survey ratings or program attendance.

Completing the CQI Plan Template

In the third column of the **Step 1: Planning** table in the CQI Plan Template, write your improvement goal. Use the template below for support in developing a SMART goal:

Our goal is to:

Increase/decrease: ________________________________ (outcome)

From: ________________________________ (baseline)

To: ________________________________ (goal)

By: ________________________________ (date, timeframe)

For/In: ________________________________ (population, program component)

Check with key stakeholders to ensure the goal is relevant and attainable!
Adapted from the Institute for Healthcare Improvement

In the example below, the CQI team sets a short- and long-term goal, which is an option for both specifying your overall definition of success (long-term goal) and your quick win (what does success look like near term?). The team also sets a goal for the specific population of interest to understand whether strategies to improve outreach to older youth are having an influence.

In the final column, note that data source you can use to assess progress toward the goal.

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 preg-nancy 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	Our goal is to increase the number of youth in our community-based sites from 22 per quarter to 40 per quarter within one year. In the short-term, the pro-gram aims to increase from 22 youth per quarter to an average of 28 per quarter within three months. The program aims to increase the percentage of 17-20-year-old youth served out of total youth from 25% to 35% by next quarter.	We will track enrollment numbers to determine if the program is hitting targets. We will also track demo-graphics of those enrolling to understand whether we are increasing the percent-age of 17-20-year-old youth being served.

Improvement strategies and rationale

This module aligns with CQI Step 2: Strategy development—Ideas for Improvement

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After you've identified root causes of your challenge, your team is well poised to develop specific strategies to address them. For a challenge like engagement, you might have identified several root causes. Prioritize these root causes with your team based on the potential impact and level of influence you believe your team has to address them. Root causes that would be very impactful to address and are within the program's control should be top priorities for strategy development. Consider bolding the priority root causes in the **Step 1: Planning** table to be clear on what you will address with your current effort.

Improvement strategies should be designed to address root causes rather than high-level challenges, as this will allow your team to develop targeted strategies. Most challenges stem from multiple root causes, meaning that a single improvement strategy is not likely to resolve the issue. But an improvement strategy could help to make progress on the challenge. Adding strategies over time then can address other root causes. CQI is about making small changes over time to support long-term improvement.

Where to look for improvement strategy ideas?

Strategy development will likely start with your core CQI team. But if you're struggling to develop ideas, there are additional resources:

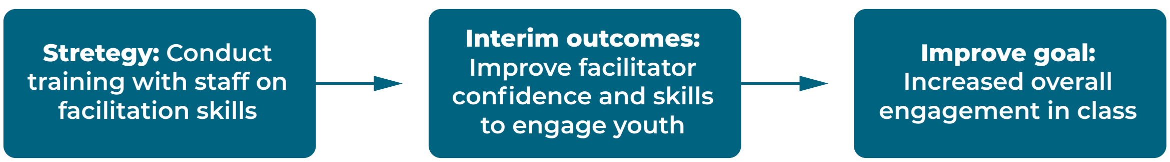
- **Your staff and program participants.** Staff and participants are closest to the program and in the best position to offer thoughts for improvement. Support structured brainstorming with tools like the Creative Matrix.
- **Other providers.** Draw on the network of other SRAE grantees for ideas or reach out to other youth providers in your community (many implementation challenges for youth programs will be common across program types). Reach out to your project officer to identify other grant recipients who have worked on similar issues and to facilitate a connection.

- **Draw on online resources for *research-based* ideas**, like [this RAND guide], [this University of Wisconsin brief], [this Mathematica brief] related to recruitment and retention strategies, or [this site] that summarizes research-based practices for enhancing family engagement.

Developing multiple strategy ideas is encouraged. However, if you have several ideas, consider prioritizing them using an effort-to-impact matrix. This tool allows you to rank strategies by feasibility and impact and vote on the first to test (Module 7). For an overview on the tool, visit [this site].

Lastly, once you have a prioritized strategy, a good check for your team is to specify the rationale for why this strategy will work (see Figure 4). Think about how your strategy might influence staff or participants' behaviors, attitudes, or skills in a way that will help to achieve progress toward your improvement goal. Stating your rationale is important for two reasons: 1) It is a good check to ensure that the strategy you developed makes sense, and 2) measuring the interim outcomes in the middle box is useful for assessing the assumptions of your strategy (e.g., does the training improve facilitator confidence, and will enhanced confidence improve student engagement?) and provides a way to assess early promise before you might expect to see progress on your improvement goal, which is often longer term.

