**WHY**

is improvement strategy essential to health center performance?

An improvement strategy ensures health centers have clearly defined visions, goals, and action steps that drive transformation and improve performance. It guides health center performance by effectively and routinely measuring and communicating information about the quality, value, and outcomes of the health care experience. In an era of value-based care, this whole-systems approach supports health centers to:

- Function as "learning organizations" engaged in continuous quality improvement and applying evidence-based interventions and best practices.
- Implement organization-wide, system-level changes that are impactful, measurable and transformative.
- Drive improvements toward the Quintuple Aim goals – improved health outcomes, improved patient experiences, improved staff experiences, reduced costs, and equity.

A health center's improvement strategy is most effective when aligned with the health center's overall strategic plan. This not only creates a solid foundation for health center improvement but integrates improvement and innovation activities within health center advancements in the infrastructure, care delivery, and people systems.

**WHAT**

is a whole-systems improvement strategy?

An improvement strategy guides the advancement of healthcare quality. The Institute of Medicine’s (IOM) 2001 landmark report, *Crossing the Quality Chasm: A New Health System for the 21st Century*, outlined six aims for improvement in the health care system¹. These includes care that is: safe, effective, patient-centered, timely, efficient, and equitable.

Organizations and health care systems worldwide have adopted these aims to define quality of care²,³. *Crossing the Quality Chasm* made an urgent call for fundamental changes in the health care system to close the quality gap and advocated for a systems approach to implementing change¹ – much like NACHC’s approach to health center systems change using the Value Transformation Framework.
At the center of a quality-driven improvement strategy is improvement science, rooted in the work of W. Edwards Deming. This work laid the foundation for the Model for Improvement, adopted by the Institute for Healthcare Improvement as its primary framework for improvement in healthcare. The Model for Improvement focuses on small scale testing such as the Plan-Do-Study-Act (PDSA) cycle.

An improvement strategy is a multi-faceted approach that allows a health center to plan, execute, and achieve desired quality and improvement goals. It encompasses distinct phases of work:

**Quality Planning** involves understanding the system and target population and developing structures and processes to achieve desired results. Key functions of quality planning include setting goals, defining measures for these goals, and developing structures and processes to support their achievement. Quality planning is iterative and should occur on a routine basis, such as annually. Tools and strategies used as part of quality planning include setting priorities and goals, leadership sponsorship, identifying improvement team(s), defining job roles, and designing an approach.

**Quality Improvement (QI)** is the process of testing ideas, identifying what works, and scaling (replicating and expanding). This is often done by those closest to the work. Improvement cycles should occur in intervals over time, typically in short bursts, to achieve new levels of performance. QI tools include improvement models (PDSA, Lean, Six Sigma, etc.), project charters, and implementation resources such as flow charts, root cause analysis, pareto charts, and A3.

**Quality Control** involves measuring and maintaining improvements over time. Quality control is daily work within teams to manage how the system is performing and to adjust, as needed, to maintain or improve performance. Tools used in this phase include visual management strategies to display and track measures, team huddles, and escalation processes.

**Quality Assurance (QA)** is the process of checking performance against external standards. While QA is not a process for improving system performance by itself, it informs the process of improvement and is important in value-based care as payers or external entities typically align payments against a set of standards or expectations.

Below is a visual that shows the cycle of improvement strategy phases as part of a whole-system improvement strategy:
### IMPROVEMENT STRATEGY

<table>
<thead>
<tr>
<th>Planning</th>
<th>Improvement</th>
<th>Control</th>
<th>Assurance</th>
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| **Focus** | • Strategic planning  
• Set priorities, goals, and measures  
• Establish structures and processes | • Operationalize the strategy  
• Test ideas  
• Scale improvements | • Measure, monitor, and maintain improvement  
• Adjust, as needed, to improve performance | • Check performance against external standards |
| **Timeframe** | • Regular, iterative (e.g., annually)  
• Overtime  
• Often small, rapid bursts | • Daily work | • Scheduled; often driven by external entities |
| **Tools** | • Goals  
• Leadership endorsement  
• Job descriptions/roles  
• Measures  
• Improvement model selection | • Improvement Model (PDSA, Lean, Six Sigma, etc.)  
• Tools (flow charts, pareto charts, A3, etc.)  
• Project Charters | • Visual management to display and track measures  
• Team huddles  
• Escalation processes | • Audit, inspection, gap analysis |

A whole-systems approach to quality and improvement combines a culture of learning with management structures that allow for learning in actionable steps. A ‘learning organization’ is one where people collaborate to create desired results by iteratively learning together, expanding their capacity and ability to realize their full potential.

