

Quality Improvement Plan Toolkit

Guidance and Resources to Assist State and Territorial Health Agencies in Developing a Quality Improvement Plan



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State Health Departments Providing Complete or Draft QI Plans for Review

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Indiana State Department of Health
Iowa Department of Public Health
Kentucky Department for Public Health
Maine Center for Disease Control and Prevention
New Hampshire Division of Public Health Services
Ohio Department of Health
Oklahoma State Department of Health
Oregon Health Authority, Public Health Division
Texas Department of State Health Services
Washington State Department of Health

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Indiana State Department of Health
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Michigan Department of Community Health
Mississippi State Department of Health
Missouri Department of Health and Senior Services
Montana Department of Public Health and Human Services
New Hampshire Division of Public Health Services
New York State Department of Health
New Jersey Department of Health and Senior Services
North Carolina Department of Health and Human Services

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How to Use This Toolkit

We have designed this toolkit to serve two purposes.

Develop an agency-wide QI plan. We have designed the toolkit for agencies at all stages of QI plan preparation. Agencies that are just starting to prepare a QI plan may find it useful to review all toolkit sections in depth, while agencies that are midway through or finalizing the plan might find that toolkit sections can act as a checklist to ensure that all aspects of a QI plan are addressed. Following this guidance will facilitate development of a QI plan, but agencies should be prepared to adapt the guidance as needed to fit the particular needs of their organization.

Facilitate preparation for PHAB accreditation. For state and territorial health agencies interested in applying for PHAB accreditation, this toolkit is intended to address the documentation requirement for PHAB measure 9.2.1 A (“Established quality improvement program based on organizational policies and direction”) and supports the accomplishment of measure 9.2.2 (“Implemented quality improvement activities”). Local health agencies may find the toolkit guidance useful as well, as PHAB requirements are similar for state and local public health agencies. Throughout the toolkit, we have noted where PHAB has provided guidance on a particular element of the QI plan. In addition, in the “Before Writing the QI Plan” section, we have noted where other PHAB Measures align with PHAB Domain 9.2 Measures. However, use of this toolkit does not guarantee that a QI plan will meet the PHAB Standards and Measures requirements.

This toolkit is organized into six sections. The first provides a checklist and key resources to refer to when developing a QI plan. The second sets the stage for creating a QI plan by providing information to consider before writing the plan. The third consists of information and resources for each of the 10 suggested QI plan elements, examples and tips from state health agencies and QI consultants, and downloadable forms. The fourth section includes links to existing QI plans from state health agencies that have agreed to share them, as well as QI plan templates and guidance. The remaining two sections provide resources and references.

Introduction

Welcome to the Association of State and Territorial Health Officials (ASTHO) QI Plan Toolkit! This toolkit is designed to assist state and territorial health agency staff with developing a quality improvement (QI) plan for their agency. Although it was primarily developed for state and territorial health agencies, the information and resources may prove helpful to local and tribal health agencies as well. This toolkit is intended to facilitate the development of a comprehensive agency-wide QI plan; it is not intended to be a primer on how to implement individual QI projects.

Over the last decade, improving public health agency accountability and performance through improving infrastructure has been a major focus at the national, state, and local level. Results of the 2010 ASTHO profile survey revealed that most responding agencies plan to apply for accreditation through the Public Health Accreditation Board (PHAB), and almost three-quarters had a QI process in place.¹ ASTHO has supported state and territorial agencies as they prepare for accreditation, conduct QI activities, and create performance management systems. This toolkit is part of those ASTHO efforts. It is intended to provide state and territorial health agencies with practical approaches, tools, examples, and tips to create a QI plan that supports agency performance goals and addresses PHAB requirements.

Toolkit Development

With funding from CDC, this toolkit was developed through a collaborative effort between ASTHO and the North Carolina Institute for Public Health (NCIPH). NCIPH prepared the toolkit after conducting reviews of existing state agency QI plans and QI planning literature and interviewing state health department staff as well QI consultants. The development process included the following steps:

- 1** NCIPH reviewed 11 QI plans, including two from state agencies accredited by PHAB in 2013. The review was structured using PHAB Measure 9.2.1 A (“Established quality improvement program based on organizational policies and direction”) guidance elements. NCIPH also reviewed the plans for QI methodology and the extent to which the QI plan was integrated with a performance management system, strategic plan, and state health improvement plan.
- 2** NCIPH interviewed QI planning staff from 23 state agencies. Staff from seven agencies reported that their agency had completed a QI plan, 10 agencies had one in progress, and six had not yet started writing the plan. All interviews used a standard protocol and explored the QI plan’s status and development, its conformance with PHAB standards, agency performance improvement structure and efforts, existence of an agency strategic plan and state health improvement plan, and staff advice about and needs surrounding a QI plan.
- 3** NCIPH also interviewed two QI consultants with more than 20 years of experience working with public health agencies to develop QI and performance management skills, systems, and quality culture. Interviews with these consultants explored the types of technical assistance they had provided to state, local, and territorial public health agencies for QI plan development, common challenges that agencies face in developing a QI plan, and best practices and resources that could inform the toolkit.ⁱ

ⁱ Please see Acknowledgements for a list of state health agencies and QI consultants interviewed for the toolkit.

- 4 NCIPH summarized and analyzed all interviews for thematic content and summarized findings from the QI plan review and interviews to inform toolkit development.
- 5 After summarizing the findings, NCIPH developed an outline of content to include in a QI plan toolkit and a proposed format. NCIPH and ASTHO co-hosted a conference call/webinar with state interviewees to provide an opportunity for them to review the outline and provide comments and suggestions. Seventeen state interviewees and related staff participated in the call. Interviewees who could not attend were invited to provide feedback by email. NCIPH summarized the findings from the call transcript and email feedback.
- 6 NCIPH prepared a draft of the QI plan toolkit for ASTHO's review. NCIPH incorporated ASTHO's feedback into a draft and sent it to five state reviewers, the two QI consultants, and PHAB staff for comment. NCIPH then incorporated feedback from the review into a final version of the toolkit.

SECTION I.

QI Plan Development Checklist

There is no standard process for developing an agency QI plan; state health agencies interviewed used different approaches to develop their plans. However, based on their experiences, QI consultant feedback, and the QI planning literature, we have included a list of suggested steps for building a QI plan. The steps do not need to occur in order, but the first five steps should be considered before writing the QI plan. You can use these steps as a checklist to plan, implement, evaluate, and sustain the plan.

Several steps in the checklist are cross-referenced with elements of the QI plan. Refer to the toolkit sections about these elements for descriptions, tips, examples, and resources.

QI PLAN DEVELOPMENT CHECKLIST

Step	Toolkit Section for More Information	Status
	Key Tool or Resource	
<p>1. Assign who will take the lead in writing the QI plan</p> <p>In state agencies that have developed a QI plan, a number of different staff have taken the lead in writing the plan. These include the performance improvement manager, QI specialists or consultants, staff or leadership from the agency’s office of performance improvement/management, the accreditation coordinator, and others. Ideally, the staff member would have some QI training and experience working on QI teams and be familiar with the PHAB Standards and Measures.</p>	<p>No specific toolkit section</p> <p>Sample Performance Improvement Manager Position Description from ASTHO</p>	<input checked="" type="checkbox"/>
<p>2. Cultivate agency leadership support for a QI plan</p> <p>Agencies that have written and implemented a successful QI plan have mentioned that the process was facilitated by support from the health officer, health commissioner, or deputy health commissioner, as well as senior management.</p>	<p>Before Writing the QI Plan: Leadership</p> <p>Leader’s Checklist for Creating a Foundation for Success</p>	<input checked="" type="checkbox"/>
<p>3. Create a QI council or other oversight structure for QI</p> <p>While a QI plan can be created without the assistance and input of a QI council, the council or committee can help to write, review, and evaluate the QI plan; champion the plan; develop activities; assist with creating a QI culture in the agency; and help with QI project selection, monitoring, and support.</p>	<p>QI Plan Elements: Organizational Structure, Roles, and Responsibilities</p> <p>QI Council Charter Template (download link)</p>	<input checked="" type="checkbox"/>
<p>4. Consider what a culture of quality will look like in the organization</p> <p>Before writing a plan for quality improvement in the agency, first determine what quality means in the agency. What are the agency’s mission, values, and vision? What would a future state of quality look like? How does it relate to organizational goals? How can a QI plan help the organization to get there? What is the purpose of the QI plan?</p>	<p>QI Plan Elements: Culture of Quality</p> <p>Roadmap to a Culture of Quality Improvement from NACCHO</p>	<input checked="" type="checkbox"/>

<p>5. Explore linkages between a QI plan and the agency strategic plan, performance management system, and state health improvement plan</p> <p>Ideally, the QI plan would be linked with the agency plans noted above in an integrated system. However, the QI plan can be written and implemented without being integrated with those plans. Integration can occur at a later date as the agency develops other plans and revised and updates the QI plan.</p>	<p>Before Writing the QI Plan: A Quality System and PHAB Standards and Measures</p> <p>No specific tool</p>	<p><input checked="" type="checkbox"/></p>
<p>6. Conduct needs assessments</p> <p>Assessments can help evaluate the organization’s commitment to and knowledge of QI and identify the current state of QI activities and culture in the organization. Assessments can also help identify areas where staff or leadership may need training around QI practices, tools, and culture.</p>	<p>QI Plan Elements: QI Training</p> <p>How CQI Oriented Is Your Culture (download link) and Quality Improvement and Performance Management Survey</p>	<p><input checked="" type="checkbox"/></p>
<p>7. Write the QI plan</p> <p>State health agencies have found that reviewing other agency QI plans and templates before writing a QI plan can help them to decide what to include in their own plan. If the QI council or other QI oversight structure has been formed, it can assist with this and the next three steps. Remember to allow several months for plan review, revision, and vetting by leadership.</p>	<p>Sample State QI Plans and Templates</p> <p>QI Plan Development Checklist (download link)</p>	<p><input checked="" type="checkbox"/></p>
<p>8. Implement the plan</p> <p>As a part of the QI plan, the agency can develop a work plan or other action plan for how to implement and monitor the work needed to meet the goals to build a QI system. Remember to track progress in all areas (e.g., QI training, communication, QI culture, QI projects).</p>	<p>QI Plan Elements: Project Implementation and Monitoring</p> <p>QI Calendar Template (download link)</p>	<p><input checked="" type="checkbox"/></p>
<p>9. Evaluate the plan</p> <p>On at least an annual basis, the QI plan should be evaluated and revised as necessary.</p>	<p>QI Plan Elements: Evaluation of the QI Plan and Activities</p> <p>Evaluation Planning Tool (download link)</p>	<p><input checked="" type="checkbox"/></p>
<p>10. Ensure sustainability</p> <p>There are a number of strategies that state health agencies can utilize to help ensure the lasting use and impact of the QI plan. For example, agencies can use the plan to examine progress toward building a QI system that drives decisions for improvements in the following year.</p>	<p>QI Plan Elements: Sustainability</p> <p>Sustainability Checklist (download link)</p>	<p><input checked="" type="checkbox"/></p>

SECTION II.

Before Writing the QI Plan

This section presents information that state and territorial health agencies should consider before actually writing a QI plan, including a discussion of the importance of an agency-wide QI plan and how the QI plan fits into an overall quality system in the agency, leadership commitment, and how the QI plan and other quality system components relate to the PHAB Standards and Measures. Reviewing this information will provide a foundation for successful QI plan development and implementation in the agency.

Importance of an Agency-Wide QI Plan

A QI plan describes what an agency is planning to accomplish and reflects what is currently happening with QI processes and systems in that agency. It is a guidance document that informs everyone in the organization as to the direction, timeline, activities, and importance of quality and quality improvement in the organization. The QI plan is also a living document and should be revised and updated regularly as progress is made and priorities change. The QI plan provides written credibility to the entire QI process and is a visible sign of management support and commitment to quality throughout the health department.²

For agencies planning to become accredited through PHAB, a QI plan is a required element of Domain 9, Measure 9.2.1 A. However, an agency QI plan is a valuable tool even if the agency is not currently planning to become accredited. The QI plan can serve as a roadmap for QI program planning and activities while also providing documentation for existing and future efforts. In addition, a QI plan can foster a culture of quality in the agency. In an era of shrinking budgets and personnel and the same or increased demand for services, developing a culture based on improving the quality and efficiency of services through performance measurement and quality improvement is critical to sustaining an efficient and effective organization.

The accreditation requirement is very important, but more important is institutionalizing QI in the department.

*Joyce Marshall, Director of the Office of Performance Management,
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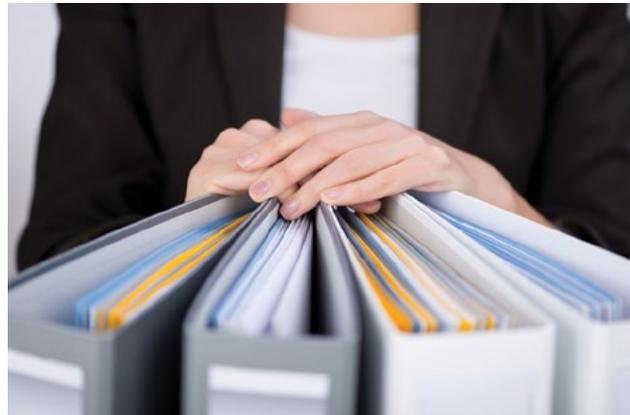
Developing a QI plan is an opportunity to integrate what may have been isolated agency plans and systems into an integrated quality system. These plans and systems include a strategic plan, state health improvement plan, performance management system, and even individual and workforce development plans. See “A Quality System” on p. 10 for more guidance on how these plans and systems can work together.

