

Rapid Cycle Improvement: Controlling change

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Healthcare today is dynamic and ever changing. Advances in technology drive the need for professionals and organizations to actively maintain a high level of quality. Other challenges include work force shortages, a focus on public reporting, greater consumer awareness, an escalating competitive market and patient safety as a priority — to name just a few. Traditionally, quality improvement efforts seem to be driven by the steps in the process rather than by the improvements themselves. This can delay progress and distract us from what we really want to accomplish.

One way to accelerate the process and keep a focus on targeted improvements is through rapid cycle methodology. Rapid cycle is not eliminating traditional quality improvement tools but using them to expedite change and results. By answering three questions you can quickly prepare for action: 1) What do we want to accomplish?

2) What changes can we make to result in an improvement? 3) How will we know an improvement has been made? These questions will assist the team in maintaining focus on the desired improvement. (Figure 2)

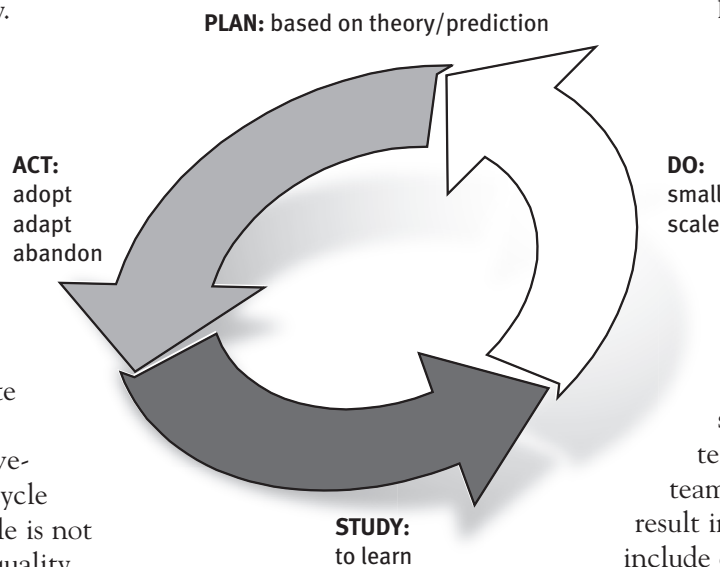
When deciding what you want to accomplish, first consider estab-

lished guidelines and current performance. Using information that is already being collected can give an idea of baseline performance. If information is not already being collected, just enough concurrent data collection should be conducted to determine whether accepted standards are being met. Looking at a small population in this way through Rapid Cycle helps put the focus on reducing failure rates rather than just improving performance. For example, examine the discharge records of patients with myocardial infarction for a month to determine whether beta-blockers were prescribed to patients who did not have contraindications. This data will allow a comparison of practice to the accepted standard.

A team approach, including all those involved in the process, helps to determine what process changes can lead to improvement. When considering strategies, the team makes changes that team members predict will result in improvement. These can include clarifying procedures, revising protocols, educating staff, or using a new form. A Plan-Do-Study-Act (PDSA) cycle can help execute and test the change. (Figure 1) After planning the

FIGURE 1

Shewhart Cycle: PDSA



lished guidelines and current performance. Using information that is already being collected can give an idea of baseline performance. If