Figure 4: Mapping a strategy rationale



Example: Stating your rationale

- **Improvement goal:** Improve ratings of engagement on participant satisfaction surveys from 65 percent to 90 percent from the fall to spring semester.
- **Root cause:** You learn that poor classroom management is a barrier to engagement.
- **Improve strategy:** Train all facilitators in classroom management, including how to address disruptive students and retain attention (the improvement strategy).
- **Rationale:** Equipping facilitators with these skills will reduce distractions and enable students to focus on the content, thus enhancing their engagement with the course.

Completing the CQI Plan Template

In the [CQI Plan Template], complete the table under **Step 2: Strategy development**. Use the space below to brainstorm improvement strategy ideas.

What are your team's strategy ideas to address the root cause your prioritized?

If you develop multiple strategy ideas for the same root cause, you can enter each strategy in a different row in the strategy development table. List all your team's ideas in the table, even if you are just testing one, as you may come back to promising strategies later and it is good to have them documented. Below is an example of what the completed template for **Step 2: Strategy development** could look like, starting with the prioritized root cause, then listing the prioritized improvement strategy to address the root cause, and then noting the rationale for how the strategy will influence the root cause and support progress on the team's improvement goal.

Root cause	Improvement strategy	How might the strategy lead to improvement?
Marketing materials and outreach strategies are not appealing to older youth	We know that youth who participate in the program enjoy it and gain value from it. We will develop program champions, drawing on youth alumni of the program, to make the pitch for the program to other youth.	We learned that older youth are skeptical about the value of our program. However, youth who participate provide very positive feedback. By using peers to deliver recruitment messages, we increase credibility about the value of the program (interim outcome), which will then lead to more success in recruiting (improvement goal).

Training Module 7

Continuous Quality Improvement Series

Road test—Strategy implementation plan

This module aligns with CQI Step 3: Road testing—Try a strategy and learn how to improve it

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.

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A road test is a way to pilot your strategy on a small scale to understand feasibility of implementing, user experiences, and early promise. Road testing involves three key steps: Specify the strategy; develop learning questions; and develop a testing plan. The steps are detailed below.

1. **Specify the strategy.** As noted in Module 6, after brainstorming strategies, your team should prioritize one. Testing one strategy at a time will reduce burden on staff who will be responsible for supporting implementation and data collection responsibilities. Testing strategies individually also allows your team to tease out the practices that are most promising; if you bundle strategies together, it may be more difficult to understand what made a difference. If you must test multiple strategies at the same time due to time constraints, know that you are testing the promise of the bundle of strategies rather than individual practices. Once you pick a strategy to test, it is important to specify the details of how you will test it. For example, which staff are responsible for carrying it out, how often will it be implemented, what training or tools are required to support staff in implementing it? Being clear on the components of the strategy will help your team to understand which parts work well and which parts need refinement.

2. **Develop learning questions.** Learning questions make clear what your team hopes to understand about the strategy in order to inform refinement and assess promise. Specifying learning questions also helps to frame the scope of your road test and make clear what you need to find out through data collection and analysis (Module 8).

When considering what questions to ask, think about implementation, early outcomes, and broader context. CQI involves three types of measures:[1]

- **Process questions** (implementation): What happened? How was the strategy implemented?
- **Outcome questions** (early outcomes): What changed? Outcome measures for road tests will be short-term changes that will help achieve your improvement goal but are not your improvement goal itself. Think about what you wrote in the **Step 2: Strategy development** table in the CQI Plan Template about the kinds of behavior, skills, or attitude changes you expect to see as possible outcome measures.

> "Without questions, there is no learning."
>
> —Edward Deming

- **Balancing questions** (broader context): Were there any unintended impacts? Strategies aren't implemented in a vacuum and, thus, can affect other parts of the system. Ensure your learning questions guide your team to uncover unintended impacts.

Learning questions for a road test should focus on the feasibility of implementation and early outcomes (for example, changes in attitudes or behaviors) rather than effectiveness. They might focus on process considerations, short-term outcomes, or unintended consequences. Your learning questions can be documented in **Step 3: Road testing** section of the CQI Plan Template.

Examples of road test learning questions.

Suppose your program wants to use youth program champions, as noted in Module 6. The team should develop a detailed implementation plan that considers the types of youth participants who would be ideal program champions; how staff will prepare and/or train youth to message the program effectively; how staff will incentivize and track referrals to the program; and how staff will support youth as they take on their role as champions for the program. The following are examples of helpful learning questions and one to avoid:

✔ What kinds of youth are interested in and enthusiastic about being program champions?

✔ How did the program prepare youth program champions to support recruitment efforts and was it sufficient?

✔ What strategies do youth program champions use to connect with their peers? What are the benefits of using youth to support recruitment?

✘ Is the use of youth program champions an effective strategy for increasing enrollment?

The question marked with an X is not a helpful learning question because road tests aren't designed to produce causal evidence of the effectiveness of a strategy. Their purpose is to enable your program to prototype a strategy, resolve usability issues, and assess whether it shows promise before launching it program-wide. For more on road testing, see the Learn, Innovate, Improve practice brief.