The examples below illustrate the Oklahoma State Department of Health and the Washington State Department of Health approach to alignment of plans and systems. Both agencies were accredited by PHAB in February 2013.

A well-designed and -executed QI plan that is aligned with other health planning and improvement approaches can support a health department’s efforts to improve performance and population health.

The Quality Improvement Plan is aligned to the Agency Strategic Map and Plan, Oklahoma Health Improvement Plan and Step UP Performance Management System to assure a continuous quality improvement culture throughout the agency.

From Oklahoma State Department of Health Quality Improvement Plan



Our quality improvement program is a disciplined approach to performance management that includes organizational strategic planning, performance management and accountability, operational/business planning and performance, and focused quality improvement efforts.

Diana Ehri, Performance Management Consultant, Washington State Department of Health, in "The QI Plan and Creating a QI Culture: What Worked for Three Accredited Health Departments."

An effort by the Connecticut Department of Public Health (CDPH) illustrates how a well-thought-out, agency-wide QI strategy can improve agency processes and population health. CDPH had been trying to improve its ability to collect and report sociodemographic data for years with little success. In 2012 the agency undertook a QI initiative to systematically analyze the root causes of the problem and develop and implement an improvement strategy. A multidisciplinary team of epidemiologists, department managers, IT personnel, and performance improvement staff, utilizing QI methods and tools, was able to increase the number of CDPH databases compliant with the federal standard by 200 percent in a six-month period, and progress is continuing. By CDPH improving its ability to collect and report socio-demographic information, health disparities can be identified throughout the state and efforts can be taken to improve population health and better address health inequities. For more information, see [Improving the Connecticut Department of Public Health Databases to Ensure Race, Ethnicity, Gender, and Other Sociodemographic Data Meet Federal Standards.](#)

A Quality System

Over the course of state health agency interviews and state QI plan review, it became clear that successful, agency-wide QI was not a standalone process but instead benefited from alignment and integration with other plans and systems in an agency. A number of agencies employed a systems approach to QI efforts and the QI plan. For example, some agencies defined improvement areas and described QI project prioritization in the QI plan based on the agency's strategic goals. The plan's QI objectives were structured as a part of a performance management system. In addition, some agencies used their state health improvement plan to identify key improvement areas. States that aligned the agency QI plan with other plans and systems found that this alignment facilitated a culture of quality in the agency and increased staff and leadership understanding and buy-in with the improvement process. Aligning these components ensures that the practice of QI in the agency supports its mission, vision, strategic direction, and organizational needs and can support organizational performance improvement.

The Association of State and Territorial Health Officials has developed a Performance Management Position Statement that describes how continuous tracking and measuring of performance leads to agency-wide improvement and is critical to building and sustaining a quality system.

The Association of State and Territorial Health Officials has developed a Performance Management Position Statement that endorses a culture of quality and promotes the uses of performance management in state health agency practices, programs, and interventions.

I. ASTHO Supports Performance Management in Public Health

Performance management is described by the Public Health Foundation as the practice of actively using performance data for improvement purposes: "This practice involves the strategic use of performance measures and standards to establish performance targets and goals."

Performance management can be used to prioritize and allocate resources, inform managers about necessary adjustments or changes in policies or programs, frame reports on success in meeting performance goals, and to "lay the foundation for improved protection, promotion, and preservation of a community's health."

ASTHO recommends that state and territorial health agencies integrate a performance management system into their agency practices, programs, and interventions.

Excerpted from [ASTHO's Performance Management Position Statement](#)

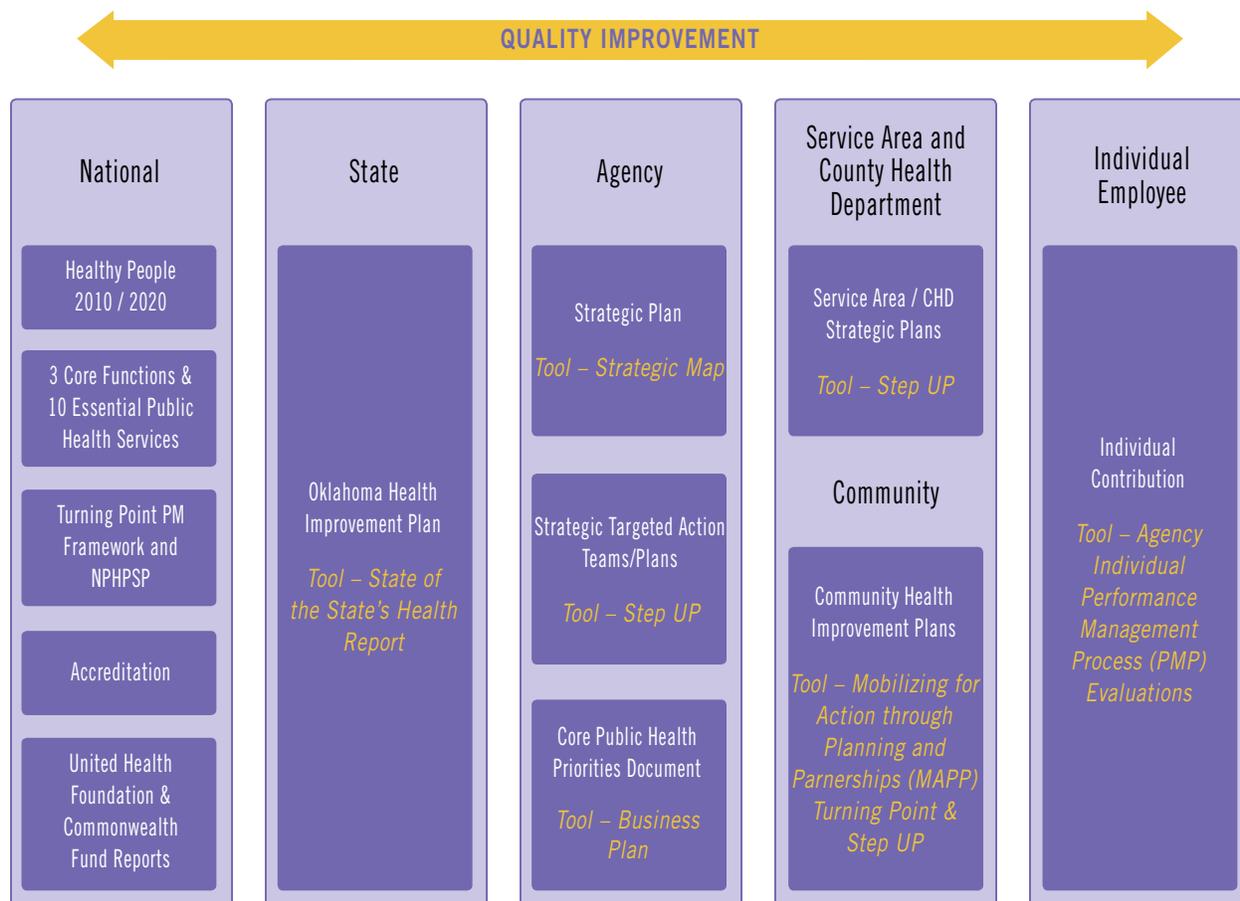
Consider two contrasting examples of state health agencies creating integrating quality systems. In the first, Montana has not yet developed their QI plan but has conducted foundational work to create a solid infrastructure for organizational quality, on which their QI plan will be based. In the second, Oklahoma shows the linkages and systems integration in a mature quality system.

The Montana Department of Public Health and Human Services first began conducting QI as part of the Robert Wood Johnson Foundation Multi-state Learning Collaborative and initially structured QI as individual projects in the agency. However, QI planning staff found that while some individual projects may have been successful, QI did not spread throughout the agency and create a culture change. Rather QI continued to happen on a case-by-case basis that was not standardized or systematic. Currently, Montana is linking multiple components of organizational management, including a performance management system, to form an integrated system. Under this model, the state health assessment, strategic planning, operational planning, budgeting, performance management, and quality improvement

comprise one unified approach. Montana is using this strategy as an effective approach for complying with PHAB accreditation criteria and restarting its improvement efforts on a foundation that will facilitate the development of agency-wide QI. For more details and illustrated schematics, see the presentation [Performance Management in Action: the Montana Model](#).

The Oklahoma State Department of Health (OSDH) created the schematic below to illustrate how performance management works in the agency. In this case, national, state, agency, community, and individual plans and performance are aligned to achieve agency goals. Quality improvement, the structure of which is described in the agency QI plan, serves as the link and feedback loop for all performance improvement efforts in the agency. Agency-wide, continuous quality improvement is essential for OSDH to achieve its national, state, agency, community, and individual employee goals. For more details about OSDH's quality system, see the Oklahoma State Department of Health Quality Improvement Plan.

OSDH PERFORMANCE MANAGEMENT MODEL



Leadership

Leadership commitment is essential to the success of a QI plan. Leaders and managers create and support organizational culture, including a culture that supports QI. While program-level QI can occur without significant senior leadership support or involvement, QI is unlikely to spread throughout the organization and become institutionalized as a culture without this support. Leaders can be champions for QI and performance, can put in place critical support mechanisms, and can give staff the authority to make change.^{2,3} In addition, several state interviewees mentioned that the support of their health commissioner, deputy commissioner, health officer, or other key leadership was integral to the progress of developing and implementing their QI plan and systems. In some states, the individual in that leadership position was the catalyst and driver of the QI program and the key to buy-in with other senior leadership. Interview participants provided the following lessons learned regarding leadership and QI plans.

- Make sure policymakers are engaged, that the QI and performance management language being used makes sense to them, and that they can relate QI efforts to outcomes in the agency.
- Regarding leadership transitions, it is helpful to have a QI plan written to show the incoming leader for signoff rather than being in the development phase.
- If leaders are not on board, a testimonial from a health commissioner in another state (or leader/policymaker at the same or a higher level than the resistant leader) with a successful QI program may be helpful. The performance improvement manager in that state may be able to facilitate that type of assistance.
- QI planning and implementation can be accomplished without significant top-down involvement if a strong grassroots effort is in place. Identify agency staff who “get it” and guide QI efforts from that base. That approach is also helpful for sustainability during leadership and management transitions.

As described in the National Association of County and City Health Officials’ (NACCHO) [“Roadmap to a Culture of Quality Improvement,”](#) there are strategies and responsibilities for both agency leaders and performance managers when developing an agency QI culture. Developing a QI plan is an opportunity to engage leaders and all agency staff in the QI culture development process. For example, the Washington State Department of Health has taken an active approach in cultivating leaders to be champions of QI. When the department first began writing a QI plan, the agency found that there was a large disconnect between line staff and management. Agency staff feared bringing problems and potential solutions to management. To address this, the agency employed a successful strategy of change management with senior leaders and managers to facilitate their ability to empower and encourage employees to conduct QI. The agency believes that to have a sustainable QI plan and system, it must address two components of change: 20 percent of efforts are devoted to technical and training aspects and 80 percent address the behavior and culture shift needed to embrace QI. Even for leaders who are supportive of QI and may have the knowledge and technical skills to lead QI efforts, the agency has found that change management training is a key element of its QI planning, so leaders can understand the culture and behavior shifts necessary to lead and encourage QI culture throughout the agency.

PHAB Standards and Measures

A goal of public health accreditation is to promote high performance and continuous quality improvement. PHAB Domain 9 focuses on the evaluation of all programs and interventions, including key public health processes, and on the implementation of a formal QI process that fosters a culture of QI. Additionally, PHAB has incorporated the concept of continuous QI in its standards and measures and in the accreditation process. As an agency creates a culture of QI, it will be in a better position to be in conformity with all the PHAB Standards and Measures. This toolkit will better position the agency to be able to address and report on continuous QI, an annual requirement of PHAB-accredited agencies.

Recognizing the interrelated components of a quality system, a QI plan addresses several [PHAB Standards and Measures](#). If an agency is developing a QI plan with the intent to become accredited, it is important to ensure that the required linkages are in place. PHAB Standard 9.2 provides the measures, required documentation, and guidance for QI processes in the agency; Standard 9.2.1 A describes the requirement for an agency QI plan. There are several specific PHAB measures that link to the QI plan outside of Standard 9.2.1 A. Using a comprehensive approach to address these linkages will facilitate an agency's preparation for accreditation. The table below provides the standards and measures that have direct links to the QI plan and quality improvement efforts. Specifically, the QI plan is linked to the standards for the agency strategic plan (5.3.1 and 5.3.2) and the performance management system (9.1.3). Continuous improvement is linked to maintaining policies (11.1.1). Finally, QI efforts must be linked to the QI plan and communicated with the governing entity (12.3.3). Some agencies begin developing their QI plan as part of the agency strategic plan, rather than as a standalone plan. That approach can meet PHAB Standards and Measures as well, as long as the required QI plan elements are present.