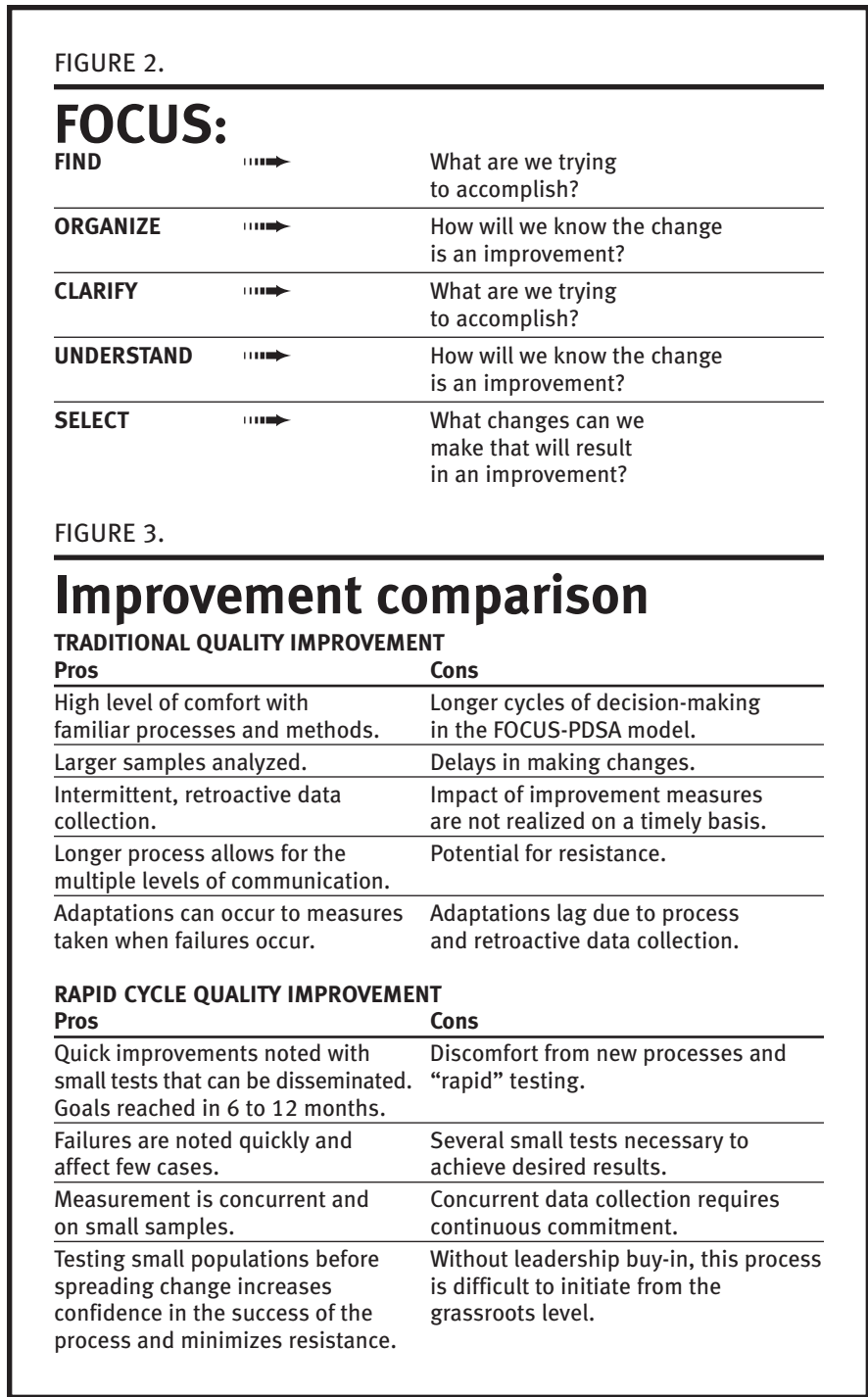
improvement, apply it on a small scale. If the desired improvement results, apply the change to a larger population to test for continued improvement.

For example, test a new process for administration of preoperative antibiotics to one orthopedic physician's patients for one week. This allows the team to test changes and make adjustments before affecting a large group. It also helps build team members' confidence in the improvement process because they see immediate results. If successful, the change could then be applied to all orthopedic physicians or more than one surgical procedure.

The team will know if the changes resulted in improvement through concurrent measurement. Performing 100% review is not necessary to determine whether improvement has been made. The focus is on the improvement, not the measurement. If all those involved in the process are represented on the team, data collection is usually less complicated than one might assume. Informing staff and senior leaders about the measurements and progress quickly, instead of after 3 or 6 months of data collection, will help gain support for efforts to rapidly improve processes.

Rapid cycle improvement can quickly create an environment that promotes excellence. It encourages health care professionals to actively work toward and meet the highest standards of care and to stay ahead of an ever-changing environment. Excellence in care not only improves outcomes but also builds consumer confidence in those providing the care. A quick comparison of traditional and rapid cycle quality improvement can be seen in Figure 3.

For more information about rapid cycle improvement or other



quality improvement issues, call AFMC at (501) 375-5700.

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