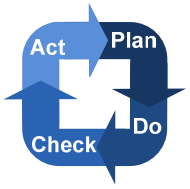
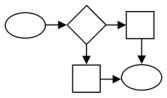
Using the Rapid Cycle Improvement Technique in Maine

The Maine Centers for Disease Control and Prevention (Maine CDC) has used quality improvement (QI) tools and techniques to improve performance in many areas of the health department. One area that needed improvement was the annual review process for eligibility to receive medical assistance through Medicaid under the Breast and Cervical Cancer Prevention and Treatment Act. All patients were contacted annually via certified mail to determine if they were still eligible to receive services. The process was cumbersome and lengthy, and led to a backlog of overdue reviews; staff needed a better way to manage the process while sustaining or improving customer service. A QI team was formed to address this challenge and used the *Rapid Cycle Improvement* (RCI) technique to complete a Plan-Do-Check-Act (PDCA) Cycle quickly.



When the improvement team initially gathered in July 2011, they began the PDCA Cycle in the *Planning* stage by writing their AIM statement: **decrease the backlog of overdue reviews by 80% by November 30, 2011**. To achieve this goal, the team examined the current review approach and then identified a potential solution: gathering required data from an existing database instead of asking clients via mail to provide the information again. The team used a Flowchart mapping exercise to create a new process that included use of this database. They continued the PDCA Cycle by *Doing* the new process and analyzing 98 cases to determine if the cases could have been pre-qualified (thus removing the need for them to go through the annual eligibility review). The team then *Checked* their results and determined that of the 98 cases reviewed, more than half could have been pre-qualified. This pre-qualification would save Maine CDC certified mail costs and reduce staff time necessary for conducting the eligibility review. The improvement team then *Acted* on the results by rewriting the protocol steps and standardizing the process. **This led to a 100% reduction in backlogged cases—surpassing the original AIM Statement objective.**

A Flowchart helps a team understand a process by using shapes, lines, and text to represent movement between steps. The flowchart identifies often forgotten tasks and shows the interdependence between tasks. After creating the flowchart, the team can add or remove steps to streamline the process.



By eliminating the backlog of cases, Maine CDC reduced costs, increased time for employees to do their remaining job duties, and decrease the burden on patients who were eligible for services; all of led to improved customer service. These elements work in tandem create a more efficient and effective public health system; customers are more likely to continue receiving uninterrupted medical assistance because the process is easy for everyone to follow.

Rapid Cycle Improvement Technique

The Rapid Cycle Improvement (RCI) technique challenges QI teams to apply the PDCA Cycle to a project in a very short time period, usually no longer than 3 months, in order to see breakthrough improvements. Using this technique is a good way for a team to feel accomplished, learn QI principles and achieve results quickly. QI projects that span many months can end up unfinished and marked as failures, which can undermine interest in QI. Choosing the right pace for a QI initiative is a *Key Ingredient in Public Health QI*; see the PHF website for details on the other key ingredients.

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