For health centers, a focus on quality planning, improvement, control, and assurance aligns with HRSA's Health Center Program Requirements and Advancing Health Center Excellence Framework both of which aim to pursue better care, healthier people and communities, and affordable care. A whole-systems improvement strategy also aligns with the Patient Centered Medical Home (PCMH) and its approach to delivering high-quality, cost-effective, patient-centered care using team-based approaches across the entire health care system.

### HOW to engage in a whole-systems improvement strategy?

This action guide is designed to support health centers as they build or enhance an improvement strategy and develop as learning organizations engaged in continuous quality improvement with application of evidence-based practices. It brings together all system Domains outlined in the Value Transformation Framework – Infrastructure, Care Delivery, and People – to achieve improved performance while encouraging innovation.

Outlined below are 9 steps health centers can take to advance a whole-systems improvement strategy organized by quality planning, improvement, control, and assurance.

| Quality Planning | Step 1. Leadership sets expectations for quality and a culture of learning  
Step 2. Write or review QI/QA Plan document  
Step 3. Select an improvement model  
Step 4. Determine priorities; Set organizational improvement and quality goals |
| Quality Improvement | Step 5. Train staff in improvement tools and processes  
Step 6. Select a manageable number of improvement initiatives; Test  
Step 7. Develop mechanisms to communicate improvement ideas/activities |
| Quality Control | Step 8. Measure, Monitor, Adjust |
| Quality Assurance | Step 9. Check performance against external standards |
Leadership Sets Expectations for Quality and a Culture of Learning. Leaders of high-performing organizations set expectations, provide support and encouragement, and develop leaders within microsystems or improvement teams. This includes establishing how quality connects back to the health center’s mission. ‘A culture of quality starts and ends with engaged leadership...Engaged leaders provide protected time and tools for quality improvement (QI) work, and they hold staff accountable for improvement.’

Organizational transformation requires that leaders invest in and train health center staff in a formal model of quality improvement and strategies to manage organizational change, as well as provide staff with protected time to work toward quality improvement goals. Leadership must invest in the tools and infrastructure needed to support quality activities, including support for the transition to value-based care. This involves investing in health information technology that can streamline the process of measuring and monitoring care delivery and reimbursement and deploying staff in new and expanded roles. For more information on the role of leadership in QI and value-based care, see NACHC’s Leadership Action Guide.

The health center Board of Directors must also be engaged to determine improvement priorities and to set goals that are laid out within the QI/QA Plan. The Board has the ultimate responsibility to evaluate the performance of the health center based on QI/QA assessments and ensure appropriate follow-up actions are taken.

**Action Step:** Engage health center leaders to establish expectations for quality and a culture of learning. Provide staff time with protected time and the tools necessary for improvement work.

Write or Review QI/QA Plan Document. As a federally qualified health center (FQHC), your QI/QA Program must comply with HRSA Health Center Program Requirements by addressing:

- Clinical guidelines, standards of care, and standards of practice
- Patient safety and adverse events, including implementation of follow-up actions
- Patient satisfaction
- Patient grievances
- Periodic QI/QA assessments
- QI/QA report generation and oversight
- Clinical competence of providers (“credentialing and privileging”)
- Assessments of clinician care (“peer review”)

For complete guidelines on HRSA Health Center Program Requirements, view the Health Center Program Site Visit Protocol.

A QI/QA Plan should also outline how the health center will adopt an improvement model. A template QI/QA Plan can be adjusted to meet health center specific needs.

