Primary Care Practice Facilitation Curriculum

Module 8: Approaches to Quality Improvement

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Suggested Citation

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Module 8. Approaches to Quality Improvement

Discussion. Ask questions and explore answers with learners. (15 minutes)

1. What experience have you had in using the Model for Improvement?
2. What are the key points of the Model for Improvement?
3. What implications do these have for your work with your practices?

Activity for learners (20 minutes)

1. Break into pairs or small groups. Assign roles: Practice Facilitator and Participant(s) (optional).
2. Complete a PDSA worksheet for an improvement they would like to make to this training program.

Discussion. Ask questions and explore answers with learners. (10 minutes)

1. Describe the PDSA you propose for improving an aspect of this training program.
2. What lessons did you learn in completing the PDSA template that you will want to apply when you go out to work with your practices?

Review with learners. (10 minutes)

1. Mold JW, Gregory ME. Best practices research. Fam Med 2003 Feb;35(2):131-4.

Discussion. Ask questions and explore answers with learners. (10 minutes)

1. What experience have you had using a best practices approach to improving a process in a practice or another setting?
2. How might you use best practices research with your practices to improve their processes?

Module 8.

In health care, quality improvement (QI) is the framework we use to systematically improve the ways care is delivered to patients. Processes have characteristics that can be measured, analyzed, improved, and controlled. QI entails continuous efforts to achieve stable and predictable process results, that is, to reduce process variation and improve the outcomes of these processes both for patients and the health care organization and system. Achieving sustained QI requires commitment from the entire organization, particularly from top-level management.

History of the Current Quality Improvement Paradigm

In the United States, there has been an evolution from quality assurance, where the emphasis was on inspection and punishment for medical errors (the "bad apple" theory), to QI, where we ask, "How did the system fail to support the worker involved in an error?" Table 8.1 contrasts these two frameworks.

Table 8.1. Quality assurance vs. quality improvement

Quality Assurance	Quality Improvement
Individual focused	Systems focused
Perfection myth	Fallibility recognized
Solo practitioners	Teamwork
Peer review ignored	Peer review valued
Errors punished	Errors seen as opportunities for learning

This evolution to a QI framework began in earnest with the publication of two landmark Institute of Medicine (IOM) reports:

- *To Err Is Human: Building a Safer Health System* (1999) focused on patient safety and brought to the public's attention the fact that 44,000 to 98,000 deaths occur each year due to medical errors.
- *Crossing the Quality Chasm: A New Health System for the 21st Century* (2001) built on *To Err is Human.* It called for a fundamental change in the health care delivery system through a complete redesign of patient provider relationships and revised patient care processes, leading to improved health care outcomes.

Before these reports, some pioneering individuals had been advocating for the use of measurement and data to judge how effective processes were at achieving desired outcomes. Notably, W. Edwards Deming talked about the science of improvement in his management theory known as the System of Profound Knowledge in the early 20th century.

Dr. Deming was a statistician who used statistical process control tools to determine sources of variation that led to waste in manufacturing. His approach to improvement shifted focus from individuals to underlying processes as the primary source of error and variation. This concept of process improvement helped pave the way for today's view of QI.

In his 1982 book *Out of the Crisis*, Deming laid out his philosophy for transformation of organizations, emphasizing the concept of total quality management and the importance of understanding the type of variation in a process. The more variation, the more waste and inability to consistently produce the outcomes desired. His 14 points, shown in Table 8.2, still resonate today. Although written for manufacturing, they have become part of health care thinking and are inherent in all QI methodologies.

Table 8.2. Deming's 14 points

1. "Create constancy of purpose towards improvement." Think long-term planning, not short-term reaction.
2. "Adopt the new philosophy." Management as well as the workforce should actually adopt this philosophy.
3. "Cease dependence on inspection." If variation is reduced, there is no need for inspection since defects (errors) will be reduced or eliminated.
4. "Move towards a single supplier for any one item." Multiple suppliers mean variation.
5. "Improve constantly and forever." Focus on continuous quality improvement.
6. "Institute training on the job." Lack of training leads to variation among workers.
7. "Institute leadership." This draws the distinction between leadership, which focuses on vision and models, and supervision, which focuses on meeting specific deliverables.
8. "Drive out fear." Management through fear is counterproductive and prevents workers from acting in the organization's best interests.
9. "Break down barriers between departments." Eliminate silos. All departments are interdependent and become each other's customers in producing outputs.
10. "Eliminate slogans." It is not people who make most mistakes—it is the process in which they are working.
11. "Eliminate management by objectives." Production targets encourage shortcuts and the delivery of poor-quality goods.
12. "Remove barriers to pride of workmanship." This leads to increased worker satisfaction.
13. "Institute education and self-improvement."
14. "The transformation is everyone's job."