3. Develop a testing plan (Module 8). The final step is to develop a testing plan, which involves specifying test logistics and a data collection plan. Module 8 contains more information about a testing plan.

[1] Langley, G., et al. The Improvement Guide: 2nd ed. Chichester, England: Jossey Bass Wiley, 2009.

Completing the CQI Plan Template

In the first table under **Step 3: Road testing** detail your strategy and learning questions. For a sample road test, see **Appendix B**.

Specify your strategy. Note details about the parts of your strategy (e.g., duration, frequency, staff responsibilities, technology/training)	**Develop learning questions. What do you want to learn about how the strategy works?**
We will develop program champions, drawing on youth alumni of the program, to make the pitch for the program to other youth. We will provide information to youth alumni to ensure they know how to message the program appropriately. One full-time staff person will be responsible for managing program champions to ensure they receive referral incentives and are supported with any questions.	What are the characteristics of youth who are a good fit to be program champions? How did the program prepare youth program champions to support recruitment efforts and was it sufficient? What strategies do youth program champions use to connect with their peers? What is the value add of using youth to support recruitment?

Road test - Testing plan

This module aligns with CQI Step 3: Road testing—Try a strategy and learn how to improve it

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After you have detailed your strategy implementation plan and developed learning questions, your team is ready to plan the test. This includes specifying logistics related to testing and a data collection plan to respond to your learning questions.

Logistics

Be clear about how long the test will run. Road tests are often short, though they could be as short as a day or as long as a few months, depending on the nature of your strategy. For example, if your strategy is to conduct monthly trainings to support recruitment staff, you would need to allow the road test to extend for a few months to be able offer and learn from more than one training. If you want to test a new intake form, you might ask intake staff to use it over the course of a day as they enroll new participants and provide feedback at the end of the day.

In addition to length of the test, you should also be clear on overarching roles and responsibilities. Consider designating someone from program leadership to oversee the test and ensure staff are clear on expectations, and another staff person to manage day-to-day tasks, such as printing feedback forms and delivering them to the correct sites; answering questions staff implementing the strategy may have; and monitoring the schedule.

Data collection plan

A strong data collection plan will list activities to answer your learning questions and specify the details for carrying them out, including who will conduct each activity, when, and how often. Consider what data you need to collect to respond to the learning questions and understand how the strategy is working. This usually involves collecting feedback from those involved with implementing or receiving a strategy. When developing a data collection plan, keep in mind that you want to collect just enough information to respond to the learning questions, while attempting to limit burden on staff and participants.

Common data collection activities and sources to support road testing include the following:

- **Questionnaire or survey.** Surveys are useful when you need to gather opinions or perspectives from a large number of people (for example, an entire workshop or class) and/or you want to understand implementation or early promise by asking about changes in attitudes, behaviors, or knowledge.
    - When using for road testing, keep the survey short by limiting questions to those you need to ask to understand how a strategy is working
    - Ensure questions are primarily close-ended rather than open response
- **Focus group or interview.** Focus groups and interviews are good when you need nuance or detail that can't be provided via close-ended questions. For example, to understand the *why* (*why did you enjoy the class?).*
    - Determine if a focus group or one-on-one interview will allow you to understand the range of experiences from those who experienced the strategy. Both data collection activities are typically done with just a subset of staff or participants, so can be less representative than well-executed surveys

Interview types.

Two main types of interviews are structured and unstructured. Structured interviews consist of standardized, predetermined questions; unstructured interviews are not guided by questions developed in advance. If your goal is to learn about a range of thoughts, feelings, or experiences with a process (for instance, as part of a road test), you should ask the same, predetermined questions of all staff or participants (a structured interview). If your inquiry is more exploratory—for example, to investigate root causes of a challenge—then you might leave the interview unstructured to allow information to emerge organically.

- **Observations.** Observations can be useful when you would prefer to see behaviors directly rather than relying on self-report data from participants or staff. For example, if you are implementing new energizers into a class and want to understand their influence on engagement, rather than conducting a survey to query students' reactions, you would observe the energizers directly to assess whether student engagement meets your expectations.
    - If using road testing, keep in mind that observations are point-in-time. Assessing student engagement for energizers used in Lesson 2 won't provide any information about level of engagement in prior or subsequent classes. Consider picking a sample of classes to observe, if your team has the capacity.
- **Administrative data.** Existing data is good when you need to understand outputs or efforts; for example, how many individual service contacts did staff have with clients last week? Using existing data is also preferable when it can answer a learning question, because it doesn't require any additional effort. However, because it is not collected to assess your strategy, it may have limitations in the extent to which you can use it to respond to your road test learning questions.
    - For road testing, administrative data may be particularly useful for understanding implementation. For example, you might examine the number of case management meetings staff inputted into your internal data system to determine whether all staff met a new expectation to have one case management meeting with each participant each week.