**Action Step:** Use the HRSA QI/QA Plan requirements as the foundation for building a robust improvement strategy.
**IMPROVEMENT STRATEGY**

**STEP 3** Select an Improvement Model. There are numerous models and methods to organize and drive improvement, including the Model for Improvement (PDSA), Lean methodology, Six Sigma tools, Define-Measure-Analyze-Improve-Control (DMAIC), and others. As all these models have been proven effective, it is most important that your health center select one model and consistently apply that model to improvement projects. For this Action Guide, the Model for Improvement is used as the example. It is a simple yet powerful tool to accelerate improvement and can be used on its own or as a complement to other tools and models. Many health centers are familiar with the small tests of change that are part of the Model for Improvement, or Plan-Do-Study-Act5.

The Model asks three questions:
1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What changes can we make that will result in improvement?

**Action Step:** Select an improvement model your organization will use to drive and organize improvement efforts.

**STEP 4** Determine Priorities; Set Organizational Improvement and Quality Goals. Using data, define your health center’s priorities for improvement to create your QI/QA Workplan. Helpful sources of information include community needs assessment findings, Uniform Data Systems (UDS) data, payor data, and national benchmarks such as Healthy People 2030.

Consider incorporating priorities beyond clinical quality into your improvement strategy. For example, performance around access to care, empanelment, patient and staff experience, care coordination/management, risk management and patient safety, can all be important components to a well-rounded improvement strategy. To build systems alignment, ensure the priorities selected for improvement also meet PCMH program standards10, such as:

- Monitor a broad spectrum of clinical quality measures, including immunization measures, other preventive care measures, chronic or acute care clinical measures, and behavioral health measures.
- Monitor resource stewardship measures related to care coordination and measures affecting health care costs.
- Monitor appointment availability by assessing performance on availability of major appointment types to meet patient needs and preferences for access.
- Monitor patient experience feedback.

Your health center Board of Directors has oversight of your QI program. It is the Board’s responsibility to evaluate the performance of the health center based on QI/QA assessments and other information received from health center management and to ensure appropriate follow-up actions are taken regarding achievement of project objectives, services utilization patterns, quality of care, efficiency, and effectiveness of the health center, and patient satisfaction9.

Set SMART objectives for performance improvement goals. SMART objectives are:

- **Specific (Who and What?):** Concrete, detailed, and well-defined
- **Measurable (By How Much?):** Quantitative or qualitative means of measurement and comparison
- **Achievable (How?):** Feasible and agreed upon by key stakeholders
- **Relevant (Why?):** Importance to the organization
- **Time-Bound (When?):** Time frame or target date
Consider peer performance, state/national benchmarks, and payor benchmarks when setting goals. For more information on setting SMART objectives, visit resources from the IHI and the CDC. In addition to setting goals at the organizational level, goals should also be set at the site or team level (e.g., adult, pediatric, etc.).

**Action Step:** Define health center improvement priorities to create your QI/QA Workplan; include SMART objectives (Specific, Measurable, Achievable, Relevant, and Time-Bound). Align QI/QA Plan with organizational goals and priorities as set out by the Board of Directors.

### QUALITY IMPROVEMENT

#### STEP 5

**Train Staff in Improvement Tools and Processes.** Organizational transformation requires that leaders invest in training health center staff to implement a formal model of quality improvement and use tools to drive practice transformation and manage change. Leaders must ensure staff have dedicated time to work toward quality improvement goals.

Training should empower staff to gain a fundamental knowledge of improvement science. This includes training in QI tools that can help to better understand, analyze, or communicate QI efforts. Examples of common QI tools include:

- **Cause and Effect Diagram:** Also known as the Ishikawa or fishbone diagram, this tool helps to analyze the root causes contributing to an outcome.
- **Failure Modes and Effects Analysis (FMEA):** Also used in Lean management and Six Sigma. FMEA is a systematic, proactive method for identifying potential risks and their impact.
- **Run Charts:** A graph of data plotted in a time sequence that helps find trends or patterns and monitor performance over time.
- **Plan-Do-Study-Act (PDSA):** A process of rapid-cycle testing that helps teams assess whether a change leads to improvement using a methodical learning process.