The PHAB Quality Improvement Standard and Measures (Version 1.5)

PHAB Standard 9.2: Develop and implement quality improvement processes integrated into organizational practice, programs, processes, and interventions.

Measure 9.2.1 A: Establish a quality improvement program based on organizational policies and direction.

Required Documentation: A written quality improvement plan.

Measure 9.2.2: Implement quality improvement activities.

Required Documentation: Quality improvement activities based on the QI plan.

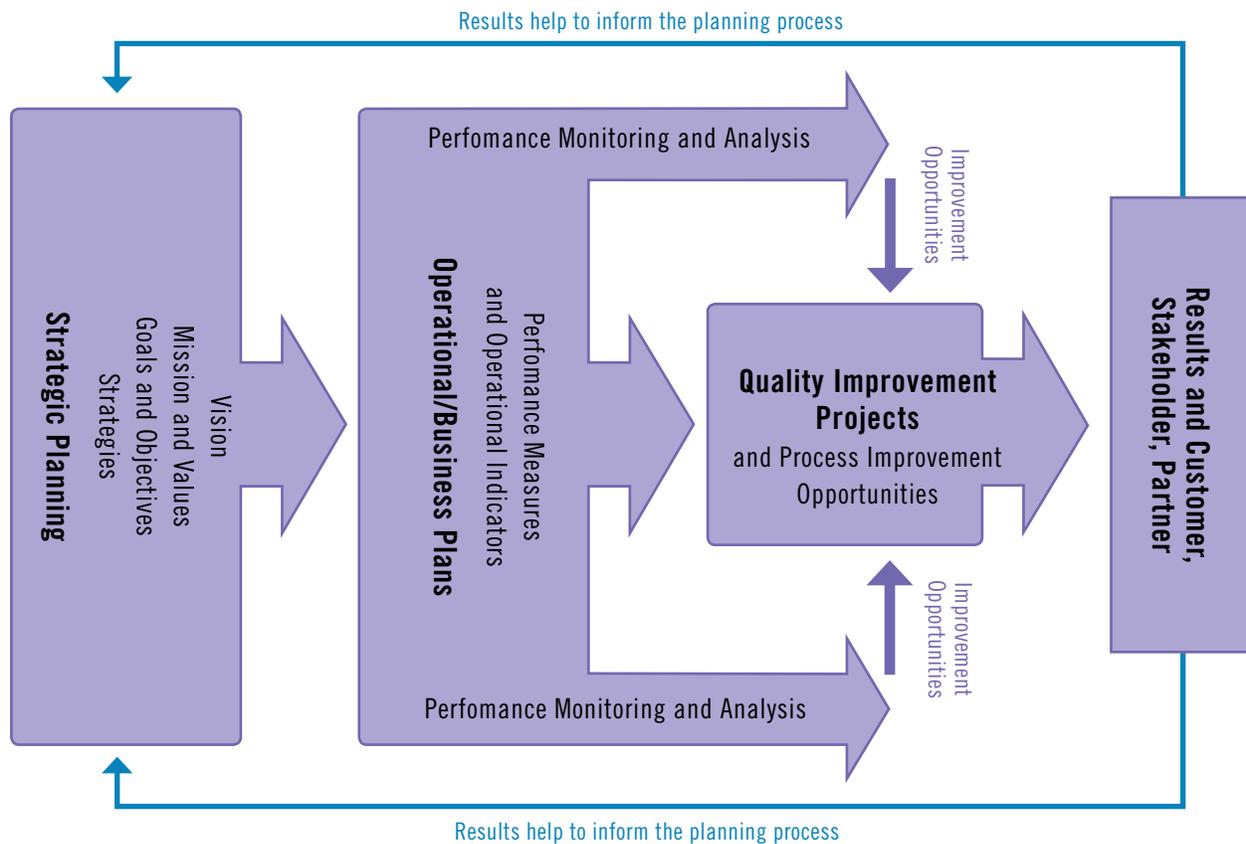
Staff participation in quality improvement activities based on the QI plan.

For further detail, please see the PHAB [Standards and Measures](#).

PHAB STANDARDS AND MEASURES RELATING TO DOMAIN 9.2

Measure Number	Measure	PHAB Guidance	Required Documentation
5.3.1	Department strategic planning process.	The development of such a plan requires a planning process that considers opinions and knowledge from across the health department, assesses the larger environment in which the health department operates, uses its organizational strengths and addresses its weaknesses, links to the health improvement plan that has been adopted by the community, and links to the health department's quality improvement plan.	N/A
5.3.2	Adopted department strategic plan.	It must also link with the health improvement plan and the health department's quality improvement plan. The strategic plan need not link to all elements of the health improvement plan or quality improvement plan, but it must show where linkages are appropriate for effective planning and implementation.	Link to the health improvement plan and quality improvement plan.
5.3.3	Implemented department strategic plan.	The health department must provide reports developed since the plan's adoption showing that it has reviewed the strategic plan and has monitored and assessed progress towards reaching the goals and objectives. The reports must include how the targets are monitored. Progress is evidenced by completing defined steps to reach a target, by completing objectives, or by addressing priorities and implementing activities. Reports must be completed no less frequently than annually. The plan may be revised based on work completed, adjustments to timelines, or changes in available resources. If the plan has been adopted within the year, progress reports of a previous plan may be provided or detailed evaluation plans may be submitted.	Progress towards achievement of the goals and objectives contained in the plan.
9.1.3	Implemented performance management system.	The health department must document that performance results, opportunities for improvement, and next steps for the identified goals and corresponding objectives were documented and reported.	Analysis of progress toward achieving goals and objectives and identification of areas in need of focused improvement processes.
11.1.1	Policies and procedures regarding health department operations, reviewed regularly, and accessible to staff.	The health department must provide written operations policies/procedures. This could be one manual or a group of policies. The health department must provide its health department organizational chart. The health department must document the review of policies and procedures. The health department must document how staff access policies.	Policy and procedure manual or individual policies; health department organizational chart; review of policies and procedures and methods for staff access to policies.
12.3.3	Communication with the governing entity about health department performance assessment and improvement.	The governing entity should be knowledgeable about the health department's overall assessment and quality improvement initiatives. Communication efforts could include, for example, program reviews, accreditation efforts, quality improvement projects, and other performance improvement activities.	Communication with the governing entity concerning assessment of the health department's performance.

The Washington State Department of Health provides an example of how a PHAB-accredited state health agency demonstrates linkages between the key elements mentioned above. The Washington State Department of Health has integrated its agency plans and systems as part of a unified, quality-driven, performance management approach. The agency uses the Baldrige National Quality Award and Washington State Quality Award frameworks, systems that correspond well to the PHAB standards, to structure and facilitate its goal of organizational excellence. The schematic below, adapted from the agency's quality improvement program, demonstrates the linkages between strategic planning (PHAB standard 5.3), performance monitoring (PHAB standard 9.1), quality improvement (PHAB standard 9.2), and communication with governing entities (PHAB measure 12.3.3) and others.



SECTION III.

QI Plan Elements

This toolkit describes the elements of an agency-wide QI plan. These elements were identified based on a review of the QI planning literature, PHAB Standards and Measures, existing state public health agency QI plans, and interviews with state public health QI planners and QI consultants. All elements do not necessarily need to be included in a QI plan, but QI planners should consider each during the QI plan process.

For each element, a description and key information of the element and its relevance to the QI plan and PHAB Measure 9.2.1 is included. Where possible, tips, examples, and resources gleaned from state health agency or QI consultant interviews,ⁱⁱⁱ state health agency QI plans, or the QI planning literature are provided. For many elements, downloadable action plans, worksheets, or checklists are included to aid in planning.

QI Plan Elements

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A. Culture of Quality

Relationship to PHAB Measure 9.2.1

In its guidance, PHAB includes the following as a component of an acceptable QI plan:

“Culture of quality and the desired future state of quality in the organization.”

(PHAB Standards and Measures Version 1.5)

ⁱⁱⁱ Please see Acknowledgements for a list of state health agencies and QI consultants interviewed for the toolkit.

Developing a culture of quality can transform how an agency does business and is more likely to result in an agency that sees improved performance as an everyday job compared with individual QI projects.^{4,5} A QI plan encompasses more than a collection of specific QI projects. It should reflect the agency's approach to quality across the organization and the establishment of a culture that supports quality and performance agency-wide.

Organizational Culture and QI

The culture of an organization is the embodiment of the core values, guiding principles, behaviors, and attitudes that collectively contribute to its daily operations. Organizational culture is the very essence of how work is accomplished; it matures over several years, during which norms are passed on from one "generation" of staff to the next. Because culture is ingrained in an organization, transforming culture to embrace QI when minimal knowledge or experience with QI exists requires strong commitment and deliberate management of change over time.

—From *"Roadmap to a Culture of Quality Improvement,"* NACCHO

A culture of quality will be defined differently from organization to organization, but some key principles include a customer focus, engaged and committed leadership and staff, use of data to identify and analyze problems and guide solutions, and continually making improvements over time. State health agencies have defined quality in different ways in their QI plans. For example, in its QI plan, the New Hampshire Division of Public Health Services described quality in the agency through a quality policy statement, shown below.

Quality Policy Statement

NH Division of Public Health Services (DPHS) is committed to a quality program as a proven way to enhance our organization's performance and achieve measurable improvements in the health and well-being of New Hampshire's residents. DPHS strives to be a high-performing, quality organization that systematically evaluates and improves the quality of our programs, processes and services to achieve a high level of efficiency, effectiveness, and customer satisfaction.

DPHS will reach that ideal by:

- Engaging customers and stakeholders and focusing on their needs;
- Ensuring leadership support, through clear direction and active involvement by the senior management team;
- Fostering a culture that encourages and empowers all employees of DPHS to be fully engaged in continuous quality improvement;
- Involving employees who are subject matter experts in and are impacted by the improvement opportunity;
- Continuously monitoring and evaluating performance;
- Using data and analysis to identify problems and performance concerns, and develop solutions and improvements; and
- Improving quality over time by investing in a continuous cycle of measurement, analysis, reporting and improvement.

—From *New Hampshire Division of Public Health Services Quality Plan 2013*

STEPS TO CREATING A CULTURE OF QUALITY IN THE AGENCY

Although agencies vary in their approach to creating a culture of quality, there are three basic steps to working through this process. These include assessing the culture, planning for improvements, and periodically reassessing culture. Each of these steps is explained below.

- 1. Assess the culture of quality in the agency.** Determining the agency's culture of quality and desired future state of quality in the organization is an important first step in the quality planning process. What does quality currently look like in the organization? What does the agency want the future state of quality to look like in one year, three years, or five years? Measuring the current state accurately will help to identify the gap that exists between the current state and future state and help with planning for resources and training.

Use one of the tools provided below to assess the quality culture in the agency. Each tool can be used as a paper-and-pencil survey or can be adapted into an online survey. Online surveys, in addition to being efficient, eliminate the need for data entry and usually are able to calculate summary statistics for an assessment. Ensure anonymity for staff taking the survey, but it may be helpful to include questions about programmatic area and whether the respondent is part of leadership to be able to better focus a planning strategy.

- 2. Plan for improvements in quality culture.** Leaders, managers and the QI council can use the planning tool [Action Plan for Leaders to Support a QI Team and Sustain a QI Culture](#) (download link) to evaluate the results of the assessment survey and plan a course of action to build a culture of quality in the agency. In addition, review NACCHO's "[Roadmap to a Culture of Quality Improvement](#)" for strategies and steps to creating a quality culture.
- 3. Periodically reassess culture of quality.** It is recommended that agency leaders and staff complete the assessment survey on an annual or biannual basis. When results are compared to previous surveys, agencies can determine if improvement strategies are working and what further training or institutional strategies may be needed.

TOOLS AND RESOURCES

There are a number of resources to assess the agency's organizational culture and progress toward building a future state of QI culture. Several of these are provided here.

[Roadmap to a Culture of Quality Improvement](#)

Through several years of research and discussions with health department leaders about implementation of successful QI projects and establishing a QI culture in their agencies, NACCHO has developed, and other organizations have tested, the "Roadmap to a Culture of Quality Improvement." State agencies can use the roadmap to determine their current phase of QI culture and learn strategies to progress through phases of QI integration.

[How CQI Oriented Is Your Culture?](#) (download link)

The Center for Public Health Quality utilizes this survey to help state agencies and local health departments assess their agency culture of quality before and after a six-month QI training program.

[Organizational QI Maturity](#)

This 50-question survey was first developed to evaluate the Robert Wood Johnson Foundation Multi-state Learning Collaborative. In 2009, 2010, and 2011, the University of Southern Maine administered this survey to state and local health departments in all 16 participating states. Since that time, a shorter version of the survey (see below) has been used in Minnesota at the state and local levels.

[Organizational QI Maturity: Ten-Question Subset](#)

An alternative option to the full QI maturity index, this is a 10-item subset of the Organizational QI Maturity tool. This shorter list of questions was developed by Minnesota's Public Health Research to Action Network to represent the key domains of QI maturity.

[Washington State's Case Study: Building a Quality Culture](#)

This presentation illustrates Tacoma-Pierce County Health Department's effort to build a quality culture and infrastructure and includes practical strategies and lessons learned.

