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An Accredited Local Health Department’s Use of the QI Roadmap to Build a Culture of Quality

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Abstract
Studies that exist on quality improvement efforts within local health departments indicate that there needs to be clearer approaches for achieving a culture of quality. This study describes how a local health department used the National Association of County and City Health Officials (NACCHO’s) *Roadmap to an Organizational Culture of Quality Improvement* (QI Roadmap) to successfully build a quality culture on its journey to becoming accredited, as reflected in results from a February 2016 survey. Local health departments who invest in and promote QI efforts that are aligned with strategic priorities; establish the necessary infrastructure to regularly track and report performance data, including customer service data; expand the use of different types of teams; offer opportunities to identify areas of improvement and trainings; and promote resources for using various improvement models can establish a solid foundation in QI leading to accreditation.

Keywords
quality improvement, local health departments, accreditation, continuous quality improvement, public health

Cover Page Footnote
No competing financial or editorial interests were reported by the authors of this paper.

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INTRODUCTION

Quality improvement (QI) in public health is gaining momentum through the public health accreditation program overseen by the Public Health Accreditation Board (PHAB).\(^1\) Consistent with other sectors, research suggests that facilitating QI opportunities by leadership; creating access to training, skill application, resources, and peer networks; developing and recognizing QI champions; and providing incentives to teams all contribute to the success of public health QI efforts.\(^2\)

Despite the growing QI expertise in public health, there is no one-size-fits-all approach. For local health departments (LHDs) to effectively implement QI activities, they require a definition for a culture of quality and the strategies and resources to achieve one. Developed from the literature and feedback from public health practitioners, the National Association of County and City Health Officials (NACCHO’s) Roadmap to an Organizational Culture of Quality Improvement (QI Roadmap) outlines six foundational elements for cultivating a QI culture: leadership commitment, QI infrastructure, employee empowerment, teamwork and collaboration, customer focus, and continuous process improvement. LHDs utilize the QI Roadmap to identify strategies for progressing through six phases of QI maturity, from no knowledge of QI (Phase 1) to a culture of quality (Phase 6).\(^3\)

Since 2013, the Santa Clara County Public Health Department (SCCPHD) in San Jose, California, has used the QI Roadmap on its successful path to becoming a nationally accredited health department in March 2016. Located in Silicon Valley, Santa Clara County is the sixth largest of California’s 58 counties and the most populated in the Bay Area with 1.8 million residents. SCCPHD has a FY2017 operating budget of $107 million and over 450 employees across its nearly 40 business units and five branches. SCCPHD’s experience with QI dates back to 2002, when staff were trained and required to participate in a department-wide evaluation initiative.\(^4\) Due to subsequent departmental budget cuts, the department-wide effort was unable to be maintained; however, some individual programs continued to utilize performance measures to meet funding requirements. Without the necessary infrastructure and staffing support, there was not a systematic utilization of data for program improvement or departmental planning purposes. SCCPHD reviewed the lessons learned from this past initiative to develop and adopt its first QI plan in May 2013 and its performance management system of today.

Public health accreditation and several countywide initiatives are influencing SCCPHD’s current QI efforts. These initiatives include a communication-based customer service program called C-I-CARE (https://www.uclahealth.org/patient-experience/cicare); unit-based labor-management teams who are working collaboratively to solve problems, improve performance, and enhance quality across the Santa Clara Valley Health and Hospital System; a Center for Leadership and Transformation that is driving transformation through 90-day plans for fast and effective change; and Just Culture trainings to help establish the necessary systems and staff and management behaviors for a culture of trust, fairness, and accountability.

This case study examines SCCPHD’s efforts to advance its quality culture against six key elements outlined in NACCHO’s QI Roadmap. For each element, a definition is provided, implementation is described, and results, lessons learned, and next steps are shared.
METHODS

To assess QI maturity against the six foundational elements, SCCPHD conducted an online survey in February 2016 using SurveyMonkey, based on the abridged version of NACCHO’s Organizational Culture of Quality Self-Assessment Tool (QI SAT). NACCHO developed the unpublished abridged version of the QI SAT primarily to give organizations a general sense of where they stand against each foundational element in order to facilitate conversations and provide education at conferences and trainings (personal communication, P. Verma, NACCHO, August 31, 2016). The 18 questions on the abridged QI SAT are based on the full SAT. The abridged version provides an average score that approximates the Roadmap Phase the organization has achieved. To capture additional information on specific activities for employee empowerment and continuous process improvement, SCCPHD incorporated seven questions related to these elements from the full SAT into the abridged version for a total of 25 questions that utilize a 5-point Likert scale. The survey was administered to employees for the first time as part of a larger survey that SCCPHD will continue to use annually to evaluate and monitor progress on its strategic plan goals, including a goal on building a culture of quality at the department.

Past assessments of the QI culture at SCCPHD in 2012 and 2014 revealed limited QI knowledge and involvement of staff. The 2016 survey measured SCCPHD at Phase 3: Informal or Ad Hoc QI (average score of 3 to 3.9). Survey results are reported in the Additional File (see attachment). The SCCPHD QI Council (Table 1) was asked at their March 2016 meeting to reflect on the results for each of the elements and update the 2016 QI plan activities accordingly. These activities generally correspond with the QI Roadmap strategies and PHAB standards and measures. Where applicable, for activities described under each element below, the corresponding QI Roadmap strategy and/or PHAB measure (V 1.5) is indicated.