For a comprehensive list of tools and templates, visit the Institute for Healthcare Improvement (IHI) Quality Improvement Essentials Toolkit.

While quality improvement requires a team approach, assigning staff member leads can help organize efforts. It is a best practice to establish a **team charter** to outline the quality effort, to help teams understand the goals, tasks, timelines, and stakeholders. A charter generally includes the following information:

- Problem statement
- Description of the process that is the focus of improvement
- Why the process needs improvement
- How the team will know if a change is an improvement
- Who is affected by the process
- Timeline
- Other considerations (e.g., available resources, constraints, technology)
- How progress is communicated to leadership and key stakeholders

**Action Step:** Train staff in improvement tools and processes so they can effectively carry out improvement strategy goals. Use team charters to define team goals, roles, and responsibilities.
**STEP 6**

**Select a Manageable Number of Improvement Initiatives; Test.** Define a limited set of measures that will be the focus of active improvement efforts based upon your health center’s priorities. This manageable set of measures can be assigned by service line, staff role, or health center site. For example, Family Practice care teams may focus on a diabetes measure, Pediatric care teams may focus on weight assessment and counseling, and front office staff may focus on an empanelment or access measure.

For each measure selected for quality improvement:

- **Assign staff leads and provider champions** to organize and drive performance improvement efforts.
- **Define measure(s).** For example, for clinical quality measures (CQMs), which clinical guidance will be followed? It is important to note that CQMs do not always align across programs (e.g., UDS, HEDIS, CMS, etc.). It is essential that the health center determine which CQMs will be utilized for quality improvement to eliminate confusion among staff and providers.
- **Define the population of focus** (e.g., the measure denominator). This could include all (qualifying) health center patients, patients attributed to the health center by a specific payor, a single/few health center pilot sites, or a specific provider(s) patient panel.
- **Set SMART goals.**
- **Apply QI tools and processes** to improve performance.
- **Assess performance and effectiveness** of improvement initiatives through regular data analysis.
- **Communicate improvement progress** with staff and providers on a routine basis.

You may also have health center priorities that are not the subject of active improvement but are for the purpose of routine monitoring (Quality Control – Step 8). While the number of measures selected for active improvement should be limited and manageable, the number of measures selected for monitoring can be much larger and include multiple UDS measures, payor measures, etc.

Given the iterative nature of QI, the set of measures for active improvement will naturally transition over time. For example, as SMART goals are met, a measure may be transitioned to the monitoring stage, while a new measure becomes the subject of active improvement. IHI’s [Quality Improvement Project Measures Worksheet](#) is a useful tool to identify process, outcome, and balancing measures.

Having a manageable set of measures for active improvement helps expedite progress since health center resources, including staffing and time, are often limited. While it is essential for leadership to provide staff with protected time for QI activities, it is also essential that the number of QI activities occurring at a single time is realistic for staff to manage.

When defining measures and populations of focus, consider the capabilities and limitations of your staff, electronic health record, registries, and/or population health management system(s). Test that information being measured is available, up-to-date, and reportable through the technology available.

**Action Step:** Select a manageable number of measures that will be the focus of improvement efforts based upon health center priorities. Define measures and test.
**IMPROVEMENT STRATEGY**

**STEP 7** Develop Mechanisms to Communicate Improvement Ideas/Activities. Establish processes to foster open communication, share and spread of ideas, and to allow for innovation\(^\text{11}\). Strategies for communication and sharing include:

- Care team huddles (see Daily Huddle Toolkit by the AMA for more information on how to incorporate daily huddles into practice workflows)
- Staff meetings
- Dedicated QI meetings

As part of improvement processes, seek input from staff whose workflows directly impact measures. If improvement efforts stall, or progress towards goals is delayed, connect with the project lead, revisit the project scope, and/or return to QI tools such as Root Cause Analysis to further assess and test processes.

NACHC offers resources to support workflow development or improvement. Action Guides, Microlearnings, and other resources are available on NACHC’s Learning Hub.