[Action Plan for Leaders to Support a QI Team and Sustain a QI Culture Tool](#) (download link)

This tool developed by the Center for Public Health Quality can help leaders to plan out strategies for building and sustaining QI culture in the agency. The center found that the tool helped leaders implement QI culture strategies they developed while agency staff participated in QI training and projects.

B. Key Quality Terms

To facilitate a common understanding of QI and performance management in the agency, is it important to define key terms that the agency plans to use related to quality systems, QI, performance management, and accreditation. A review of current state health agency QI plans showed that almost all included key quality term definitions, but the terms and definitions were different from agency to agency. Developing a set of key quality terms is an important part of the QI plan, because defining key quality terms provides staff and leadership in the agency with a consistent vocabulary when learning about, describing, and implementing QI and performance management. Because every agency is different, it is important to use terms that are relevant and understandable to the agency. There is no standard as to where the terms are placed in the QI plan; agencies have included them in the beginning or middle of the plan or in an appendix.

Relationship to PHAB Measure 9.2.1 A

In its guidance, PHAB includes the following as a component of an acceptable QI plan:
"Key quality terms to create a common vocabulary and a clear, consistent message." (*PHAB Standards and Measures Version 1.5*)

QI plans reviewed included definitions for the following terms and acronyms (note: this is not a complete list).

QI terms. These include definitions of general terms such as "Quality Improvement," "Quality Assurance," "Continuous Quality Improvement," and "Quality Improvement Methods," as well as definitions of specific QI methods and tools such as "PDCA," "AIM Statement," and "Lean."

Performance management terms. These include terms such as "Performance Metrics," "Baseline," "Benchmark," "Standard," "Goals," "Outcome Objectives," "Process Objectives," "Activities," "SMART Measure," and "Indicator."

Miscellaneous terms. These include definitions of other terms used in the QI plan such as “Strategic Plan,” “Stakeholders,” “Sustainability,” “Action Plan,” “Customer,” “Mission,” “Leadership,” “Accreditation,” “PHAB,” “Evidence-Based Practice,” “Board of Health,” “Infrastructure,” “Population Health,” “Healthy People 2020,” and “Vision.”

Acronyms. Some state health agencies included definitions of agency or related acronyms such as “LSTAT” (Leadership Strategic Targeted Action Teams), “OHIP” (Oklahoma Health Improvement Plan), and “ELT” (Executive Leadership Team).

Tip from State Health Agencies

Because performance management, quality improvement, and strategic planning are intertwined in an integrated quality system, consider including terms relevant to each of those areas. For example, if the QI plan is linked to a performance management system or performance measures will be used, include terms defining key concepts of a performance management system.

WHERE TO FIND KEY QUALITY TERMS

A number of organizations have compiled listings and definitions of quality terms, such as PHAB in its [Acronyms and Glossary of Terms 1.5](#) and ASTHO in its [National Public Health Performance Standards Version 3.0 Glossary](#). The Public Health Foundation’s [Performance Management Self-Assessment Tool](#) also included a brief set of key definitions (you must register to access the tool). Many of the existing QI plans from state health agencies include key quality terms; [Oklahoma’s](#) and [Washington’s](#) QI plans are examples.

C. Organizational Structure, Roles, and Responsibilities

Building an organizational structure (sometimes referred to as governance) for QI will facilitate QI plan implementation by clarifying roles, responsibilities, expectations, and reporting requirements. Often, this is accomplished by means of a QI council, QI advisory committee, or similar body. An existing management committee structure can also be used to fulfill this role, especially if the agency is small. The agency QI plan may also include the roles for the performance improvement or management office, senior leadership team, performance management team, QI champions or teams, and other agency staff.

Relationship to PHAB Measure 9.2.1

In its guidance, PHAB includes the following as a component of an acceptable QI plan:

“Key elements of the quality improvement plan’s governance structure, such as:

- Organization structure.
- Membership and rotation.
- Roles and responsibilities.
- Staffing and administrative support.
- Budget and resource allocation.”

(PHAB Standards and Measures Version 1.5)

QI COUNCIL

A QI council can perform several functions that support the success of QI plan implementation and activities and spread of QI culture in the agency. These include identifying and prioritizing QI projects that are aligned with the strategic goals of the agency, ensuring projects are tracked for achievement of their goals and lessons learned, and providing guidance regarding QI processes and training. Based on state health agency QI plan review and interviews with state QI plan developers and QI technical consultants, the functions of the QI committee also could include the following, depending on the membership, roles, and skills of the group.



1. QI plan oversight

- Assisting with development of agency QI policies.
- Reviewing and evaluating QI plan implementation progress.
- Reviewing the results of customer surveys and making recommendations.

2. Training and technical assistance

- Participating in QI tool and methods training and methods and modeling their use in the agency.
- Planning for training needs of staff and identifying resources needed for training.
- Providing guidance and technical assistance to staff engaged in QI projects.

3. Organizational supports for QI

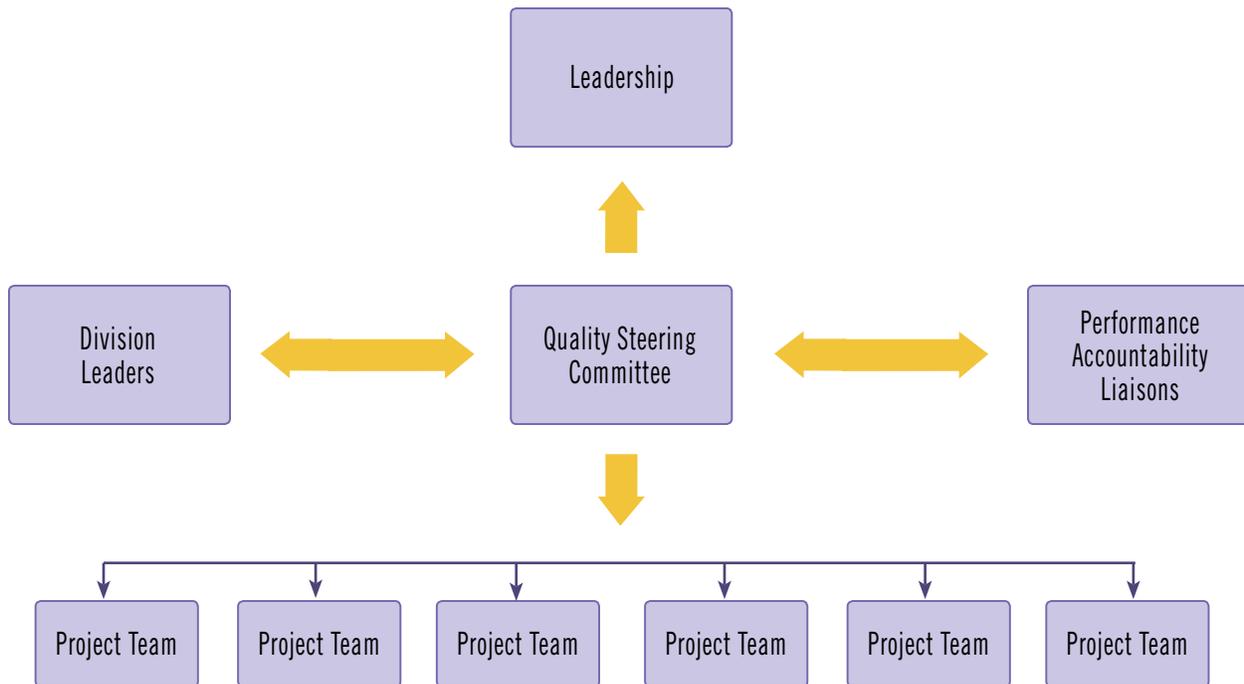
- Ensuring resources are available for QI projects.
- Linking quality improvement to strategic objectives and performance management within the organization.
- Ensuring QI efforts are recognized and celebrated in the agency.

4. Organizational culture

- Promoting an organizational vision that incorporates quality improvement.
- Communicating progress and results of QI activities to staff, leadership, and external governance such as a board of health, as well as communicating quality as a part of the organization's core values.
- Serving as a liaison to senior leadership in the agency.

Depending on the organization, oversight for QI can be structured in several different ways. For example, for agencies with a performance management system in place, the QI organizational structure is often integrated into the performance management structure. The example below from the Washington State Department of Health's QI Plan shows a simple schematic of its oversight structure for QI and includes a detailed description of the Quality Steering Committee (leadership, performance accountability liaison [representatives from various division areas of the agency], and project team responsibilities are included in the QI plan as well).

WASHINGTON STATE DEPARTMENT OF HEALTH QI OVERSIGHT STRUCTURE



Quality Steering Committee

Chair: Performance and Accountability Office Director.

Meets: Once a quarter. Special sessions may be called by the chairperson. Committee members are expected to be personally engaged by attending meetings.

Reports to: Leadership, Secretary, Deputy Secretary.

Roles and Responsibilities, All Steering Committee Members:

- Establish overall quality improvement (QI) program policies, goals, and selected performance indicators.
- Establish a QI project selection and review process. (Including regular review of customer needs, agency performance data—ensure that decisions are data-driven, not based on hunches or opinions—develop criteria for deciding when a QI effort/project might be indicated.)
- Provide guidance and oversight of the agency’s QI efforts: 1) Review quality performance indicators quarterly to assure progress toward specific, achievable QI goals and objectives. 2) Identify potential QI program implementation issues and develop secondary data analysis to determine if further review is warranted. 3) Resolve conflicts related to funding, priorities, external commitments, cross-organizational boundaries, management, and employees. 4) Recommend changes in program, process, and policy.
- Prepare an annual report of all agency QI efforts to Leadership.
- Promote QI program and project support with key internal stakeholders: the full SMT, agency mid-management, and employees. Encourage the involvement of teams of highly capable individuals from all department levels, disciplines, and divisions.
- Encourage and support timely recognition of individual and team performance accomplishments.
- Communicate clear messages about desired QI outcomes and priorities to internal and external audiences; clearly connect the department’s strategic plan to performance improvement.
- Gather and share best practices.

—From [Washington State Department of Health Quality Improvement Program Plan](#)

MEMBERSHIP AND ROTATION

Membership in the QI oversight body will be determined partly by the functions for which the group is responsible. The following are a few considerations gleaned from state health agency and QI consultant interviews.

- Leader participation in the committee facilitates resource allocation and provides visible commitment to QI in the agency. However, leadership need not attend all meetings; committee members may have more autonomy and speak more freely if leadership is not in attendance.
- If guidance of QI projects is a desired role, it will be helpful to include members with previous QI experience.
- Cross-divisional or cross-departmental membership is often used to help spread QI throughout the organization and avoid isolated QI efforts.
- Asking for volunteer representatives can help to increase buy-in and motivation on the committee.
- QI council members could include the following:
 - Performance improvement manager.
 - Agency QI specialists.
 - Performance office staff and leadership.
 - Agency senior leadership.
 - Frontline and manager staff from each division, department, branch, program or section.
 - Information technology staff.
 - Human resources staff.

Tip from a QI Consultant

I strongly encourage leaders to get on the team. It speaks volumes to people. In [one state health agency] it helped to launch QI projects. The health commissioner led a team—that sends a strong message to people.

Based on reviews of state health agency QI plans and interviews, a typical membership term on a QI council lasts a minimum of two years, with rotation to increase engagement of all agency staff in the process. Additional governing provisions might include less than half the members rotating off in any given year, and only one staff member from each division rotating off at a time.

IMPORTANCE OF A CHARTER

Creating a charter for the QI committee documents and clearly communicates the membership, terms, expectations, and roles of the QI committee members. The charter can also orient new members to the committee. A number of state health agencies mention QI committee charters in their QI plans. The QI committee charter, like the agency QI plan, can be housed on the agency's intranet so it is available to all staff. This [QI Council Charter Template](#) (download link) includes typical information that is included in a QI council charter.

In addition to a charter, a QI council calendar can be a useful tool to schedule topics that the QI council will review and take action on and to assess progress in the planned activities. An example calendar is below.

QI COUNCIL CALENDAR TEMPLATE

Quality Improvement Calendar, <timeframe>				
Quality Project, Program, or Area	Accountable Staff	Completion Date	QI Council Review Date	Other Review Dates (Management Team, BOH, etc.)
Quality Projects				
<i>Project 1</i>				
<i>Project 2</i>				
Ongoing Program QI				
<i>Division or Program 1</i>				
<i>Division or Program 2</i>				
Agency Performance Measures Review				
Review of Health Indicators				
Review of QI Training Calendar				
Approval of <Calendar Year> QI Plan				
Evaluation of QI Plan				
<i><Calendar Year> Evaluation Recommendations</i>				
<i><Calendar Year> Evaluation</i>				

—Adapted from [Tacoma-Pierce 2010-2011 Quality Improvement Plan](#)

BEYOND THE QI COUNCIL: ROLES AND RESPONSIBILITIES

Roles and responsibilities are a key component of an organizational structure for QI and should encompass more than just the QI council. Ideally, all staff in an organization should play a role in QI efforts. One way to accomplish this is to include QI responsibilities as part of all position descriptions for all staff. For the QI plan, agencies can describe the management and coordination of QI activities through a summary of roles and responsibilities addressing the contributions of employees in the agency.