For tips and considerations about designing and administering data collection tools to support learning cycles, or periods of feedback during a road test, see **Appendix A** in this set of modules.

Completing the CQI Plan Template

Use the open text box under **Step 3: Road testing** to detail your logistical plan for the road test. In the data collection table that follows, map out how your team plans to respond to each learning question. In each row, specify the data collection activity you will use to answer one or more of your learning questions. Be specific about the plan and purpose (*see example in the table below*). It's also useful to think ahead about how you will analyze the data collected as part of a road test to ensure someone has the time and capacity to generate insights from it. For example, data gathered from focus groups and interviews can be very valuable but also potentially time consuming to analyze. If conducting a survey, ideally, you can administer with an online program, such as Google Forms or Survey Monkey. But if you must use paper, it is important to ensure someone on staff will be able to input the data so that it can be analyzed in a timely fashion.

Specify your implementation plan. Be clear on start/end dates for your road test and where and with whom you will pilot the strategy.
We will start by recruiting and training three program champions. The test will run from January 1 to Jan. 31. At the conclusion of the test, we will gather feedback from youth champions to understand how the strategy worked and gather suggestions for improvement.

Learning question	**Data collection activity (method/ tool, respondents, point person)**	**Analysis plan (when and how will you analyze?)**
What are the characteristics of youth who are a good fit to be program champions? How did the program prepare youth program champions to support recruitment efforts and was it sufficient? What strategies do youth program champions use to connect with their peers? What is the value add of using youth to support recruitment?	• Interviews with youth program champions at the end of the road test (after 2 months of testing). • Focus group with newly recruited youth to understand their experiences interacting with youth program champions. • Administrative data tracking of the referral source for all new enrollees to understand promise of the youth strategy.	Data analyst will record the interviews/focus group and take notes. She will review the notes and highlight key themes related to challenges, successes, and opportunities for refining the strategy. She will also analyze the referral source data to understand whether the number of referrals coming from youth champions meets expectations.

Assessments and reflection questions

This module aligns with CQI Step 4: Assessing—Reflect on learning and how to move forward

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When analyzing road test data, you should aim to respond to your specific learning questions and reflect on the strengths, challenges, and lessons learned related to the strategy. Your team should reflect on what happened—for example, what worked consistently well or not well—as well as next steps based on what you learned, such as how to build on aspects that worked well or how to address challenges.

Over the course of conducting a road test, you might collect a mix of quantitative (for example, surveys) and qualitative (for example, focus groups) data. You need to synthesize all your data points to answer your learning questions. You can analyze and present most quantitative data sources, such as program administrative data or surveys, with simple descriptive statistics. You should code qualitative data, including focus group and interview transcripts, for themes (for a brief primer on qualitative analysis, see this video). A synthesis matrix can help to organize multiple data sources and understand what you learned about key themes or questions from each data source. For examples of an analysis plan and a synthesis matrix, see the improvement example in Appendix B.

In **Step 4: Assessing** in the CQI Plan Template, insert your top three (or more!) insights from the road test below using the format of "We learned that …" statements. In addition to considering your learning questions, use the high-level reflection questions below to help distill lessons learned:

- What seems to have worked consistently well and not so well? What was inconsistent?
- What, if anything, was surprising, given expectations about how the strategy would work?
- Does the feedback suggest that staff or clients' attitudes, behaviors, or skills are changing (if relevant)?

- How might your team build on aspects that worked well (helped implement the strategy)?
- How might your team address aspects that have not worked well (hindered implementing the strategy)?

Based on what your team learned, what are your next steps? Decide whether you want to adapt, maintain or scale up, or abandon. To inform your decision, ask:

- Was the strategy implemented as intended during your road test?
  - No. Consider conducting another learning cycle and think about what you need to do to support better implementation. For example, you might provide a refresher training prior to testing again. **Next step: Adapt the strategy and test again**.
- Is the strategy promising as designed?
  - Yes, the strategy worked great! If all worked well during your first road test, your team might choose to maintain or scale up. For instance, if you tested a strategy on a small scale in just one of your program sites, you could expand the strategy to additional sites. For more considerations on scaling, see Module 10. **Next step: Maintain or scale up the strategy.**
  - Yes, but the team identified necessary refinements during the initial road test. For example, you might determine that a strategy to have facilitators conduct outreach to youth in between classes to build connection is promising but need to change the mode of outreach based on feedback you received from youth. In this case, make the necessary changes and test again to assess improvement. **Next step: Adapt the strategy and test again.**
  - No. If the information you collect in a road test of your strategy doesn't demonstrate that the strategy is changing the attitudes, behaviors or skills that you hoped to change in order to make progress on your SMART goal, consider abandoning the strategy and trying something new. For example, your team tests a strategy to integrate a quiz-based program like Kahoot! or Menti into your in-person classes by allowing students to engage with their cell phones. Your theory is that increased interactivity will keep students interested and lead to a more engaging class; instead, allowing students to take out their phones proves to be a distraction. In this case, the strategy isn't working as intended. If your team has ideas for improving the strategy, you might try to adapt; if not, you should move on. **Next step: Abandon the strategy and try something new.**