Source: W. Edwards Deming Institute, 14 Points for Management, Available at: www.deming.org.

The Model for Improvement

The Model for Improvement (MFI) is the most commonly used QI approach in health care and one you will want to teach your practices. The MFI was developed by the Institute for Healthcare Improvement (IHI) in 1996 and published in *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (1996).

The MFI uses a rapid cycle process called Plan Do Study Act (PDSA) cycles to test the effects of small changes, make those changes, and ultimately spread the effective changes through the practice or organization (see Figure 8.1). The MFI begins by asking three simple questions:

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in improvement?

Quality improvement teams then introduce and test changes designed to achieve the improvement aims using successive PDSA cycles until they arrive on a change they believe will produce the desired results and is ready for implementation and spread. This process is depicted in Figure 8.1.

Figure 8.1. The Model for Improvement
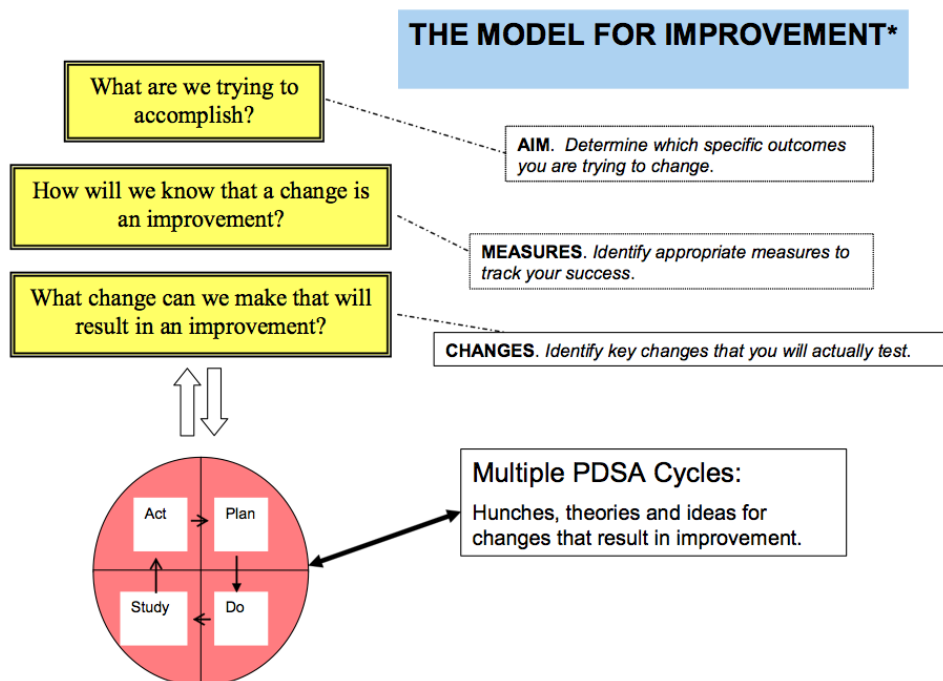
Source: Langley GL, Nolan KM, Nolan TW, et al. The improvement guide: a practical approach to enhancing organizational performance. San Francisco: Jossey-Bass; 1996.

* The Plan Do Study Act cycle was developed by W. Edwards Deming. See Deming WE. The new economics for industry, government, education. Cambridge: Massachusetts Institute of Technology; 1994.

You will need to be prepared to teach your practices how to use the MFI, and specifically, how to carry out repetitive and systematic processes for testing and implementing improvements, the PDSA improvement cycles. Your goal will be to instill these as habits in your practices. Every improvement activity they decide to undertake should be an opportunity to encourage them to take a systematic and data-driven approach to implementing, testing, and sustaining the change.

An essential part of introducing a culture of quality in a practice is assisting the practice to shift its focus from individuals to processes. Organizations can often get mired in finding individuals to blame for less than optimal outcomes, an approach that can produce a punitive and problem-focused work environment. You can use the MFI and the basic tool of PDSA cycles to assist practices in making a shift to thinking about their processes and systems and how they can be modified to produce better outcomes.

