Commentary

Supporting Public Health Departments’ Quality Improvement Initiatives: Lessons Learned From the Public Health Foundation

Ronald Bialek, Jackie Carden, and Grace L. Duffy

We can all relate to the expression “hindsight is 20/20.” After time has passed, we can see clearly what we would have, could have, or should have done. When we are in the year 2020, will we look back at the past 10 years and think about what we might have done better to prepare health departments for new challenges? Will we wish that we could have taught more of the public health workforce about quality improvement (QI)? Will we wish we had spent less time contemplating QI and more time equipping health departments to do QI? Will we be able to point to an evidence base that proves QI made a difference in the public’s health? The Public Health Foundation (PHF), like others, is sharpening its focus based on observations from its experiences in the field. This commentary is informed by the observations of nearly 200 QI consultations provided by the PHF and its consultants over the past decade.

The PHF has been privileged to provide QI technical assistance, training, consultation, and individualized support to numerous state and local health departments (LHDs). Although QI is well-defined in other industries, these definitions fell short of articulating what QI means for public health. An enthusiastic subgroup of partners participating in the Public Health Accreditation Coalition took on the task of creating a definition of QI for public health.

Quality improvement in public health is the use of a deliberate and defined improvement process such as Plan-Do-Check-Act, which is focused on activities that are responsive to community needs and improving population health. It refers to a continuous and ongoing effort to achieve measurable improvements in the efficiency, effectiveness, performance, accountability, outcomes, and other indicators of quality in services or processes which achieve equity and improve the health of the community.1

Figure 1 illustrates the iterative nature of Plan-Do-Check-Act (PDCA) in the continuous QI process.

● Connecting the Dots—An Increasing Focus on QI

PHF’s mission to “improve public health infrastructure and performance through innovative solutions and measurable results” drives the PHF to partner with a complex and interrelated set of public health and community partners to assess the strengths and needs of individuals and organizations and provide an effective portfolio of programs to support these needs. The PHF sees the value of using QI tools and techniques to address a number of health department challenges, including providing new ways to solve complex problems, showing measurable results for what we do, mitigating budget and accountability pressures, and deriving the most value from our public health systems. The PHF has been involved for the last decade with various developments in public health practice that form the basis for QI activities. These developments include performance standards, performance

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High-level, iterative, continuous improvement. Knowledge and experience lead to improved quality, which can be applied to any system. PDCA cycle.

**FIGURE 1** Continuous Quality Improvement Model—Iterative Nature of PDCA Continuous Quality Improvement.ª

From Duffy et al. ²

ªPDCA indicates Plan-Do-Check-Act.

management, Essential Public Health Services, and accreditation. ³–⁶

It was a simple decision then, given PHF’s mission and long history of experiences with performance measurement and management, to embrace QI methodology and provide health departments across the United States with tools and assistance to help them embark upon a continuous QI journey. The PHF has offered these services in kind, with generous support from the Centers for Disease Control and Prevention and grants provided by the Robert Wood Johnson Foundation (RWJF) through the National Association of County & City Health Officials (NACCHO), and directly to health departments. PHF’s approach has been to adapt QI processes and tools from other industries and customize training to meet individual health departments needs. Figure 2 shows the basic tools the PHF suggests health departments begin with when using the PDCA model mentioned earlier.

Through 2009, the PHF successfully assisted more than 200 public health organizations, including health departments, in QI with priority activities focused on improving quality and outcomes of existing services; training employees to be more client oriented; improving client relations through effective communications, participation, and feedback; improving processes to lower costs and better use scarce resources; expanding community relations and associated political relationships; identifying opportunities and designing programs to expand services; and using effective data gathering and analysis to justify increased funding to meet community needs.

**Supporting Accreditation Through a QI Lens**

Some observations from the field suggest that health departments have recently become much more engaged in QI efforts as a means to prepare for accreditation. NACCHO awarded grants through the RWJF-funded “Accreditation Preparation and QI Demonstration Sites Project” to a first cohort of 10 LHDs and a second cohort

**FIGURE 2** The Basic Tools PHF Suggests Health Departments Implement Initially When Using the PDCA Model.ª

From Bialek et al. ⁷

ªPDCA indicates Plan-Do-Check-Act; PHF, Public Health Foundation.
of 56 to conduct a self-assessment and subsequently engage in QI processes to address identified gaps. NACCHO contracted with the PHF to provide QI assistance to 9 of the first 10 selected LHDs, and LHDs in the second cohort chose consultants through either the PHF or local channels. The PHF assisted 10 (approximately 18%) LHDs in the second cohort.