> **"Fail early, fail often, but always fail forward."**
>
> **—John Maxwell**

Completing the CQI Plan Template

When you've had a chance to analyze, synthesize and reflect on your data from the road test, consider your top three takeaways. What did your team learn from the road test about implementation or promise of your strategy? Enter your three takeaways as "We learned that …" statements under **Step 4: Assessing** in the CQI Plan Template. Next, document your decision in the "Taking action" section of **Step 4**. If you plan to adapt, be sure to note how you plan to revise the strategy for your records.

Communication plan considerations

This module aligns with CQI Step 5: Implementing—Monitor progress toward your goal

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If you decide to maintain a strategy, you have one of two choices: 1) Continue to implement on a small scale to give your team time to monitor progress toward your SMART goal, or 2) Expand the strategy to one or more additional sites to understand whether it works the same in new contexts and/or begin to share the new strategy program-wide. If you plan to scale up, consider how to communicate the new practice with key stakeholders, as buy-in from staff and partners responsible for implementation is not assured. Consider the following.[1]

- **Ownership.** Who will own the new practice? Who do you expect to carry it out and who will oversee the process to ensure it happens? If you expand to new sites, try to identify a champion to oversee on-the-ground implementation at each site and have a member of your CQI team offer implementation support across sites and monitor progress.
- **Communication and training.** Who should be the messengers for the change? Are there staff involved with the initial road test who can help to build buy-in for a new process? How will you support staff in carrying out the new practice? For example, if staff need to start offering online make-up sessions, how will you train them on the online platform so that they feel confident sharing it with participants and are clear about expectations?

Tip for spreading changes

Strategies can work differently across different sites, groups or facilitators. When scaling up a new change program-wide, consider what elements of the strategy are core and what elements you can adapt to fit different contexts and environments. For example, the core of an attendance outreach strategy might be that facilitators must reach out to all participants at least once a week outside of sessions. When the outreach occurs (for example, how long before or after a session) and how it happens (via phone, email, or text) can vary depending on what works at a given site. Allowing adaptation fosters buy-in and helps to ensure success across sites.

[1] Institute for Healthcare Improvement. "Improvement Tools." Available at http://www.ihi.org/resources/Pages/Tools/default.aspx. Accessed January 7, 2021.

- **Institutionalizing the change.** How can you prevent staff from slipping back into the old way of doing things? Is there a way to standardize the new process with documentation or resources? For example, if you now expect staff to reach out to absent participants within 24 hours, your team could develop a system for staff to document outreach instances to monitor timeliness.
- **The impact on workload**. A new practice might mean more work for staff, which can cause resistance, even if it's an improvement. Consider how you can reduce their burden in other areas.

For an example of a structured worksheet for sustainability planning, visit the Institute for Healthcare Improvement site to access its sustainability planning worksheet (note: while free, accessing resources on the site requires registration).

Completing the CQI Plan Template

Under **Step 5: Implementing** note how you will manage sustaining or scaling up your strategy.

Monitoring progress

This module aligns with CQI Step 5: Implementing—Monitor progress toward your goal

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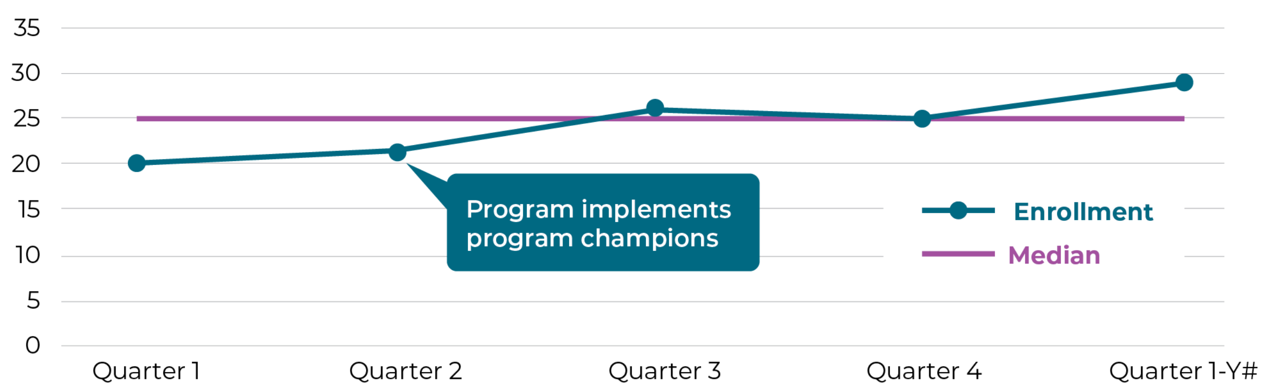
After implementing a strategy, your team should also develop a plan for monitoring long-term progress toward your improvement goal. In the **Step 1: Planning** table, your team specified a data source to track to assess progress toward your SMART goal. Develop a plan for using these data to gauge whether you're making progress toward your improvement goal. For example, how often will you monitor it? Who will monitor it?

