

QUALITY IMPROVEMENT STRATEGY

Tools to Make and Measure Improvement

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For more detailed information, see the [Quality Improvement Strategy Part 1: Tools to Make and Measure Improvement Implementation Guide](#) and the [Quality Improvement Strategy Part 2: Optimizing Health Information Technology for Patient-Centered Medical Homes Implementation Guide](#).

For additional information on involving patients and families in quality improvement work, see the [Patient-Centered Interactions Improvement Guide](#).

What

A quality improvement (QI) strategy is an approach to change. It provides a framework and tools to plan, organize, and then to monitor, sustain, and spread the changes that data show are improvements.

Health information technology (HIT) is the set of sophisticated tools that support the information needs of a Patient-Centered Medical Home (PCMH).

Why

PCMH transformation entails numerous changes—to processes, workflows, scheduling systems, and the care team structure, among others. Adopting a stable QI strategy gives staff confidence, skills, and a specific approach to use in making these changes and determining whether or not they are improving care and outcomes for patients and families.

Measurement is an essential part of PCMH transformation. A measurement strategy provides feedback to staff, providers, leaders, board members, and patients about the organization's progress toward transformation and the outcomes of the care they provide or receive.

Measurement data demonstrate progress, highlight areas for improvement, and engage the entire organization, including patients and families in improvement efforts.

HIT is part of the Quality Improvement Strategy Change Concept because quality improvement requires information. HIT can help practices collect, manage, and report data accurately and efficiently, providing care teams with the information they need to improve processes and outcomes.

Implementation Overview

Build a Quality Improvement Infrastructure

- Establish a QI policy and structure. Start by creating an organizational QI policy that outlines your organization's quality goals and your process for identifying strategic QI priorities. A successful QI policy provides a roadmap for how to proceed with your organization's QI efforts.
- Define roles and responsibilities. Who is on the QI committee or team? Who is responsible for metrics?
- Outline a process for organizing, monitoring, and concluding improvement projects.
- Establish opportunities for staff to participate in practice-wide QI work and designate time to review and manage QI tools used for improvement. Reviewing and discussing data is key to creating a culture of QI within an organization.

Use Proven QI Strategies and Tools

Once a practice has a QI team in place and has identified strategic QI priorities, the practice can adopt a formal model for QI including a measurement strategy.

- The Model for Improvement is one of the most straightforward and prevalent approaches and includes development of a strategy (Aims, Measures, and Ideas) and use of the Plan-Do-Study-Act (PDSA) Cycle to rapidly test and implement change. This approach can be used alone or as a companion strategy with Lean Methodology or others. Steps include establishing the following:
 - Aims. What are we trying to accomplish?
 - Measures. How will we know that a change is an improvement?
 - Ideas. What changes can we make that will result in an improvement?
- The second component of the Model for Improvement is the Plan-Do-Study-Act (PDSA) cycle, the improvement engine or thought process applied to a desired improvement. Steps include:
 - Plan. Planning an intervention.
 - Do. Testing the change on a small scale.
 - Study. Observing, measuring, and analyzing the test of change.
 - Act. Using the knowledge gained to plan the next steps.
- Lean Methodology (Lean) is a strategy of quality improvement that can be used with the Model for Improvement. Lean is customer-focused and aims to improve processes by driving out "non-value-added" activities, usually referred to as "waste." Practices have successfully used Lean to engage employees, manage workflow, and improve processes, clinical quality, and reliability. Key Lean methods and concepts include: analyzing waste reduction and value streams, creating visual displays of information and data boards, and rapid process improvement workshops.

Use Measurement and Data to Guide and Drive Improvement

Measurement is an essential part of PCMH transformation and is used to guide the work, regardless of the QI strategy that a practice chooses.

- Select measures strategically. Use nationally-endorsed, standardized data definitions whenever possible and clear data definitions. Select a comprehensive measure set that fully reflects the work of PCMH transformation.
- Balance the resources required to report the measure versus the value the results bring.
- Collect data from a variety of sources. Often the easiest way to collect data is concurrently, as work occurs. This is facilitated when data collection is designed into workflows within your EHR.
- Display data. Graphic displays of data foster engagement of senior leaders, providers, staff, patients, and families. Run charts are the most common QI tool to display improvement data. Run charts (often known as line graphs) display performance over time, making it easy to tell at a glance if improvements are occurring. Make data visible throughout the practice by posting it in high-traffic areas (e.g., patient waiting rooms, staff lounges, the back of bathroom stall doors).

Sustain Change

Imagine you have tested multiple changes using small-scale, rapid PDSA cycles from the Model for Improvement. Some of those tests resulted in the implementation of a successful new process or way of working. How do you effectively sustain the new way of carrying out the work?

- Ensure the change is ready to be implemented and sustained. Allow time for experimentation, since that provides freedom to work the wrinkles out of a new process—building support among practice teams and helping them understand and experience how the new method is better.
- Communicate the benefits of the improved process.
- Have staff involved in the work identify which features of the innovation are essential and find ways to make sure they are done consistently as part of new “standard work.”
- Make the new way of doing things unavoidable with standardized work processes. Standardized work includes detailed, documented visual systems where staff develop, agree, and follow a defined process.

Spread Change

Your change is ready to be spread throughout the practice or to other parts of the organization/other organizations when you:

- Can demonstrate success with data.
- Have champions who tested initial changes and who are prepared to help with spread—to communicate, influence, and train others.
- Have the interest and support of key leader(s).
- Have a plan and resources to train staff to carry out the new process. Be prepared to share and explain data and address resistance.