Too often organizations go "charging off in all directions" in an enthusiastic effort to improve. But without discipline and the ability to assess the real effects of the improvements, these enthusiastic efforts can yield little in terms of real outcomes. One of your roles will be to help practices develop the discipline of using a systematic process to develop and test improvements.

The MFI and PDSA cycles are a simple yet effective "discipline" that you can help practices develop. One of the best ways to do to this is to encourage the practice to go through the discipline of completing an improvement form based on the MFI. The mere act of completing the form helps reinforce the idea and build the internal discipline and skill to use a defined process for testing and adopting changes to the usual course of business.

You will also need to know how to introduce the MFI to your practices. This can be difficult in a practice that is enthusiastic about making improvements. It can also be difficult in a practice where buy-in to improvement efforts is low. The enthusiastic practice may lack patience for systematic improvement work and may have difficulty instituting the discipline needed to use the PDSA process. Practices where buy-in is low may lack the commitment and associated energy needed to engage in a systematic approach to change.

Using the Model for Improvement

To use the MFI, first you will need to help your practices identify their "aims" or goals for improvement. Often this will require you to listen "between the lines" and help a practice identify actionable goals within its larger discussions of practice improvement. Large and lofty goals are excellent for inspiration and rallying troops, but the actual work of improvement can be mundane and tedious, and involves small changes that are tested, and then spread, in sequence until the goal is attained. In addition, you will want to help your practices assure that the changes they are making and the outcomes they plan to measure are aligned.

Because the MFI and PDSA processes have been the primary approach to practice improvement over the past 10 years, you may also encounter practices that have been "overexposed" to the

approach. They will need to be skilled in navigating their reactions to processes they may have used with limited success in the past. While there can be barriers to getting a practice to use the MFI and PDSA cycles in their improvement work, it is a "habit" that is very helpful for practices to develop. Without some type of systematic approach, improvement work can become chaotic, ineffective, and unlikely to produce the outcomes desired.

In addition to the MFI and PDSA cycles, there are a wide variety of QI tools that you will find helpful in your work with practices. Some of these are covered in subsequent modules and include workflow mapping, audit and feedback, benchmarking, academic detailing, and best practices research.

Best Practices Research

Best practices research is a powerful but less well-known QI approach that you should make an effort to become familiar with and comfortable using. Best practices research is a method of identifying the "best way to do X" in practice that is based on identifying and studying individuals or practices that are "exemplars" in the process or part of the process under question. This approach is called positive deviance. The approach can be used to identify the best processes for activities such as managing lab test results, managing prescription refills, delivering adult immunizations, managing walk-ins, and caring for diabetic patients.

The conditions for successfully translating evidence into practice include: development of practitioner skills relating to care delivery, creation of an operational infrastructure, and development of public policy to facilitate action (Nutbeam, 1996). Your role as a PF will largely rely on your skills as a facilitator and the guidance of evidence-based care models. Deciding on the model can be quite cumbersome. To address this area, consider the following steps.

1. Clearly define the process you are seeking to improve and break it down into discrete elements or subprocesses.
2. Define what constitutes a best practice for each element or subprocess.
3. Identify exemplars in the overall process or for each element or subprocess through peer nomination, and then confirm through performance audit or chart audit reviews.
4. Combine the methods used by exemplars into a best approach.
5. Test and then spread the "best practice" to other clinicians and practices.

The systematic spread of good ideas is one of the most important contributions you will make as a facilitator to both your individual practices and to health care as a whole (Mold and Peterson, 2005; Mold and Gregory, 2003). Best practices research is an approach that can help you identify exemplar practices appropriate to spread.

Note: this module is based on Module 4 of AHRQ's Practice Facilitation Handbook available at: https://www.ahrq.gov/ncepcr/tools/pf-handbook/index.html

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Appendix 8. PDSA Worksheet for Testing Change

Aim   (overall goal you wish to achieve)
Every goal will require multiple smaller tests of change

Describe your first (or next) test of change:	Person responsible	When to be done	Where to be done

Plan

List the tasks needed to set up this test of change	Person responsible	When to be done	Where to be done

Predict what will happen when the test is carried out	Measures to determine if prediction succeeds

Do   **Describe what actually happened when you ran the test**

Study   **Describe the measured results and how they compared to the predictions**

Act   **Describe what modifications to the plan will be made for the next cycle from what you learned**