A run chart is a tool to show patterns in the data you track regularly (Figure 5). Run charts show changes to a data point over time and compare changes against the median of all data points. A run is a string of data points on either side of the median. The idea of a run chart is not to examine every variation that occurs, but to focus on trends (for example, an upward trend or a string of points above the median). The chart below shows quarterly enrollment at a community-based program. As noted above, the program aims to reach 40 youth per quarter, and tracking shows the program's steady improvement. Given the improvement, the

Figure 5: Sample run chart showing quarterly enrollment in programming



program concludes the program champions strategy is successful, but the work in improving recruitment and enrollment is not complete.

Completing the CQI Plan Template

Complete the table under **Step 5: Implementing** in the CQI Plan Template to specify how often you'll track data related to your improvement goal and who will be responsible to monitoring. The below table provides an example of a monitoring plan using the improvement goal introduced earlier to improve youth engagement ratings:

Improvement goal (from Table C1)	Strategy for improvement (from Table C3)	Data source(s) to assess progress (from Table C1)	Frequency of monitoring	Staff responsible
Our goal is to increase the number of youth served in a year in community-based sites from 22 per quarter to 40 per quarter	We will develop program champions, drawing on youth alumni of the program, to make the pitch for the program to other youth	Enrollment data	Monthly	The program director will monitor enrollment and share trends monthly during staff meetings

Tips and considerations for data collection to support improvement work

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Data collection for improvement differs from data collection for research, as the goal is to learn and inform next steps rather than to conduct a comprehensive assessment (Institute for Healthcare Improvement 2004). The idea is to collect just enough data to respond to your key learning questions while limiting burden, so instruments for CQI learning cycles are often brief. Considerations for developing and administering instruments to support learning cycles follow.

Design considerations

- **Keep it short.** Surveys, for example, might be only one to five questions.
- **Think first about your purpose**. This will help your team to develop a concise instrument (e.g., survey or interview protocol). Are you trying to understand how a process was implemented? Get feedback on how a new process went? Keep your questions focused on your purpose and resist the temptation to ask additional questions out of curiosity alone.
- **Match the question form to the method.** For interviews and focus groups, develop open-ended questions; don’t ask yes or no questions, as you want to elicit nuanced responses. Surveys can contain open- or closed-ended questions, though open-ended questions on a survey can be more time consuming for youth to complete and for your team to analyze.
- **Use probes.** In focus groups and interviews, use probes to move beyond superficial responses. Probes can be as simple as asking “Can you elaborate on that?” or “What did you mean when you said ___?”

Administration considerations

- **Interviews are typically conducted with a subset of participants.** You can test a new strategy with a group of 20 participants but interview only 3 or 4 of them. When selecting participants, **create selection criteria in advance.** For example, for an attendance outreach strategy, we might want to interview a mix of high and low attenders to understand the strategy. Stating key criteria in advance protects against selection based solely on who is most available for the interview.
- **Focus groups often work better when homogenous.** For example, if you're gathering thoughts from staff on program challenges, don't mix facilitators and one group with supervisors.
- **Be clear with respondents about your goal.** For instance, when introducing a focus group or survey, be clear that your goal is to improve the program and their honest feedback is valuable.
- **For observations focused on improvement:**
  - **Have a good understanding of the rationale for the strategy.** For example, why do we think the strategy will help achieve our improvement goal? Observe implementation and note: Was the strategy implemented as intended? Does what you observed support the rationale for the strategy? What surprised you? What was a success or not?
  - **Be a silent listener**. Make objective notes about what you observe (What did you see? What did you hear?). Note insights that emerge from the observation.

For more tips on observations, see this practice brief on FYSB's The Exchange website.

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Supplemental material

Continuous Quality Improvement Series

Example road test

This supplement 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.

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The following example presents a sample road test for a strategy to address low program retention.

Table B.1. Sample road test components.