As an example, the [Oregon Health Authority Public Health Division Quality Improvement Plan](#) notes that “QI requires the participation of staff at all levels of an organization.” Detailed roles and responsibilities are listed for the QI council, QI project teams, director of Oregon Public Health Division, deputy director of Oregon Public Health Division, performance manager, center directors, section managers, program managers, and quality improvement specialists, as well as all staff. For example, the roles and responsibilities for all staff are outlined as follows:

- Participating in QI projects.
- Developing an understanding of basic QI principles and tools through QI training.
- Identifying program areas for QI and report QI opportunities to manager.

- Discussing QI training needs with managers to ensure continued professional development and increase institutional/program capacity.
- Completing QI activities under the normal supervisory authority and supervisory structure of the Oregon Public Health Division.
- Applying QI principles and tools to daily work.



BUDGET AND RESOURCE ALLOCATION

If desired, the QI plan can include details about the budget and funds allocated to QI initiatives and the plan for sustaining QI activities in the absence of continuing external or internal funding. Leadership, in its role as executive sponsors of QI projects, is responsible for ensuring that budget and resource allocation is made available for the completion and sustainability of QI projects and accomplishments.

D. QI Training

A key part of the QI plan is determining the agency’s QI training strategy. To create a training strategy that will facilitate implementation of a successful QI plan, the following questions need to be addressed:

- Who will be trained, when, and what will the training content be?
- Do staff need training on performance management as well as quality improvement?
- What training will be most effective to facilitate a QI culture?

Relationship to PHAB Measure 9.2.1

In its guidance, PHAB includes the following as a component of an acceptable QI plan:
 “Types of quality improvement training available and conducted within the organization, for example:

- New employee orientation presentation materials.
- Introductory online course for all staff.
- Advanced training for lead QI staff.
- Continuing staff training on QI.
- Other training as needed—position-specific (MCH, epidemiology, infection control, etc.).”

(PHAB Standards and Measures Version 1.5)

This section contains two parts: “Training Principles” and “Training Plan.” The training principles will inform development and implementation of the training plan.

Tip from a QI Consultant

Unless you teach the principles that underlie QI, it doesn't become embedded. It's just another spreadsheet, a tool, and not part of the culture. The very first hour of any QI training should be, what are the underlying principles? Customer focus, work process, using data appropriately, leadership and change management, making QI continuous, etc.

TRAINING PRINCIPLES

- 1. Training goals.** The QI training plan should be part of the strategy to create an organizational culture of quality. This will support implementation of individual QI efforts as well as create the support for lasting organizational improvement.⁶ An important first step is to orient staff to what a culture of quality is and what it looks like (or is planned to look like) in the agency. (See “Culture of Quality” starting on p. 16 for more detail about a culture of quality and vision for the agency.) Some states have found that QI did not become ingrained in the agency until a performance management system was developed and staff could understand how quality improvement fit in as an integral component of a system of performance improvement, rather than extra work added to day-to-day job responsibilities.
- 2. Application is key.** Introductory QI courses provide foundational knowledge and skills to all agency staff, including QI council members and leaders. Several states have adopted this approach as part of new employee orientation. According to interviews with state agency personnel and published research, however, QI training is most effective when paired with application opportunities, such as a QI project.⁵ Some state agencies provide just-in-time training to teams implementing QI projects. This training should build additional QI skills, particularly use of QI tools needed for the specific QI project. These teams' work should be facilitated by a coach or mentor who can provide the necessary training for successful skill application.
- 3. Involve leaders.** Interviewees from state health agencies emphasized the importance of training leaders to provide them with skills to establish a quality culture. Specifically, leaders may need training in change management or quality leadership. This type of training can help orient leaders to their role in leading, facilitating, and modeling a culture of quality and provide them with tools to translate their agency's quality strategy into tangible QI efforts.

TRAINING PLAN

There are three steps to the training plan. First, agencies need to determine staff QI training needs, typically through conducting an assessment. Second, agencies need to choose trainings to provide based on assessed needs. Third, agencies will implement the training either through internal resources, external resources, or both. Each of these steps is explained in detail below.

- 1. Determining training needs.** It can be overwhelming to identify the type of QI training that is best for the organization. Agencies may wish to start with a workforce assessment to determine staff QI skills, knowledge, interest, and the presence of existing QI projects in the agency. Such an assessment could also include performance management principles and skills. Conducting an assessment can help the agency focus training efforts and set organizational QI goals. There are several established assessments available that have been used by state health agencies, or an organization can create one on its own or in partnership with external consultants. The [Michigan Quality Improvement and Performance Management Survey](#), for example, contains 13 questions assessing QI and performance management knowledge, experience, and previous training, as well as previous use of QI methods



and tools and quality culture questions. The Michigan Public Health Administration deploys the survey with staff annually to inform planning for QI and performance management training and development of quality culture. The survey was developed by Michigan's Department of Community Health (Office of Performance Improvement and Management) together with the Michigan Public Health Institute and is available for adaptation and use by other agencies.

2. **Choosing training.** Deciding which training is right for an organization depends on the agency's overall QI training plan and time, the specific performance management system being utilized, and the training program's purpose and goals. It also depends on the agency's internal training capacity and budget for external training. In many cases, a versatile training strategy might combine two or more separate curricula. A comprehensive strategy could utilize the following approach.
 - Quality principles, QI, and performance management foundational training for all staff. Once all staff are trained, it becomes part of orientation for new employees.
 - Change management training for leaders.
 - Just-in-time training with practical application opportunities for QI team members.

The table on the following page provides general categories of quality improvement training, delivery methods, audiences/participants, the goal of the training, and examples.

TYPES OF QI AND PERFORMANCE MANAGEMENT TRAINING

Type of Training	Level	Delivery Method	Audience	Purpose or Goal	Example
New employee orientation	Basic	Usually internal; face to face, written materials, or web modules	New employees	Orient new employees to the agency's culture of quality and QI plan	Introductory QI and quality culture materials, QI plan if available
Introduction to QI	Basic	Usually web modules or internal staff training	All employees	Provide a general overview to QI principles, methods, and tools	Public Health Foundation's Quality Improvement 101
Introduction to performance management	Basic	Usually web modules or internal staff training	All employees	Provide a general overview of performance management principles, methods, and tools	Embracing Quality in Public Health: A Practitioner's Performance Management Primer
Applied QI training	Intermediate	Internal or external; can be distance-based format	QI team members or anticipated team members	Provide in-depth training about QI with a project-based, applied focus	Quality Improvement 101 Training Program
Performance management training	Intermediate/advanced	Internal or external; can be distance-based format	Staff using/building a performance management system	Learn how to build a performance management system	Turning Point Performance Management Toolkit
Just-in-time training or coaching	Intermediate/advanced	Internal or external	QI team members or anticipated team members	As needed for employees actively practicing QI or planning to practice QI	National Network of Public Health Institutes and Community of Practice for Public Health Improvement webinars and presentations
Change management and quality leadership	Basic/intermediate/advanced	Internal or external	Agency leaders and managers	Orient leaders and managers to their role in facilitating a quality culture	Public Health Foundation; Change Management for Effective QI: A Primer
Train-the-trainer	Advanced	Internal or external	Employees with previous QI experience	Develop organizational capacity for internal QI training	CPHQ QI Advisor course; Public Health Foundation
Academic training	Advanced	External	Managers or motivated staff	Lead and implement performance improvement initiatives	Minnesota's Public Health Certificate in Performance Improvement

IMPLEMENTING TRAINING

- 1. Internal training.** State agencies used the following strategies to internally train staff: QI experts providing ongoing coaching or conducting practical, QI project-based training or train-the-trainer sessions; presentations at staff meetings or informational sessions about performance management or QI principles; and building internal or external learning management systems (such as TRAIN), which provide a catalogue of courses available to staff. Some agencies utilize an employee intranet to house materials about QI principles, tools, and methodology as well as materials related to QI projects such as submission forms and project documentation.
- 2. Hiring a consultant.** A consultant can help expedite the process to train staff and leaders or develop internal training capacity by training the trainer. Agencies have hired QI consultants from national or private organizations or partnered with universities or public health institutes with QI or performance management expertise. These consultants or partnering organizations provide trainings ranging from basic QI online modules and introductory performance management to train-the-trainer sessions and advanced QI training and coaching for QI teams.

RESOURCES

[Engaging a Quality Improvement Consultant](#)

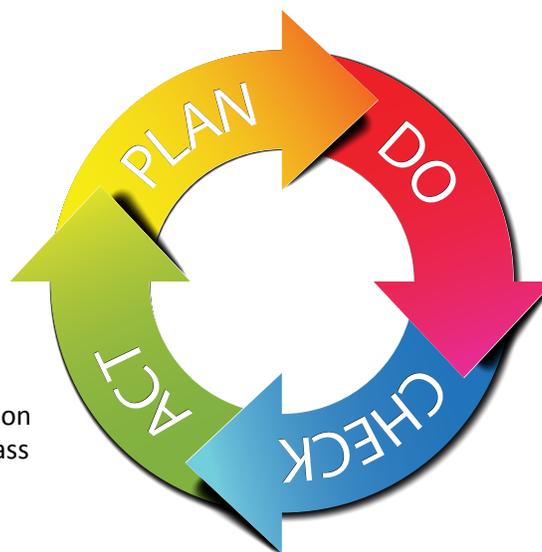
This four-page guide from NACCHO walks users through the process of engaging an external QI consultant, including experience and attributes of the consultant, questions to ask, expectations, challenges, and benefits to the organization.

[Michigan Quality Training Plan](#)

Michigan's Department of Community Health, in partnership with the Michigan Public Health Institute, has created a comprehensive quality training plan describing training needs, vision, principles, goals, objectives, implementation, curricula, evaluation, and tracking.

E. QI Methodology

The QI plan should include documentation of the agency's QI methodology, including QI philosophy, methods, tools, and techniques. Similar to key quality terms, outlining the QI methodology will ensure that all staff have a common understanding of the QI approach. Although QI methodology is not included in the guidance in Domain 9, Measure 9.2.1 A, Version 1.0 of the PHAB Standards and Measures, several state agency QI plans reviewed included this information. QI consultants suggest including the information as well. A QI methodology section in the QI plan can encompass QI principles, methods, and tools.



QI PHILOSOPHY

The agency QI philosophy reflects the fundamental values on which the QI program is based. Some state health agencies have described their agency QI philosophy through a set of key principles. The example principles below were included in Washington State Department of Health's QI plan.

Key Principles: This approach reflects a strong commitment to sustainability and success by emphasizing:

- **Simplicity in design.** The approach uses a disciplined process improvement methodology that can be applied in larger scale projects as well as in smaller scope process improvements through the Rapid Cycle Improvement (RCI) technique. The RCI provides quick results with minimum administrative burden.
- **Just-in-time training.** Training is designed to coincide with actual use, which reinforces the learning process.
- **Clear goals.** This disciplined approach is used to establish project and process improvement goals, strategies, and performance measures.
- **Commitment to oversight.** This includes monitoring and evaluating results to design and implement program improvements. It is important to understand the current situation, or the current level of performance, to allow comparison after improvements are implemented.
- **A focus on the front line.** Staff must see it done at the division and office level to buy into a quality improvement program.
- **Concentration on meaningful business issues.** The ongoing work plan will focus on strategic improvements and significant business practices with measurable gains for internal and external customers.

—From Appendix C: Quality Improvement Approach, Tools, and Techniques, [Washington State Department of Health Quality Improvement Program](#)

QI METHODS

The QI methods section should describe the methods and processes that the QI program utilizes. Some agencies prescribe a certain method that staff should use, such as Plan-Do-Check-Act (PDCA). Others utilize more than one method or process, such as PDCA, Lean, and Rapid Cycle Improvement. Some state health agency QI plans note that staff may use other, proven methods of their choosing.

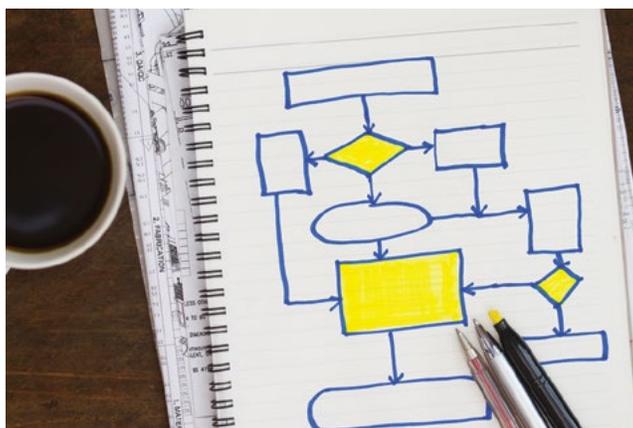
QI Tools and Techniques

A number of state health agencies include definitions and descriptions of the QI tools and techniques utilized or planned to be utilized by the agency. There are many QI tools and techniques available; below are six basic tools for public health QI practitioners.

- **Brainstorming:** Helps to define the issue or problem and includes asking for and sharing ideas, capturing and recording input, analyzing all ideas, and collaborating to organize ideas into categories or identify themes.
- **Process map:** PDCA is used to improve processes, but to improve a process it is important to know the process inside and out. A process map (also known as a flowchart) is a diagram of the steps taken to get a job done.
- **Fishbone diagram:** One of the important parts of PDCA is ensuring the process change addresses the root cause of the problem. A fishbone (also known as cause-and-effect) diagram identifies possible causes of a problem and encourages the QI team to consider possible causes that are not readily apparent.
- **Check sheet:** This tool records and organizes observations to determine how often specific events are occurring. It can help turn observational data into numerical data, establish baseline data, and track data over time to see if a process change is an improvement.