Observations from QI experiences in the field
Involvement in the NACCHO projects and other QI consultations with state and LHDs opened up a “window with a unique view” into public health to observe firsthand how QI added value to many health departments’ performance improvement efforts. Eight significant observations garnered from these QI consultations with health department leaders and improvement teams are highlighted in Table 1 and are discussed below.

Use well-established assessment and performance management tools
Effective use of the community-driven strategic planning process “Mobilizing for Action Through Planning and Partnerships” (MAPP)\(^8\) tool provides an appropriate foundation for QI efforts. MAPP combines external community assessments with internal capacity assessments. This information positions health departments to identify the right things to do and to do them correctly. Another value gained from the MAPP process is the use of the National Public Health Performance Standards Program assessments, which engages staff to think in terms of the Essential Public Health Services,\(^9\) as opposed to limiting thinking to programs and dedicated funding streams. Linking such measures of performance directly to the requirements identified by the community adds value. Finally, the MAPP process involves identifying a multitude of data and information sources. Access to a variety of data and information enables communities to develop, implement, and evaluate community health improvement plans. In sum, the MAPP process ties together internal needs of the health department with strengths and needs of the community it serves.

Crystallize thinking: Tie information and data to goals and objectives
Using the Essential Public Health Services and the Turning Point Performance Management model\(^10\) as structures to organize data gathered during a community assessment enabled public health professionals to identify high-priority objectives, plan and manage change, and improve policies, programs, and outcomes—all part of the QI process. Performance management reinforces using performance data, such as that derived from MAPP or other community assessment processes, to improve the public’s health. For example, health departments, because of applying the QI process, identified the need to improve upon program evaluation as a high-priority objective.\(^11\)

Cure for confusion: Set priorities
It is crucial that leadership and teams discuss the results of assessment activities, put data into context, and then set priorities. When the MAPP strategic planning process was used, data could be put into a community context. Department strategic planning activities use measurements and goals to drive attainment of community health outcomes. MAPP concepts have also been adapted for state-level priority setting and strategic planning.\(^12\) LHD leadership quickly embraced the opportunity to associate programmatic activities, using priority-setting tools (eg, prioritization matrices\(^13\)), with the organization’s critical success objectives for ease of monitoring and continuous QI.

Ensure clear vision: Integrate/align operational and strategic goals and objectives
The four components of the Turning Point Performance Management model mesh effectively with the PDCA model for summarizing performance improvement

<table>
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<th>Number</th>
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<td>1</td>
<td>Use well-established assessment and performance management tools</td>
<td>Major southern city/county health department</td>
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<td>2</td>
<td>Crystallize thinking: Tie information and data to goals and objectives</td>
<td>Medium-sized Midwest county health department</td>
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<td>3</td>
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<td>Share insights: Document processes and share best practices</td>
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<td>8</td>
<td>Identify champions and designate health department teams and team leaders</td>
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Abbreviation: QI: quality improvement.
activities. Through a series of assessments and subsequent action planning, the performance management model served as a framework for aligning measures of success for QI projects and programmatic priorities with the strategic goals and objectives for the entire health department. Using both models together guided the decisions about what constitutes success at both the operational level and the strategic level. More recently, tools such as the Community Balanced Scorecard and strategy mapping have also been used.

**Share insights: Document processes and share best practices**

The voluntary national accreditation program, in addition to recognizing high-performing health departments, will focus more attention on quality and performance improvement for all health departments. Although processes generally exist in health departments, many are not well documented. When taught and practiced, health department QI teams quickly embraced tools such as flowcharting and value stream mapping to understand and document what is working effectively within the department and to identify areas where processes could be improved or wasted effort eliminated. Sharing these positive practices once clearly documented can benefit all health departments.

**Eliminate spectacles: Maximize the effectiveness of QI**

Through QI work in the field, the following were identified as key ingredients necessary to ensure QI training “sticks” and to pave the way for establishing a culture of QI:

- **Train at all levels within the organization.** Training in groups allows for better cross-functional support within the health department. Those departments that provided a consistent level of training to their whole department quickly realized the benefits of QI. Training all leadership and staff institutionalized and sustained the knowledge despite natural attrition.

