



## Introduction to Quality Improvement and the FOCUS-PDSA Model

### Overview of Quality Improvement (QI)

The increasing demand for high quality delivery of patient care has led many health care settings to begin monitoring their performance in an effort to ensure that they are delivering care that is: safe, effective, timely, patient-centered, equitable, and efficient.<sup>1</sup> To help do this, several organizations have introduced the concepts of continuous quality improvement (CQI) to their staff.

CQI is an approach to quality management that builds upon traditional quality assurance methods by emphasizing the organization and its systems. It is an approach that focuses on the “process” rather than the individual, recognizes both internal and external “customers” and promotes the need for objective data to analyze and improve processes. With a solid understanding of an organization’s processes and awareness of performance levels for specific tasks, a team of individuals can bring about needed changes to help the team perform even better.

This QI Tool Kit will help you develop and follow an action plan for a specific clinical or management problem that can benefit from a quality improvement strategy.

You will be introduced to a change model referred to as FOCUS-PDSA, and some basic skills needed to use this model. FOCUS-PDSA is a common quality improvement approach utilized by many healthcare organizations. Easy to learn and use, this model can be applied to the management of any process. Each of its nine steps stand for the following actions:

**F** = Find a problem  
**O** = Organize a team  
**C** = Clarify the problem  
**U** = Understand a problem  
**S** = Select an intervention

**P** = Plan  
**D** = Do  
**S** = Study  
**A** = Act

Determining a problem to improve can be easy, but actually making a change is not. The focus of this primer is on determining the best approach you can take to make changes that result in improvement.

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<sup>1</sup> These principles of quality care were introduced by the 2001 Institute of Medicine report *Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century* and have served to establish numerous quality improvement efforts in the health care field.

## Developing an Action Plan (FOCUS)

The FOCUS-PDSA model works well in many areas of improvement, and requires only the formation of an interdisciplinary team and use of a few simple data collection and reporting tools. For each step introduced in this section, there is a corresponding Worksheet included in this Tool Kit that will explain in a step-by-step manner how to conduct each stage. In addition, some of the resources needed can be found in the QI Tool Box of this Tool Kit, so be sure to look to those examples of data gathering and presenting tools as needed. Following the outlined steps will help you provide better patient care, document your progress, and energize your team to do even better.

### Step 1: F=Find a Process or Problem to Improve

The first step in the FOCUS-PDSA model is to identify and very clearly define a specific process or problem to improve. To accomplish this task, we recommend that you complete five simple steps. Do not be surprised if it takes a considerable time to complete Step 1, as finding a process or problem to improve is perhaps the most important step in implementing CQI.

#### ■ Objectives

Understand the importance of identifying the process or problem to be improved.

- Use QI tools to identify and select potential opportunities for process improvement that are important to both the customer and the organization.
- Recognize the role of stakeholders/customers in prioritizing potential process improvements.
- Demonstrate the ability to draft a good problem statement.
- Demonstrate the ability to establish a team charter.
- Complete the "Find a Process to Improve" worksheet.

#### ■ Outcome

To select a process with a significant opportunity for improvement and demonstrable results that is important to both the customer and the organization and to outline a team charter for the project.

### Step 2: O=Organize a Team

The second step in the FOCUS-PDSA model is to assemble a team that is familiar with the process or problem under investigation. This section does not outline the steps required to ensure effective teams (e.g., conflict resolution), but focuses on identifying team members and assembling the team.

#### ■ Objectives

- Increase knowledge of key work-team concepts, including team process.
- Organize a team that is multidisciplinary.
- Select a team leader and facilitator.
- Develop team goals; then define roles and procedures to support them.
- Develop agreed upon ground rules.
- Complete the "Organize a Team that Knows the Process or Problem" worksheet.

#### ■ Outcome

To organize an efficient and effective multidisciplinary team with team members who are extremely knowledgeable about the process or problem.

### Step 3: C=Clarify Current Knowledge of the Process

A team cannot improve a process or problem until the team fully understands the current process or problem. Therefore, the third step in the FOCUS-PDSA model is to clarify current knowledge of processes of care and to answer questions such as, “Is the problem clearly understood?” or “Are the related processes clearly understood?” In addition, this step encourages teams to begin to think about what data are necessary and how to begin collecting it to fully address the process or problem under study.

#### ■ Objectives

- Understand how the current process works and be able to analyze it.
- Identify the customers and suppliers in the current process.
- Recognize the importance of performance indicators.
- Understand how to set up a measurement process so data may be collected.
- Complete the “Clarify Current Knowledge of the Process” worksheet.

#### ■ Outcome

- To describe how the current process actually works.
- To establish a measurement process.
- To collect data relevant to addressing your quality improvement problem.