- **Pareto chart:** Problems often have more than one cause, but a QI rule of thumb, known as the Pareto Principle, is that 80 percent of the problem is usually caused by 20 percent of the underlying causes. This tool can help to figure out which causes most frequently lead to the problematic outcome.
- **Run chart:** This tool displays data on the results of a process over a specified period of time. To know if a change was an improvement, run charts measure how well the process is working by tracking data on the results of the process over time.

—Adapted from [Michigan’s Embracing Quality in Public Health: A Practitioner’s Quality Improvement Guidebook, 2nd Edition](#)



TOOLS AND RESOURCES

There is a wealth of internet information describing QI methods. A few useful, public-health-related resources include:

[The ABCs of PDCA](#), written by Grace Gorenflo and John W. Moran in 2010, has been used by many health departments and is an introduction to quality improvement using the PDCA cycle.

[Michigan’s Embracing Quality in Public Health: A Practitioner’s Quality Improvement Guidebook, 2nd edition](#), is a detailed QI guide utilizing the PDCA process and related tools, techniques, and case studies. It includes a QI tool selector chart of 16 QI tools and describes when and how to use them.

The [Oregon Health Authority Public Health Division Quality Improvement Plan](#) includes a 10-page, detailed appendix of QI tools and processes used in the division.

The Center for Public Health Quality’s [Step by Step Guide](#) outlines the key steps to planning and conducting a QI project using the Model for Improvement and sustaining the gains of a QI project.

F. Goals and Projects

A QI plan should outline the agency's QI program goals, objectives, and measures as well as the process by which QI projects are initiated and prioritized. Ideally, the goals, objectives, and measures are conceived as part of a performance management system and are informed by the agency's strategic plan, as is the prioritization of QI projects. Some agencies have included QI as one of the strategic priority areas in their strategic plan. Program-level QI initiatives can also be aligned with strategic goals while still meeting specific grant and program requirements. For more information on how state agencies have approached aligning the QI plan with the strategic plan and performance management, see the section "Before Writing the QI Plan" beginning on page 8.

Relationship to PHAB Measure 9.2.1 A

In its guidance, PHAB includes the following as component of an acceptable QI plan:

Project identification, alignment with strategic plan, and initiation process:

- Describe and demonstrate how improvement areas are identified and how they are prioritized for the project activity.
- Describe and demonstrate how the improvement projects align with the health department's strategic vision/mission.

Quality improvement goals, objectives, and measures with timeframe targets:

- Define the performance measures to be achieved.
- For each objective in the plan, list the person(s) responsible (an individual or team) and timeframes associated with targets.
- Identify the activities or projects associated with each objective.

(PHAB Standards and Measures Version 1.5)

GOALS, OBJECTIVES, AND MEASURES

The QI council or other QI lead group is responsible for developing specific quality-related goals for the organization, the objectives and measures to meet those goals, and the timeline for the objectives to be completed. Goals can be developed for both the short (e.g., training, QI team formation) and long term (e.g., QI culture goals). For example:

- **One-year goal:**
 - All staff will be oriented to the underlying culture and basic principles of quality improvement by <date>.
 - By <date>, two QI project teams will be formed and have initiated a QI project.
- **Three-year goals:**
 - In three years, by <date>, our agency will have moved from Phase X to Phase X on the QI Culture Roadmap.
 - In three years, by <date>, our agency will have developed a culture of internal customer satisfaction that will result in a 20 percent increase in satisfaction scores.
 - In three years, by <date>, 50 percent of health department units will have conducted at least one QI project.

The example below, excerpted from the New Hampshire Division of Public Health Services QI Plan, shows how one state health agency has developed performance indicators to reach a specific agency goal based on an agency strategic priority. Although not specified in the plan, objectives and measures are included as components of the performance indicators.

Over-Archiving Challenge: Demonstrate Measureable Improvements in the Health of New Hampshire Populations

Cross-Cutting Strategic Priority: Implement Performance Management within DPHS

Goal 1: Managers and staff practice performance management and use quality improvement methods and tools in their daily work.

Performance Indicators:

- Managers confident in using basic performance management practices
 - Target: 100% of senior, section and program managers understand basic performance management practices by September 1, 2014
- DPHS employees skilled in using QI methods and tools
 - Target: 10% of DPHS employees by October 1, 2013
 - Target: 25% of DPHS employees by October 1, 2014
 - Target: 50% of DPHS employees by October 1, 2015
- Managers trained in leadership skills
 - Target: 100% Senior Management Team members by November 1, 2013
 - Target: 100% of Extended Management Team members by November 1, 2013

—From [*New Hampshire Division of Public Health Services Quality Improvement Plan \(2013-2016\)*](#)

KEY DEFINITIONS

Because the terms “goal,” “objective,” and “measure” can be confusing, definitions are provided below. Agencies will need to identify and systematically use definitions such as these throughout their QI plan.

Goal: A future condition or performance level the organization intends to achieve. Goals are ends that guide objectives and action steps and can be short or long term. Long-term goals are referred to as “strategic,” “breakthrough,” or “key.”

Objective: Indicates an organization’s desired accomplishment. Objectives can be short or long term. Long-term objectives are referred to as “strategic objectives.” Action steps drive toward an objective. Objectives in turn drive toward a goal. A strategic objective is a significant and necessary step in accomplishing the goal.

Measure: Also referred to as indicators. These terms refer to numerical information or data that quantifies input, output, performance, and outcomes. Measures can be simple (referring to one action) or a composite.

—Adapted from the [*Washington State Department of Health Quality Improvement Program Plan*](#)

The worksheet below is designed to facilitate QI plan organization of goals, objectives, measures, and QI projects as well as management of these efforts.

QI PLAN WORKSHEET

QI Plan Goal. Define the QI plan goal. Add sections for additional goals as needed.	
QI Plan Objective: Define the objective that will meet the above QI plan goal. Add objectives as needed.	
Outcome Measure #1: Define the measure designed to meet the objective and goals above. What is the target value of the measure to be achieved?	
Data source:	
Current value of the measure:	
Individual or team responsible for data collection:	
How often will the data be analyzed and reported?	
To whom are the data reported?	
QI efforts in progress to address this measure (description, time frame):	

–Adapted from [Data Description and Collection Tool, Marlene Mason, MarMason Consulting, LLC](#) (download link)

PROJECT IDENTIFICATION AND PRIORITIZATION

Based on review of state health agency QI plans and interviews, agencies should create strategies to identify and prioritize two potential sources for QI projects. First, agency leadership or the QI council can identify and prioritize cross-cutting and overarching agency improvement priorities, especially those linked to agency strategic priority areas. Second, employees should be encouraged to make suggestions for cross-cutting projects as well as program-level improvements, particularly in their area of expertise. For cross-cutting programs, it may be helpful to start with smaller programs and find similarities that help to coordinate improvement across programs.

To identify QI opportunities, the QI council and other staff can look to existing assessments, data, and reports, such as the following:

- Performance measurement data.
- Health indicators.
- State health improvement plan or state health assessment, health status report, or behavioral risk factor survey results.
- Self-assessment against PHAB Standards and Measures.
- Feedback received in PHAB site visit report and from PHAB Accreditation Committee (if applying for reaccreditation).
- Data related to births, deaths, and diseases in the community.
- Survey data related to customer/client satisfaction.

- Data related to the internal operations of the agency, such as time studies, response rates, employee morale, or workforce development.
- Survey data from staff QI knowledge/skills and culture assessments.
- Surveys of staff asking for their opinions of systems or processes that need improvement.

Other factors agencies may wish to consider when prioritizing projects include the following:

- 1. Documenting current agency QI practices.** There may already be QI projects and processes occurring in the agency; for those agencies, the QI plan serves to formalize and, if needed, structure the ongoing efforts. In these agencies, a first step would be to assess current QI efforts. The efforts may be informal processes to make improvements in the agency or more formal QI. Documenting existing QI efforts and processes can provide a foundation for formalizing structures and processes as well as facilitate building on QI successes and increasing staff buy-in.

The Minnesota Department of Public Health developed the form [Gathering Information: Summary of Current QI Practices](#) (download link) to aid in gathering and summarizing information on existing agency QI processes, projects, training, communication, assessment of customer satisfaction, and use of data and measurement.

- 2. Choosing a QI project.** If the project is the first formal project for the agency, choose one that is likely to be successful and produce results that gain support from others in the organization. (It does not have to be a large project; sometimes smaller projects that produce results have a large impact.) Given current budget constraints, one approach would be to identify a project that focuses on improving efficiency within the agency. When choosing a project, ask yourself the following questions, included in the [Center for Public Health Quality's Step by Step Guide](#) to QI projects:

- Where are the gaps between what you desire and your actual performance? (Gather ideas; review your state health assessment, accreditation results, financial performance, and client/staff satisfaction surveys for additional ideas.)
- Does the project have a strategic connection for your agency?
- Is the project one that front-line staff and clients think needs improvement?
- Can the project be done on a small scale and show results within three months?
- Could the project produce an early win? (Consider the leadership support from top to bottom for the project as well as fiscal resources.)
- Is this project in an area that needs improvement? Will showing improvements in this area gain support from staff to do future QI projects?
- Would staff or leaders be resistant to change in this area? (Choose an initial project that has low resistance.)



The template below provides a format for agency staff to suggest a QI project as well as tracking information on projects.

QI PROJECT IDENTIFICATION AND TRACKING TOOL

Employee Name:	Date:	
Program:	Section/Bureau:	
Please describe the underlying issue or the process you would like to improve:		
Do you have information/evidence/data available to support the need to work on this topic? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please describe:		
What kind of improvement will result? (Check all that apply): <input type="checkbox"/> Increased Efficiency <input type="checkbox"/> Improved Safety <input type="checkbox"/> Improved Quality of Service <input type="checkbox"/> Improved Use of Resources <input type="checkbox"/> Improved Teamwork and Communications <input type="checkbox"/> Improved Working Conditions and Employee Morale	<input type="checkbox"/> Enhanced Employee Performance <input type="checkbox"/> Reduced Waste <input type="checkbox"/> Satisfied Customers and/or Stakeholders <input type="checkbox"/> Reduced Cost <input type="checkbox"/> Other _____	
What is the desired improvement? (Example: reduced turnaround time)		
Who will benefit? (Check all that apply) <input type="checkbox"/> Program <input type="checkbox"/> Section <input type="checkbox"/> Bureau <input type="checkbox"/> DPHS <input type="checkbox"/> DHHS <input type="checkbox"/> External stakeholders <input type="checkbox"/> Public <input type="checkbox"/> Other		
Optional: Do you have a project plan in mind? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please describe. Please consider project scope, measures of success, resources (time and money), limitations and barriers, timeline, etc.		
For QI staff use only	Date	Comment
Project #		
Submitted to QI staff:		
Sent to QI Council:		
Reviewed by QI Council and decision:		
QI Council or other sponsor (name):		
Management Team Review and Decision:		
Management Team Sponsor:		

—Adapted from [New Hampshire Division of Public Health Services Quality Improvement Plan \(2013-2016\)](#)

TOOLS AND RESOURCES

The [Project Selection Matrix](#) (download link) noted above can be downloaded as an Excel spreadsheet.

The Oregon Health Authority Quality Improvement Plan contains a [Performance Management Program Improvement Prioritization Matrix](#) on page 16.

The Office of Performance Improvement at the University of Wisconsin-Madison has developed an eight-page [Project Prioritization Guide](#) that includes a sample completed prioritization matrix.

G. Implementation and Monitoring

A QI plan should contain strategies to implement and monitor the plan and its associated projects. Creating a sound implementation and monitoring approach constructs the foundation for QI plan evaluation, improvement, and sustainability activities. Specific implementation and monitoring activities include, but are not limited to, the following:

- Collecting and analyzing QI project and performance measure data (including time frames).
- Reporting on the status of QI plan goals and objectives, including who prepares reports, to what group or groups, and on what schedule.
- Reviewing progress and deciding what actions need to be taken to make improvements.
- Review and approval of resources or new policies needed to make improvements.

Relationship to PHAB Measure 9.2.1 A

PHAB includes the following as a component of an acceptable QI plan:

“The health department’s approach to how the quality improvement plan is monitored: Data are collected and analyzed, progress reported toward achieving stated goals and objectives, and actions taken to make improvements based on progress reports and ongoing data monitoring and analysis.”

(PHAB Standards and Measures Version 1.5)

CREATING THE APPROACH

These activities can be carried out by the QI council, performance improvement manager, other performance office staff, QI consultant, QI project members, and other staff. Roles and activities can be described as part of the governance section roles and responsibilities, or it can be described as part of a monitoring approach.

One way to implement and monitor the QI plan is through an incremental or phased approach. Activities for this plan, as outlined in the table below, are scheduled in six-month, manageable increments.