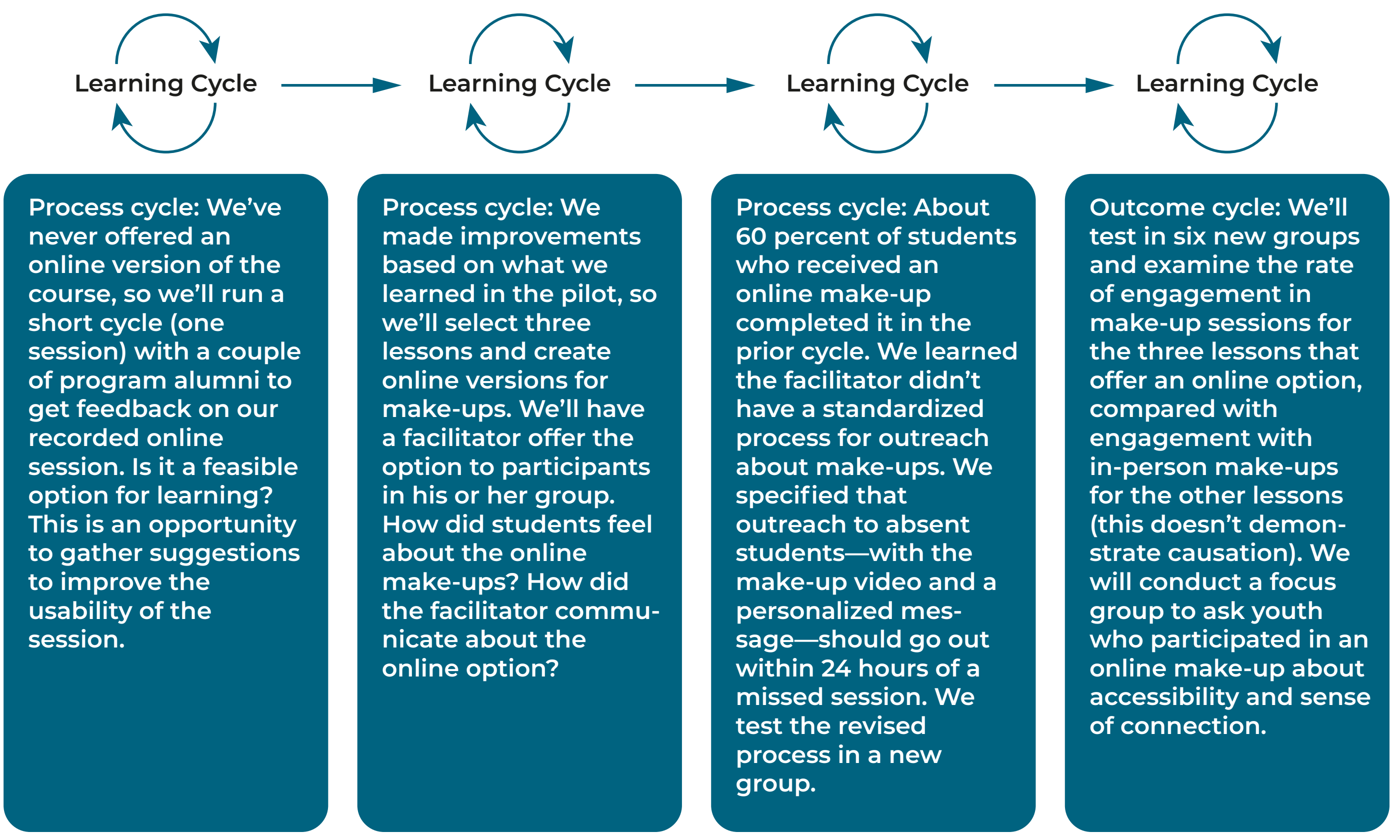
Challenge	Low rates of program retention
Root cause	One identified root cause is that youth who miss a session find it difficult to attend the in-person make-up sessions (which currently happen during one-on-one meetings with the facilitator), fall behind, and disengage with the program.
Strategies	Develop an online, recorded version of the program to lower the burden of participating in make-up sessions and keep absent students engaged.
Strategies	By making it easier to attend make-up sessions (by allowing students to watch recorded videos when they can), students who miss a session won't fall behind on content and will retain their sense of connection to the program.
Learning questions	• Did youth engage with online make-up sessions when they were offered? How did level of engagement compare to the in-person make-up sessions? (process question) • How did facilitators communicate with students about the online sessions? (process question) • Did engaging in an online session help absent students maintain their connection to the program? (outcome question) • Did students who took the online sessions seem to retain the content? (balancing question)

Our data collection plan for the road test follows:

Table B.2. Data collection plan

Learning question	Data collection activity	Plan for data collection
Did youth engage with online make-up sessions when they were offered?	Attendance log	For each session, the facilitator will track (1) the number of absent students, (2) the number of absent students who received outreach from a facilitator about make-up options, and (3) the number of youth who completed exit ticket at the end of the video (indicating completion).
How did facilitators communicate with students about the online sessions?	Staff interview	At the end of the road test, talk to facilitators to learn how they communicated about the availability of online sessions. What did they say in their outreach to absent youth? How did they communicate the importance of catching up through the make-up? How does communication differ for in-person versus recorded sessions?
Did engaging in an online session help absent students maintain connection to the program?	Youth focus group	We will recruit a group of students who took at least one online course. Did they enjoy receiving the content this way? Did they find the sessions accessible? Did they feel the online sessions helped them catch up? Maintain connection to the program?
Did students who took the online sessions seem to retain the content?	Exit ticket	After completing an online session, a student will receive a pop-up survey to (1) indicate he or she completed the course and (2) answer two core knowledge questions.

Figure B.1. Example of learning cycles in a road test



Analysis plans for each cycle would differ slightly. In the early process cycles, when the focus is on staff implementation, we might collect data only from staff. An analysis plan follows for the *outcome cycle* to respond to all the learning questions in Table B.2.

Table B.3. Analysis plan

Data collection tool	Relevant learning questions	Analysis plan
Attendance log	Do youth engage with online make-up sessions when they are offered?	Across all six sessions, we will calculate the percentage of absent students who received outreach about the online session within 24 hours, and the percentage of absent students who completed the online session (measured via exit tickets). We will also track outreach to absent students for sessions that don't have an online make-up option (10 lessons) and the percentage of students who attended an in-person make-up.
Staff interview	How did facilitators communicate with students about the online sessions?	As we have run prior process cycles to develop a standardized process, for the outcome cycle we will reflect on how easy it was to adhere to that process. We will code for themes such as challenges, lessons learned, and adaptations.
Youth focus group	Does engaging in an online session help absent students maintain connection to the program?	We will code the focus group notes, looking for predetermined themes, such as accessibility, connection, and satisfaction, as well as general themes such as positive feedback and critiques.
Exit ticket	Do students who take the online sessions seem to retain the content?	We will use the exit tickets primarily to track completion of the online sessions but also added a few knowledge questions to understand whether students seem to learn via the recorded videos, which is not directly related to our outcome of interest but an important question to understand unintended consequences. To analyze, we'll calculate the average score on the test for absent students in the 3 online make-up sessions and the 10 in-person make-up sessions.

Because you might use multiple data collection methods for a road test, consider how you'll synthesize the data. One option is to use a matrix, listing the data collection tools in the rows, key themes or questions of interest in the columns, and summaries of takeaways in the cells (*see table B.4).*

Table B.4. Findings synthesis matrix

	Youth engagement	Staff implementation	Sense of connection	Lessons learned
Attendance log or exit ticket	85 percent of absent students who had the online option completed the session. 50 percent who missed a session with in-person make-up only attended.	98 percent of absent students received outreach within 24 hours, as specified in the updated outreach process.		75 percent of students taking an online make-up session correctly answered all knowledge questions on the exit ticket. Thus, most students seem to retain key takeaways from the lesson.
Staff interview	Staff heard positive feedback from youth about the accessibility of online options.	Staff shared that online make-up sessions were lower burden for them, but still required outreach to ensure youth watch the video and respond to questions. They noted it helped to have a standardized process (reach out within 24 hours), but also said it was helpful to be able to customize or personalize outreach to youth. Some youth prefer texting and others social media or email outreach, so it is important to allow adaptations.	Staff felt youth who attended a make-up session (online or in-person) returned to the group more prepared to engage in discussion than those who missed a session.	Staff noted some students with poor Internet access couldn't participate in online make-ups, so it's important to retain in-person make-ups as an option.
Youth focus group	Youth shared in the focus group that they appreciated the flexibility of watching the make-up lessons when it was convenient for them.		Youth noted it was helpful to receive the missed content, so they didn't feel like they were falling too far behind.	Youth shared it was hard to watch a 20-minute video and suggested breaking content in multiple shorter videos.

A final step is to develop “We learned that …” statements:

We learned that …

- Students were more likely to engage with the online make-up sessions compared to in-person make-up sessions.
- Students and staff felt attending make-up sessions (in-person or online) was helpful for catching up and staying connected.
- The program could benefit from offering online make-up sessions but should retain in-person make-up options for students with access barriers.

Action, communication, and monitoring plan. Online make-up sessions are a feasible way to offer students more flexibility in making up missed content, which helps absent students remain connected to the program. The program will build recorded online sessions for all 13 lessons and train facilitators across all sites on the standardized outreach process for reaching out to and sharing videos with absent students. Staff will monitor program retention numbers over time.

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