### Step 4: U=Understand Sources or Causes of Process Variation

The key to solving a problem is to fully understand it. To do so, you need data. As previously mentioned in Step 3 (Clarify Current Knowledge of the Process), data are the linchpin to any quality improvement effort and care must be taken to appropriately identify and collect the data needed to address the quality improvement problem under investigation. These data, however, are only good if they are used in a completely comprehensible manner. In this fourth step of the FOCUS-PDSA model, you will learn how to take meaning from the data once it has been compiled, understand its sources and patterns of variation, and use this information to guide actions for improvement.

#### ■ Objectives

- Analyze data using analytical tools.
- Understand causes of variation in the system.
- Identify the root causes of the problem.
- Complete the “Understand Sources or Causes of Process Variation” worksheet.

#### ■ Outcome

Understand the root causes that determine how the process performs so that an informed decision can be made about how to improve it.

### Step 5: S=Select the Improvement or Intervention

Building upon the team’s understanding of the process and their identified reason for the problem in Step 4, the team is now ready to move on to the next step. It is likely that several alternatives for solving the problem exist. Choosing sound solutions requires a good list of options. The “best” strategy,

however, depends on the forces that impede or favor the change, and the effectiveness and cost of the alternative solutions. In the fifth step of the FOCUS-PDSA model, the team is charged with identifying and selecting the improvements or interventions to be implemented.

#### ■ Objectives

- Identify what improvements or interventions will be made in the process.
- Understand the value in using creative thinking techniques to develop potential solutions.
- Use team-building techniques to evaluate the solutions proposed.
- Complete the “Select the Improvement or Intervention” worksheet.

#### ■ Outcome

To identify the intervention(s) to implement for improving the process or problem under study using consensus decision making techniques.

### Implementing an Action Plan (PDSA)

Once the team has selected the improvements to be made and the intervention(s) needed, it’s time to put the wheels in motion by using a Plan-Do-Study-Act cycle (PDSA cycle). Central to the FOCUS-PDSA approach is the idea that changes in care can be planned and tested very easily on a small scale and at multiple levels — patient, provider or hospital level — and easily reproduced on a larger scale if improvement is achieved. The focus on small steps enables rapid feedback and ensures that movement in the “wrong” direction is detected quickly. Larger improvements are realized by the cumulative effects of rapid improvement PDSA cycles.

#### Step 6: P=Plan How to Implement the Improvement and Test the Changes

In this first step of a PDSA cycle (Step 6 of the larger FOCUS-PDSA model), the team is tasked with identifying and applying an action plan intended to modify certain processes and to improve performance.

#### ■ Objectives

- Define the current situation or system.
- Gather data to describe the processes as they are currently working.
- Identify causes of the variation or problems and develop theories to address these.
- Define specifically what you are trying to accomplish.
- Obtain buy-in from key stakeholders.
- Identify ways to counteract resistance to change.
- Develop a communication plan.
- Complete the “Plan How to Implement” worksheet.

#### ■ Outcome

To develop a plan to implement the changes that are intended to improve performance.

#### Step 7: D=Do Implement the Plan

Once a concise and realistic plan has been developed, it’s time to put the plan into practice. In the seventh step of the FOCUS-PDSA model, the team carries out the steps of the project plan and collects information that indicates how well the intervention proceeded. Even the best, most thought through plans are likely to need a little revamping, so be ready to modify your plan if needed.

### ■ Objectives

- Implement the intervention plan.
- Record any unexpected events and other observations.
- Begin analyzing the data.
- Complete the “Do the Improvement ” worksheet.

### ■ Outcome

To make the changes in the process that are intended to improve performance.

## Step 8: S=Study the Results of the Implementation

Now that the intervention has been implemented and sufficient time for the intervention to take effect has been given, your team should take the time to review and evaluate the results. The main focus of this step is geared towards the team analyzing the data, comparing them to the predicted results, and summarizing the lessons learned from performing the cycle. Ultimately, the team is charged with evaluating the effectiveness of the intervention and deciding if the intervention should be retained, refined, or abandoned.

### ■ Objectives

- Use tools to analyze data to determine if the intervention(s) improved the process or problem.
- Learn techniques to succinctly summarize the findings of the small-scale tests.
- Understand how to determine when modifications to the solution are needed.
- Complete the “Study the Results of the Implementation” worksheet.

### ■ Outcome

To describe the change in performance and the extent to which the intervention has closed previously identified performance gaps.

## Step 9: A=Act to Hold the Gain and Continue Improvement

Based upon the lessons learned from planning, testing, and studying the intervention in Steps 6, 7, and 8, the team now must decide what action to take. By summarizing and communicating the lessons learned from the previous step, the team will decide whether to implement the intervention on a larger scale, modify, or discard the intervention and start over. The purpose of Step 9 of the FOCUS-PDSA model is to “act to hold the gains and continue improvement.” This means institutionalizing the improvement and monitoring results over time.

### ■ Objectives

- Learn when it is appropriate to implement changes on a wide scale.
- Develop a monitoring schedule to measure gains over time.
- Determine how processes can be improved further.
- Complete the “Act to Hold the Gain and Continue Improvement” worksheet.

### ■ Outcome

To further improve the process, implement the improvements to all patients, and to monitor results over time.