IMPLEMENTATION AND MONITORING APPROACH FOR A QI PLAN

Months 1-6	Months 7-12	Months 13-18
<ul style="list-style-type: none"> • Build awareness and launch • Communicate the QI plan and recognize those already doing it • Educate staff/awareness • Recruit quality champions • Get projects approved and started • Track projects • Measure and assess the program 	<ul style="list-style-type: none"> • Assess progress • Identify and act on lessons learned • Conduct next round of training • Implement next round of projects • Adjust QI plan and structure • Build QI champion base 	<ul style="list-style-type: none"> • Institutionalize QI plan • Assess progress • Identify and act on lessons learned

—Adapted from John Moran, Public Health Foundation

Tip from State Health Agencies

It may be helpful to pilot the QI plan with a specific bureau or section before rolling it out in the entire agency. Choose a bureau or section that has systems in place to compliment and provide a base for the QI plan and encourage the development of bureau champions. That bureau can later be used as a showcase or example when training other bureaus.

There are a number of tools and examples that can help to plan, structure, and monitor QI efforts arising from the QI plan.

PLANNING QI PROJECTS

Based on their experience training state and local health agency staff in applied quality improvement, the Center for Public Health Quality has developed a number of tools to facilitate planning QI projects.

- The [QI Project Charter Template](#) (download link) provides an executive summary of the QI project that can be shared with the management team and other staff. The tool helps the team think through the project aims, measures, deliverables, scope, stakeholders, and team member expectations.
- The [PDSA Cycle Template](#) (download link) helps teams plan, test on a small scale, and implement changes in a process.
- The Center for Public Health Quality's [Step by Step Guide](#) provides guidance on each step of the QI process starting with selecting a QI project and ending with sustaining the gains of a project.

QI WORKFLOW

Agencies may find it helpful to depict QI activities, workflow, and reporting channels in the agency through a process map or schematic.

The [Oklahoma State Department of Health Quality Improvement Plan](#) includes a QI Process Map in Appendix C to visualize QI project workflow in the agency.

SCHEDULING QI PLAN ACTIVITIES

QI calendars are an efficient way to track QI activities in an agency over time. These can take several forms: They can encompass all QI activities, such as training, infrastructure building, communication, and QI culture building, or they can just include QI projects. The QI council should determine the approach that will be most useful to facilitate QI plan implementation. Potential information to document includes name and type of QI project, goal/objective, component of the QI plan such as evaluation or training, accountable staff, start and completion dates, and QI council and other key stakeholder review dates. Below is a QI calendar template and some examples from health agencies.

QI CALENDAR TEMPLATE

Quality Improvement Calendar, <time frame>				
Quality Project, Program, or Area	Accountable Staff	Completion Date	QI Council Review Date	Other Review Dates (Management Team, BOH, etc.)
Quality Projects				
Project 1				
Project 2				
Ongoing Program QI				
Division or Program 1				
Division or Program 2				
Agency Performance Measures Review				
Review of Health Indicators				
Review of QI Training Calendar				
Approval of <Calendar Year> QI Plan				
Evaluation of QI Plan				
<Calendar Year> Evaluation Recommendations				
<Calendar Year> Evaluation				

—This [QI Calendar Template](#) (download link) is included in the Tacoma-Pierce County Health Department 2010-2011 Quality Improvement Plan.

The Washington State Department of Health includes a [Quality Improvement Work Plan](#) with its QI plan to track QI activities and includes start date, project lead, date completed, and comments.

H. Communication

Regular communication about health department QI activities can be vital to the success of the QI plan. Besides keeping leaders and staff aware of QI practices and improvement efforts in the agency, it can help increase engagement and buy-in and facilitate progress toward building a QI culture. Several aspects of a QI culture rely on strong communication: customer focus, engaging employees and leadership, etc. A number of state health agency QI plans provide only brief details regarding a communication plan. However, thinking strategically about audiences and possible modes of communication and reporting will yield benefits in agency support, implementation of QI projects, and the success of the QI plan.

Relationship to PHAB Measure 9.2.1 A

In its guidance, PHAB includes the following as a component of an acceptable QI plan:

“Regular communication of quality improvement activities conducted in the health department through such mechanisms as:

- Quality electronic newsletter.
- Story board displayed publicly.
- Board of Health meeting minutes.
- Quality Council meeting minutes.
- Staff meeting updates.”

(PHAB Standards and Measures Version 1.5)

KEY STATE HEALTH AGENCY AUDIENCES TO ENGAGE IN THE QI PLAN

1. **Leaders and senior managers.** Leaders that are aware of and engaged in the QI plan are more likely to support it and be invested in its success. If a formal reporting mechanism is not already in place to report QI progress and results to leaders, then schedule time in regular meetings, such as monthly, for this purpose. Include updates such as how the QI plan is being implemented, including progress on training activities and QI implementation. For example, to engage public health leaders, the Center for Public Health Quality includes QI testimonials from leaders in its newsletter sent to North Carolina’s state and local health departments.

Tip from State Health Agencies

If leadership is new or not on board yet, one strategy to gain buy-in is to contact a PIM [performance improvement manager] in a state or local health department with a successful QI program to ask its secretary of health or commissioner of health (or other leader similar to the agency leader) for a testimonial.

2. **Staff.** Communicating with staff about the QI plan and projects will create a supportive culture for performance improvement. State agency personnel interviewed for this toolkit suggested that communications include drawing connections for staff between the work they do every day and improvement work they may already be doing. This will encourage them to see QI as integrated into a larger process of quality that can save time and resources for all rather than as an added

responsibility. Also, peer testimonials describing QI successes and benefits can be a very effective communication strategy to gain buy-in. These strategies will encourage grassroots support and empowerment to complement leadership support for QI.

Tip from State Health Agencies

Consistent documentation of QI processes, projects, and results is an important component of effective communication with staff, leaders, governing bodies, and the public. Storytelling through storyboards or other media that demonstrates personal or team experience can be an effective communication tool and bring clarity and understanding to what can be a complex topic.

SAMPLE COMMUNICATION STRATEGIES

The following are sample communication strategies public health agencies have used to communicate QI successes.

- Regular QI newsletter emailed to all staff and also available in hard copy.
- QI updates and presentations during regular staff meetings.
- Emails to all staff as projects are completed.
- Presentations at leadership meetings.
- Intranet or SharePoint sites to share QI tools, methods, ongoing projects, and successes.
- Celebrations of QI project completion.
- QI plan rollout marketing.
- Storyboards and signs in lobbies and hallways.
- Website updates.
- One-pager describing the QI program and results.

The Washington State Department of Health uses several QI program communication strategies in their QI plan, including:

- Share progress, challenges, and successes for quality improvement projects in quarterly HealthMAP (Health Management Accountability and Performance) sessions with Leaders and staff in attendance.
- Provide updates to division staff through monthly meetings with PALS (performance and accountability liaisons representing agency-wide divisions).
- Communicate program performance targets and achievements to staff and customers in monthly DOH newsletter articles.
- Provide updates to the Performance and Accountability Web page.
- Developed a one page question and answer handout.
- Showcase projects in building lobbies on the Quality Improvement Wall of Fame—pictures and stories of eight current QI teams.

—From [*Quality Improvement: What Does it Look Like in the Washington State Department of Health?*](#)

COMMUNICATIONS TEMPLATE

Because communication about QI can be multifaceted and involve several different audiences and methods, a table of agency communications strategies is one way to plan and monitor communications related to QI.

AGENCY QI COMMUNICATIONS TEMPLATE

Communication Content (What)	Timeline (When)	Audience (Who Will Receive)	Delivery Medium (Where and/or How)	Presenter (Who Coordinates, Develops, or Presents)
<i>Agency QI project presentations, regular updates on QI activities, showcases of successful projects, staff QI training opportunities, etc.</i>	<i>Annually, quarterly, as needed, etc.</i>	<i>Senior management team, all staff, division leadership, board of health, the community</i>	<i>Staff, leadership and board of health meetings; intranet; agency website; email; presentation posters, one-page visual, etc.</i>	<i>PIM, QI committee, or other QI staff</i>

– Agency [QI Communications Template](#) (download link).

I. Evaluation of the QI Plan and Activities

The goal of evaluating the QI plan should be like QI itself, to result in an improved QI plan and support development and sustainability of a culture of performance. At a general level, evaluation questions about the QI plan should include: 1) Is the plan being implemented as designed and working well? 2) How can the plan be improved? 3) What was the impact of the QI plan?

Relationship to PHAB Domain 9.2.1 A

In its guidance, PHAB includes the following as a component of an acceptable QI plan:

“Process to assess the effectiveness of the quality improvement plan and activities, which may include:

- Review of the process and the progress toward achieving goals and objectives.
- Efficiencies and effectiveness obtained and lessons learned.
- Customer/stakeholder satisfaction with services and programs.
- Description of how reports on progress were used to revise and update the quality improvement plan.”

(PHAB Standards and Measures Version 1.5)

Review, evaluation, and updating of the QI plan and activities are typically the responsibility of the QI council or other QI oversight body. The council should evaluate the plan annually, although specific aspects of the plan, such as performance indicators, may need to be reviewed more often. To address general evaluation questions, capacity, process, and outcome measures (see box) can be explored.

Types of Evaluation Measures

Capacity measures: Capacity refers to the ability of a group, program, or organization to carry out the intended services. It covers infrastructure and resources, such as sufficient staff, training, facilities, and finances. This would also include the extent to which the QI committee infrastructure is sufficient to support the QI plan and representation of staff on the QI council and on QI projects.

- Example measure: 10 percent of all agency staff will be trained in QI methods and able to participate in a QI project by <date>.

Process measures: Process refers to actions that are undertaken by defined individuals or groups as part of providing intended services. Process measures examine implementing aspects of the QI plan, performing procedures, or holding meetings; implementation of QI projects, the number and type, the extent to which implemented projects match the QI plan prioritization process, and lessons learned; and leadership and staff satisfaction with QI projects and the QI plan.

- Example measure: 100 percent of QI teams initiated by the organization will follow the PDCA cycle, develop AIM statements, and focus on projects that can be completed within six months of the start date of the team.

Outcome measures. Outcome refers to a change, or lack of change, in the status of the indicator or process under review.

- Example measure: 80 percent of QI team projects will be related to identified strategic priorities.



Additionally, if the QI council or other leadership set specific QI goals and indicators, the evaluation should include a review and assessment of the extent to which indicators were met and identify recommendations for improvement. Documentation of lessons learned and improvements that have been made or planned are an important part of the evaluation process.

The table on page 45 is designed to facilitate agency QI plan evaluation planning. Suggested topics for evaluation are provided on the left, followed by potential measures for each topic and specific indicators to examine. The timeline for data collection can be entered into the “timeline” column.

EVALUATION PLANNING TABLE

Evaluation Topic	Type of Measure	Indicator	Data Collection Method(s)	Timeline
QI Council	Process	Council member satisfaction with operations and perception of the effectiveness of the council	Survey of QI council members	
QI Projects	Process	Number of projects initiated/ completed	Document review	
	Outcome	Extent to which projects achieved AIM statements* and sustained improvements		
External Customers	Process	Percent of external customers satisfied with specific improvements; general satisfaction with agency services	Survey of governing bodies, public, etc.	
Internal Customers	Process	Awareness of QI plan; satisfaction with improvements from specific QI projects and QI plan effectiveness	Survey of agency staff and leaders, QI participants	
QI Training	Capacity, Process	Staff improved knowledge and skills and perceived confidence to conduct QI projects	Survey of QI training participants	
Overall QI Plan	Capacity, Process, Outcome	Progress toward meeting annual goals/objectives	Document review	
QI Culture	See "Culture of Quality" section			

**An AIM statement, referenced in the table, is a description developed by teams that explicitly defines their problem and the intended goal or outcome resulting from their group work.*

As with evaluation of any program or plan, there are a large number of potential questions that could be pursued to examine the effectiveness of the QI plan. Agencies can use several approaches to prioritize which questions to pursue and when. CDC created the workbook [Developing an Effective Evaluation Plan](#) to facilitate this process. There are three major issues to be considered to prioritize evaluation questions:

1. Who are the key stakeholders for the evaluation? What are they interested in knowing?

Stakeholders should be users of the QI plan evaluation results. They should include the QI council and agency leaders and managers. If the QI plan is developed to meet accreditation standards, PHAB is a stakeholder as well, both during the accreditation process and after accreditation, when the agency is required to submit an annual report that addresses ongoing QI activities. The worksheet below can be used to identify the various questions that these groups may have about QI plan effectiveness. Many areas of interest to these stakeholders are identified in the Evaluation Planning Table above. In addition, the worksheet can be used to identify potential data collection methods and how results from data collected about this question will be used. Evaluation questions for which results have a clear use should be prioritized, as stakeholders are likely to take action on the results.

STAKEHOLDER PLANNING WORKSHEET

Stakeholder Group	Question About the Effectiveness of QI Plan	Potential Data Collection Method(s)	How Results Will Be Used

1. At what stage of development is the program (planning, implementation, or maintenance)?

Questions to be pursued at a given time are highly dependent on the program's (in this case the QI plan's) stage of development. For the QI plan, planning would be analogous to developing the QI plan; implementation would be the first year of implementing the plan; and maintenance (or sustainability) would occur from the second year of implementation forward. The capacity, process, and outcome measures identified above could be prioritized. In the first year of implementation, priority questions will focus on capacity and process measures. As the QI plan moves to maintenance, a core set of three to five capacity and process measures should be monitored to ensure plan quality, but the focus of questions should be on outcome measures.