Document all improvement activities. Documentation is required for HRSA Health Center Program compliance and PCMH program requirements. Additionally, PCMH standards require practices to share data with patients and/or publicly\(^\text{10}\). Moreover, data and documentation are needed to assess which activities worked and which did not work as you aim to improve measure performance.

When goals are achieved, celebrate, and acknowledge the staff and teams that contributed to success.

**Action Step:** Document and communicate your improvement efforts, next steps, and successes with staff, leadership, and the Board.

**QUALITY CONTROL**

**STEP 8** Measure, Monitor, Adjust. The Quality Control phase requires selection of a set of measures to monitor over time to ensure maintenance of improvements achieved during the Quality Improvement phase. These measures can be included on data dashboards, visual displays, and reports but they may not be part of active improvement efforts.

For each measure selected for routine monitoring:

- Define measure(s)
- Define the population of focus (e.g., the measure denominator)
- Set goals that are focused on maintaining performance
- Conduct regular data assurance to ensure your data is complete and accurate
- Share reports with staff and providers on a routine basis to monitor performance

For successful quality control, assess whether your data is complete and accurate. For example, consider whether your reports and dashboards are mapped to structured data fields (e.g., can be searched in the electronic health record) and can be reported.

Optimize your Electronic Health Record or Population Health Management System to create data dashboards. Data dashboards help to visualize real-time, current measure performance against measure goals. They also increase transparency in performance improvement, which is helpful to gain provider and staff buy-in. A study of quality dashboards in health care organizations suggests that useful dashboard components include those that enable users to customize displays to illustrate performance comparison and outliers, evaluate trends, “drill down” data on select groups, and ensure that data is trustworthy and high-quality\(^\text{13}\).
**IMPROVEMENT STRATEGY**

**Action Step:** Measure, monitor, and adjust processes to maintain improvements over time. Use data dashboards to display data and share findings with health center staff and leadership.

**QUALITY ASSURANCE**

**STEP 9**

**Check Performance Against External Standards**

Quality Assurance (QA) is the process of assessing performance against external standards. QA informs the process of improvement. It is a relevant step in value-based care as stakeholders (e.g., payors) typically align payments with established standards or expectations.

Comparing performance to external benchmarks (e.g., community needs assessment findings, Uniform Data Systems (UDS) data, payor data, Healthy People 2030) enables health centers to evaluate the quality of care they provide against industry standards and the performance of peers. Effective benchmarking requires data surveillance and access to useful, relevant, and up-to-date information. Benchmarking also includes:

- Regularly comparing indicators (structure, activities, processes, and outcomes) against top performers.
- Identifying variations in outcomes through inter-organizational cooperation.
- Pursuing innovative opportunities that have the greatest impact on outcomes.
- Monitoring indicators.

Quality Assurance, unlike earlier phases in the improvement continuum, is process oriented. It involves systematic measurement, monitoring of processes, and feedback loops to prevent errors. “In health care, it refers to activities and programs intended to ‘assure’ or promise improvement in quality of care in a defined medical setting or program.”

With health centers expected to measure many metrics, care teams should work to assess which metrics overlap to work most efficiently and intentionally. For example, health centers are required to report their UDS data each February. They may have value-based payment arrangements with payors that report HEDIS measure outcomes and might even receive grants that also require measurements of certain clinical outcomes. To best utilize the health center team’s limited time and resources, evaluate which metrics overlap and focus on streamlining the measurement systems and related interventions as much as possible.

When comparing health center outcomes with external sources it is critical to compare “apples-to-apples.” Community health centers have an incredible resource of the HRSA data set that allows them to do just that – compare their organization to other health centers who serve similar patient populations. It is for this reason that most health centers use this rich, aggregate data on which to base their quality improvement efforts. This data can be found at HRSA’s website here.

Each year, a health center should use this information to evaluate their performance and set goals for the coming year in their QI/QA Plan. It is recommended to choose a few of the metrics that are falling farthest behind the national health center outcomes and focus on improving them.

**Action Step:** Assess performance against external standards to evaluate and inform improvement efforts.
References:


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