- **Select experienced facilitators.** Having an outside facilitator provide QI training and on-site project support was preferred by many health departments. This approach freed key people to participate. The value of a professional and objective facilitator was cited often in addition to appreciating the stories and expertise QI consultants could share and adapt from their experiences with other public health organizations and industries. QI is a relatively new concept for most of public health. Therefore, sharing model practice stories from other organizations achieving and sustaining proven successes enabled health departments to apply what they were learning to their special situations more easily.

- **Identify champions and designate health department teams and team leaders.** “Implementing QI is not a spectator sport” means that leaders at all levels cannot stand on the sidelines and expect great success to occur by chance alone. They have to champion the cause—be part of the process. A senior leadership focus highlights the critical nature of continuous QI. To the extent possible, health department leaders must integrate QI activities seamlessly into departmental structures and daily practice, including having a performance management system, progress reporting, and quality or department staff meetings. Complete support from leaders and buy-in from all levels of staff go a long way to ensure a sustainable culture of QI.

Responsibility for performance should be vested in teams that will own and orient the process to achieve results. Finally, for continuity in planning and implementation, identifying a team coordinator (or leader) from within the health department staff who can maintain contact with all those involved keeps the process moving forward. Involving more staff (and community partners, as appropriate) early in the process conveys transparency, generates loyalty, and creates the conditions in which QI efforts can take root throughout the organization.

**Discussion: Realizing the Long-term Vision and Creating a QI Culture**

QI efforts are most successful when deeply embedded within the organization’s structure, function, and operations and intrinsically part of organizational culture. As noted earlier, setting priorities is essential to achieving desired goals and objectives. Aligning programs, activities, and resources with the organization’s mission, vision, and strategic plan creates an environment in which QI can thrive because it is what all members of the organization, from senior leadership to frontline employees, embrace daily. This awareness requires strong horizontal and vertical communication throughout the department, rather than the all-too-common silo mentality of looking at performance and outcomes with only one or two assigned programs. Using QI processes and tools is not a work add-on but a replacement for less effective activities within health department operations. QI tools have been successfully used to focus on priority strategies in health departments such as those in Cuyahoga County, Ohio; Berrien County, Michigan; Orange County, Florida; and the State of Pennsylvania. Case studies supporting such activities are available for study through the NACCHO and PHF Web sites.

The QI process should be simple and sustainable. The PDCA model allows a team to start small, gain
comfort with QI processes and tools, and then expand the complexity of improvements as teams and leadership gain critical skills. Figure 1 shows the iterative nature of the PDCA model in continuous improvement in ever-increasing project difficulty. As teams become more familiar with the use of the basic QI tools, they tackle more difficult projects, increase their knowledge and skills as professionals, and achieve greater levels of improved performance across the organization.

Reinforcement and reintroduction of QI tools on a regular basis is necessary and constitutes best practice. Many tools are available; however, it is difficult to recall all of the tools and their potential applications if not used frequently. Moreover, as these tools are introduced to public health professionals and applied to solve public health problems, innovations emerge that are important to share throughout the public health community. Department leadership should reinforce the use of QI tools on a yearly or biyearly basis. The PHF has found that by translating private sector tools for public health application, there is far greater understanding of their longer-term use within health departments. In addition, resources exist through the Public Health Improvement Resource Center14 and other national organizations that can be helpful to the health department leadership’s effort to sustain QI. Finally, it bears reinforcing that complete support and involvement from leadership and buy-in from all levels of staff are necessary to make QI successful and sustainable. Leaders at all levels must “model the way.”

**Summary**

A wealth of experience in working with health departments has yielded some striking conclusions about how to support QI efforts. Big sustainable success does not happen overnight. These experiences remind us that it takes a winning team comprising champions—leaders who share a vision for improved community health, coaches who share their tools, knowledge, and wisdom; team players who put their best game forward; and fans, the public that stands to benefit the most from the team’s greatness. It is not just about winning and success or for public health accreditation or QI. That would be shortsighted. We could ascribe success to that 20/20 vision we know as professional hindsight—where we look at a situation/decision after it has happened, knowing and appreciating what we now see and how we can use that knowledge to improve. We also know hindsight is not always 20/20. We can have the foresight, even when fraught with uncertainty, to recruit the best and the brightest and hold them accountable; design a plan for success that survives the pressures of execution; adapt what we learn from our successes and failures; and celebrate small, incremental successes.

**References**