2. What resources (budget, etc.) are available to conduct QI plan evaluation activities?

CDC estimates that approximately 10 percent of program resources should be allocated to evaluation of that program.⁷ Once questions have been prioritized and data collection methods identified, the cost of and resources needed to collect and summarize needed data should be calculated. Typically, there are insufficient resources to pursue all evaluation questions of interest at a given time. Examining the costs to conduct various evaluation activities is an additional opportunity to prioritize and streamline these activities.

Oklahoma State Department of Health's QI Plan Evaluation

Performance measures are set for each STAT Team [Leadership Strategic Targeted Action Team, executive level] goal and objective, along with each OSDH [Oklahoma State Department of Health] service/direct report area and county health department goal and objective. Measures are evaluated at least quarterly for QI and STAT teams, and at least annually for all service areas and county health departments as to progress made towards goals, objectives, and targeted measures set. Each are also evaluated as to barriers and most successful/effective practices so lessons learned may be gained by all teams, services, and employees. Individual performance and participation in continuous quality improvement efforts can be measured annually via completion of the employee's performance management evaluation process.

—From the Oklahoma State Department of Health Quality Improvement Plan

Oregon Health Authority's Public Health Division Continuous Planning and Evaluation

The Performance Management Program (PMP) will annually assess and report QIP [quality improvement plan] performance. This report will be reviewed by the Quality Improvement Council and Leadership Team, as part of the performance management system review.

The annual report will summarize the goals and objectives of the QIP, QI activities conducted during the past year, benefits realized, performance indicators utilized with direct mapping to the strategic plan (where applicable), and any lessons learned. Each center will assist PMP with completing this report by providing the following inputs as requested:

- Summary of progress towards QIP annual goals/objectives.
- A brief summary of progress towards meeting each goal.
- A summary of QI initiatives conducted during the year that includes: what activities took place, improved process, realized benefits, next steps, and how improvements will be maintained.
- Necessary actions to improve the efficiency and effectiveness of the QI process based on the annual evaluation. Answer the question, "how can we do this better next year?"

Continuous Improvement Planning

The yearly evaluation will help inform the QI Plan for each subsequent year. Improvement initiatives that have met their objectives will close, and lessons learned and new PHD [Public Health Division] priorities will chart the course for the coming year.

—From the Oregon Health Authority Public Health Division Quality Improvement Plan

J. Sustainability

Regular feedback regarding improvement projects is critical to the QI plan's success in sustaining improvements over time. Once an improvement plan has demonstrated success, a regular monitoring schedule can be implemented to sustain success. Developing and implementing a QI plan that addresses PHAB standards and is a valuable tool for your agency will take work by a dedicated team. Once an agency is accredited, having a sustainability strategy in place will facilitate the PHAB requirement for submission of an annual QI report. To ensure that the agency has a sustainable QI plan, consider the following suggestions based on interviews with state health agencies and QI consultants.

- 1. Start by building a QI culture in your agency.** Don't let the myth continue that QI is an add-on activity that will fade. Creating this culture can depend on the following.
 - Cultivate leadership support, commitment, and modeling. Modeling should be vocal, demonstrated, and consistent. Identify QI champions at all management levels through training and participating in QI teams.
 - Engage and involve all employees through constant communication, coaching, and celebration of successes. Repeat the message that QI is a way of working smarter and making jobs easier and built into everyday work processes
 - Use data—especially customer data—to create commitment to using performance monitoring and evidence-based decisionmaking.
 - Train all agency staff in QI methods and tools.

- Demonstrate QI wins. Find hidden examples of and opportunities for QI.
 - Identify small QI projects like restructuring a work area as an easy QI success.
 - Use QI to tackle challenging issues like budget cuts or to improve the agency’s response to the latest epidemic.

2. Build the QI plan into your agency’s daily way of working.

- When possible, start with a performance management system and develop the QI plan as part of that system.
- Consider how you can integrate the QI plan with the agency strategic plan as well as the health improvement plan. If the improvement plan has not been developed, use the state health assessment or Healthy People 2020 as benchmarking standards.
- As you build the QI plan, think about how it can survive leadership, priority, and budget changes. What are the critical resources (human, financial, and infrastructure) needed to sustain implementation of the QI plan and performance improvements?
- Implement the QI plan, evaluate it annually, and improve on it as it is implemented.

3. Develop your QI network and learning community.

Over the last decade, the resources for public health QI and the number of public health professionals engaged in QI have expanded nationwide.

- Use the resources identified throughout this toolkit to identify your peers in other state agencies, such as performance improvement managers. Talk to them about their experiences and lessons learned.
- Participate in QI conferences and webinars available through ASTHO, National Network of Public Health Institutes, and other organizations.
- Share what you have learned through your agency’s QI plan experience.

TOOLS AND RESOURCES

The following QI sustainability tools were developed by the Center for Public Health Quality based on its experience training state and local health agency staff in applied quality improvement.

[Spread Checklist and Plan—Template and Example](#) (download link)

This tool can help QI staff and leaders to plan for the spread of QI tools, concepts, and new processes throughout the agency. It also includes practical examples.

[Leader’s Checklist for Creating a Foundation for Success](#)

This tool is useful in guiding leaders to create a culture of quality in their agency, and incorporates various sustainability concepts.

[QI Project Sustainability Checklist](#) (download link)

This tool will help QI staff and project teams develop a plan to sustain the improvements made during a QI project.

[QI Plan Sustainability Checklist](#) (download link)

The checklist, adapted below for the QI plan, can help to facilitate sustaining the gains made through agency QI projects.

QI PLAN SUSTAINABILITY CHECKLIST

Developing systems to sustain the gains from your plan requires ongoing effort. Maintaining these systems ensures that all of your hard work pays off in the long run. Use this checklist to assist you in sustaining the agency's QI plan. Each task includes activities that support achievement of the task.

- We have a team** responsible for QI plan implementation, achievement of goals and objectives, and facilitating communication to leaders, staff, and clients about agency performance. Ideally, this will be a QI council or other QI oversight body.
 - Who is/will be the QI process owner(s)?
 - What are their specific responsibilities in sustaining the QI plan?
- Our senior leaders are involved in keeping everyone focused on improving performance.** They are knowledgeable about the QI plan and communicate about its importance and the results of implementing the QI plan at staff meetings, as well as informally day to day.
 - What information is needed to keep leaders informed about the QI plan?
 - How will it be communicated? How often?
 - What will we ask leadership do to keep our agency focused on improving performance?
- We make sure our systems and processes are independent of the people involved** by providing relevant ongoing training, making this training part of our new employee orientation, adding relevant roles and responsibilities to job descriptions, considering requirements in the hiring process, and cross-training staff for critical roles related to the QI plan.
 - What training is needed?
 - Who will assist the process owner with ensuring training needs are met?
 - What job descriptions and workplans need to be updated?
 - Who needs to be cross-trained for critical roles?
 - How will your hiring process be altered?
- We create, adapt, or use existing tools** (e.g., checklists, visual aids, policies and procedures, etc.) to make it easier for everyone to follow the new procedures and systems we established through QI projects.
 - What tools should be created or adapted?
 - Who will create and adapt needed tools?
 - How will the information be communicated to staff?
- We continuously monitor QI plan goals, objectives, and performance measures** to know for ourselves: "Are our QI projects working? Are we seeing improvements?" Once our targets are reached for one goal, we shift to an auditing mode (decreasing the frequency and quantity of data collected) so that data collection is easier to sustain. Then we address other goals, objectives, and performance measures in the QI plan.
 - What are the "vital few" measures that will be tracked? What data no longer needs to be collected?
 - How often will the data be collected (should be "just enough")?
 - Who will continue to collect the data?
 - How will the results be reported to management?
- We celebrate our success with all of our staff.**
 - How will the successes be celebrated?
 - What are good milestones to celebrate the successes (e.g., six-month/one year anniversary, 100 days above goal, etc.)?
- We communicate our improvements to our clients or stakeholders** to involve them in sustaining a focus on performance and improvements made through QI projects and create additional accountability.
 - What will be communicated to our clients/customers?
 - How will the information be communicated?
 - Who will assist the process owner with developing communication materials?
 - When will the information be communicated?

—Adapted from the Center for Public Health Quality's Step by Step Guide

SECTION IV.

State Health Agency QI Plan Links and Templates

QUALITY IMPROVEMENT PLANS

Several state health agencies, including two agencies that received PHAB accreditation in February 2013 (Oklahoma and Washington), have completed agency QI plans and agreed to share them with other state and territorial health agencies. The plans encompass a range of styles and content matter and can provide a template that agencies creating a QI plan can adapt for their needs. In addition, links to local health department QI plans recommended as useful examples by QI consultants are included below.

State Health Agencies:

[Connecticut Department of Public Health](#)

[New Jersey Department of Health and Senior Services](#)

[Florida Department of Health](#)

[Oklahoma State Department of Health*](#)

[Kentucky Department for Public Health](#)

[Oregon Health Authority, Public Health Division](#)

[Maine Center for Disease Control and Prevention](#)

[Washington State Department of Health*](#)

[New Hampshire Division of Public Health Services](#)

Local Health Agencies:

[Sedgwick County \(KS\)](#)

[Tacoma-Pierce County \(WA\)](#)

[Spokane Regional Health District \(WA\)*](#)

**Agency was accredited by PHAB in 2013.*

QI PLAN TEMPLATES

A number of organizations and authors have created templates or guides to facilitate the development of agency QI plans. Although many of these were developed for local health departments, the information is useful for state health agencies as well.

[QI Plan Template and User Guide](#)

The Center for Public Health Practice at the Ohio State University's College of Public Health has developed a QI plan template to support overall agency improvement efforts as well as address accreditation-related documentation requirements.

[Developing a Health Department Quality Improvement Plan](#)

Jack Moran, Ty Kane, and Sonja Armbruster wrote this white paper on how to develop a QI plan for the Sedgwick County Local Public Health Department in 2010. The paper describes the crucial elements to include in a QI plan and includes a sample plan.

[How to Develop a QI Plan](#)

The Minnesota Department of Health created a website with information about QI plans, a how-to guide, and downloads including a QI plan outline and QI assessments and tools.

[Quality Improvement Plan Template](#)

The Office of Quality Management at the New York State Office of Mental Health developed a QI plan template for clinic programs that contains useful ideas and definitions for public health agencies.

SECTION V.

Resource List

This section contains an overview of key resources identified by state health agencies and QI consultants as helpful in supporting agency quality improvement and QI plan development.

[ASTHO: Accreditation and Performance](#)

ASTHO's site has resources and guidance related to PHAB accreditation and the National Public Health Performance Standards as well as tools and case studies for quality improvement and performance management.

[CDC: Performance Management and Quality Improvement](#)

This page on the CDC website contains a glossary of key terms and resources about quality improvement and performance management.

[Center for Public Health Quality](#)

The center conducts state and local QI training programs. Its site has a QI [Step by Step Guide](#) and QI testimonials.

Journal of Public Health Management and Practice (JPHMP), [Volume 18 \(1\), January/February 2012](#) and [Volume 16\(1\), January/February 2010](#)

These two issues of JPHMP are devoted to quality improvement in public health. Nonsubscribers must pay to access some articles. A [third issue](#) released in January/February 2014 features the relationship of quality improvement to accreditation in public health.

[Michigan Public Health Institute: Office of Accreditation and Performance Improvement](#)

This site houses the free, useful resources “Embracing Quality in Public Health: Practitioner’s Quality Improvement Guidebook” and “Embracing Quality in Public Health: A Practitioner’s Performance Management Primer.”

[NACCHO: Accreditation Preparation and Quality Improvement](#)

Resources available from NACCHO include accreditation and QI webinars, an accreditation preparation toolkit, a QI toolkit, an Organizational Culture of Quality Self Assessment Tool, the [Roadmap to a Culture of Quality Improvement](#), and a [guide](#) to engaging a QI consultant.

[National Network of Public Health Institutes: Accreditation and Performance Improvement Resources](#)

This site contains links to the Public Health Performance Improvement Toolkit, storyboards, QI webinars, and the Community of Practice for Public Health Improvement Open Forum meeting materials, a rich source of the latest information about QI and performance management from state and local practitioners.

[The Public Health Accreditation Board \(PHAB\) Version 1.0 Standards and Measures](#)

For agencies planning on applying for accreditation, a QI plan is a required element of Domain 9. The PHAB Standards and Measures Version 1.0 document serves as the official standards, measures, and required documentation for PHAB national public health department accreditation. It is available as a free download.

[Public Health Foundation: Performance Management and Quality Improvement](#)

This Public Health Foundation site offers many QI and performance management resources, including trainings, a QI Quick Guide and Tutorial, state and local agency QI case studies, and accreditation preparation.

[Public Health Quality Improvement Exchange \(PHQIX\)](#)

PHQIX is an online community designed to be a communication hub for public health professionals interested in learning and sharing information about QI in public health. Information continuously added to the site includes state and local QI case studies, QI plans, a community forum, and an “Ask the Expert” feature.

SECTION VI.

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