RESULTS

Leadership Commitment
Leadership commitment entails demonstrating continuous support toward QI. Beginning in 2013, leaders set departmental policy (Measure 9.1.1) and funded contracts for staff, program development, and operational tasks related to QI (QI Roadmap Phase 3 leadership strategy). SCCPHD workgroups defined the strategic goals, objectives, and performance measures used to monitor and review progress on SCCPHD’s strategic plan priorities in 2015 (Measure 9.1.2). Leadership commitment has been essential, yet leaders were perceived as having work to do to set a clear vision for quality, role model and mentor staff, and routinely vocalize their commitment to quality (Additional File [see attachment]). To improve in this area, a new budget and organizational unit for Performance Management and Innovation was established in January 2016, and visibility of support for QI has since increased through all-staff events, monthly manager meetings, messaging to the governing entity, and monthly QI electronic newsletters (QI Roadmap Phase 4 leadership strategies).

Teamwork and Collaboration
Teamwork and collaboration is a widespread effort in which teams are formed to brainstorm ideas, conduct QI projects, and share learnings. Six departmental teams were formed in 2013 to lead the learning and improvement efforts at SCCPHD (QI Roadmap Phase 3 teamwork and collaboration
<table>
<thead>
<tr>
<th>Team</th>
<th>Responsibilities</th>
<th>Staff involved</th>
<th>Number of staff</th>
<th>Frequency of meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>QI Training Cohort</td>
<td>Participates in trainings to develop knowledge and skills to provide leadership and support for QI within each Branch of the department. Beginning 2016, staff are required to complete an individual and program QI work plan, QI tools trainings, a process map, and a logic model, in addition to participation in a QI project. Opportunities to fulfill these requirements are offered regularly (at least once a month).</td>
<td>Analysts, Managers, Nurses</td>
<td>30–35</td>
<td>Does not meet; required participation at trainings and in QI projects</td>
</tr>
<tr>
<td>QI Council</td>
<td>Provides oversight for Departmental QI efforts and activities and implementation of QI Plan. Also supports Executive Leadership Team in building a culture of QI throughout the organization. Revises the QI plan annually to ensure alignment with strategic priorities and PHAB standards. Council is chaired by two Executives and is proportionally represented by staff from each branch of the Department.</td>
<td>Subset of QI Training Cohort</td>
<td>15–20</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Staff Engagement Committee (SEC)</td>
<td>Promotes and fosters a culture of QI and engagement where all employees are committed to the SCCPHD vision and find satisfaction in their work. Serves as champions within their respective program areas encouraging and engaging staff participation in activities that advance departmental priorities, community needs, and excellent customer service. Also assists in the implementation of strategies towards performance improvement. SEC consists of at least one member, identified by a manager or independently volunteered with manager approval, from each program.</td>
<td>Primarily frontline staff</td>
<td>30–35</td>
<td>Monthly</td>
</tr>
<tr>
<td>Strategic Plan Leads</td>
<td>Collaborates with workgroups comprised of staff from across the department to develop and implement work plans for strategic plan goals and objectives. Responsible for reporting progress in Performance Management system.</td>
<td>Managers</td>
<td>20–25</td>
<td>At least quarterly or more frequently if decided by workgroup</td>
</tr>
<tr>
<td>Accreditation Domain Co-chairs</td>
<td>Subject matter/functional experts responsible for ensuring the department is adhering to PHAB standards and measures and identifying gaps for assigned domain. There are 12 domains with 1–2 staff co-chairs assigned to each.</td>
<td>Managers</td>
<td>20–25</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Accreditation Core Team</td>
<td>Oversees the Department's accreditation efforts. Includes co-chairs for Accreditation, Performance Improvement, Community Health Assessment/Community Health Improvement Plan, and Communications.</td>
<td>Managers</td>
<td>6</td>
<td>Since becoming accredited, as needed</td>
</tr>
</tbody>
</table>
strategy). The current teams are represented in Table 1. By 2015, there were nine QI projects that included designated roles of sponsor, team leader, and facilitator; improvement and cross-functional teams worked on projects to improve administrative and programmatic processes (Measure 9.2.2). However, more routine opportunities were needed to share lessons learned and participate in project teams (Additional File [see attachment]); therefore, a QI training program was launched in March 2016 to include sharing forums and require participation in QI projects (QI Roadmap Phase 4 teamwork and collaboration strategy). SCCPHD expanded the number of QI project teams by 18 to a total of 27 in 2016. Successful projects have been marked by leadership engagement and active participation with other team members.

Customer Focus
Customer focus entails routine assessment of customer service to ensure customer satisfaction. SCCPHD began collecting and analyzing customer feedback in 2013. The commitment to provide excellent service is embedded in the vision and core values of SCCPHD and captured as measurable objectives in the 2015–2018 strategic plan (Measure 9.1.4, QI Roadmap Phase 4 customer focus strategy). However, a standardized approach to assessing customer satisfaction and using it to drive improvement has not been fully implemented across the Department (Additional File [see attachment]). In early 2016, C-I-CARE was adopted, and training for all employees under this framework began in summer 2016. The current customer service policy and procedures have been updated to ensure a standardized assessment of customer service and expectations for programs to regularly report customer service measures for improvement (Measure 9.1.4, QI Roadmap Phase 5 customer focus strategy).

Employee Empowerment
Employee empowerment is achieved by offering recurring training, decision-making authority, and diffusing fears of blame. Beginning in 2013, occasional trainings on QI tools (process maps, fishbone diagrams), QI methods (Plan–Do–Study–Act [PDSA], Lean Six Sigma), and performance measures were offered to employees (Measure 9.1.5, QI Roadmap Phase 3 employee empowerment strategy). Employees began using a process for timely data entry and reporting of performance data to identify improvement opportunities in 2014 (Measure 9.1.2, QI Roadmap Phase 3 employee empowerment strategy). While SCCPHD provides opportunities for employees to create improvements, these opportunities have not always been regularly available. Furthermore, employees are not always rewarded for their improvement efforts (Additional File [see attachment]). Open and honest communication at all levels is important to empower employees to be part of the change process and accountable to make changes. In March 2016, a QI training cohort was created to develop a cadre of staff with specialized skills in QI (Table 1). Training opportunities are now offered more frequently for all staff to enable them to apply QI tools in their daily work, and participating staff will be recognized for their achievements in QI at the end of the training year (Measure 9.1.5, QI Roadmap Phase 4 employee empowerment strategy).

Quality Improvement Infrastructure
A sound QI infrastructure, reflected in SCCPHD’s model, consists of a QI Council (Measure 9.1.3) formed in late 2012 (Table 1), QI plan (Measure 9.2.1), and performance management system (Measure 9.1.2). Established in 2013 and revised annually, the QI plan contains key quality terms, a vision for quality, QI structural elements, types of QI training available, QI project information,
communication activities for QI, and plans for monitoring and oversight. Infrastructure components are largely in place (Additional File [see attachment]; QI Roadmap Phase 4 QI infrastructure strategy), but continue to evolve, given the Department’s collaboration with leaders, enlisting of outside expertise, and review of model practice stories from other LHDs. The current performance management system is an online database where employees track and report on progress towards strategic objectives. Data are exported into Tableau (Version 9.2) dashboards and shared quarterly with employees and reported to leadership semiannually. To impart more shared ownership for QI activities among QI Council members, the 2016 QI plan work plan guides the reporting structure for the QI Council meetings, and the QI training cohort develops QI work plans in coordination with their branch directors (QI Roadmap Phase 5 QI infrastructure strategy).

**Continuous Process Improvement**
Continuous process improvement promotes an ongoing practice to understand problems and improve processes. From 2014 to 2015, SCCPHD fostered continuous process improvement by providing a small number of project teams with project roadmaps and introductory trainings. Completed projects were highlighted by some teams with QI storyboards, online publications, and presentations to employees (Measure 9.2.2, QI Roadmap Phase 3 continuous process improvement strategy). While QI project team members believed they were using QI tools and methods throughout their QI projects (Additional File [see attachment]), review of projects suggested closer adherence to the project roadmap and just-in-time training and coaching were needed to promote more effective use of QI tools and methods. This is now being provided to 2016 projects (Measure 9.2.2, QI Roadmap Phase 4 continuous process improvement strategy).

**IMPLICATIONS**

The Santa Clara County Public Health Department has made strides toward formalizing QI in specific areas of the organization using NACCHO’s QI Roadmap and continues to use the QI Roadmap to advance in each of the 6 foundational elements. Factors that contributed to the success of SCCPHD’s QI efforts leading to accreditation are consistent with other studies, and include committed leaders who support QI efforts and align them with strategic priorities; infrastructure to regularly track and report on performance data, including customer service data; the use of different types of teams; access to improvement opportunities and trainings; and promoting resources for using various improvement models. This case study demonstrates that the QI Roadmap has great utility for helping LHDs advance their culture of quality and achieve national public health accreditation.
SUMMARY BOX

What is already known about this topic? Research suggests that there are many different approaches to implementing QI activities in a local health department to build a culture of quality and achieve national public health accreditation. To effectively implement QI, local health departments need clearer guidance on the definition of and the strategies for attaining a culture of quality.

What is added by this report? This study indicated that the National Association of County & City Health Officials (NACCHO’s) Roadmap to an Organizational Culture of Quality Improvement (QI Roadmap) is a useful tool for assisting local health departments in advancing their quality culture on their journey to becoming accredited.

What are the implications for public health practice, policy, and research? Local health departments who commit to supporting QI efforts, and aligning them with strategic priorities; establishing the necessary infrastructure to regularly track and report on performance data, including for customer service; expanding the use of different types of teams; offering improvement opportunities and trainings; and promoting resources for using various improvement models can establish a solid foundation in QI leading to accreditation.

REFERENCES


