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EXECUTIVE SUMMARY
The Northampton Health Department (NHD) and the Quabbin Health District (QHD), located in western Massachusetts and serving over 54,000 residents in the four served municipalities (Northampton, Belchertown, Pelham, and Ware) worked collaboratively to assess their combined organizational capacities to meet the Public Health Accreditation Board’s (PHAB) standards. They jointly developed a quality improvement (QI) project to address citizen complaints about environmental health issues with the goal of more consistently obtaining customer satisfaction data from complainants and educating consumers about the functions of LHDs (LHDs). As a result, the two departments have co-developed three accessible, easy-to-read handouts about the basic functions of LHDs, revised their consumer complaint documentation forms, and intend to use a brief survey to routinely assess and monitor customer satisfaction with the complaint process.

BACKGROUND/INTRODUCTION
At the time of the original 2009 beta test application, the Amherst Health Department, NHD, and QHD, all of which are located in western Massachusetts, agreed to submit a joint application. In November 2009, the Amherst Health Department withdrew from the project, but the remaining two departments agreed to move forward with the process, undergo the self-assessment, and engage in the required QI project. It helps to understand the unique structure of public health in the state to understand the challenges faced by LHDs and why the LHDs sought to serve as a beta test site. In Massachusetts, all communities are required to have their own local board of health, most of which focus on environmental inspections. The Commonwealth of Massachusetts is unique in that each of the 351 municipalities is responsible for local public health programs, yet there is no direct state funding. There is also no county system of public health services; the state department of public health (DPH) provides funding to community organizations whose services are intended to reach a broad range of individuals. DPH programs, services, and educational initiatives are designed to prevent disease and disability and reduce the impact of preventable health conditions and secondary effects. However, many core functions, such as sanitary code administration and enforcement, communicable disease investigations, and emergency preparedness, fall to local communities. The current system results in a disjointed delivery system dependent on local commitment and funding. In addition, many services traditionally performed by public health departments such as the Women, Infants, and Children program, family planning, or domestic violence are funded by state dollars awarded to non-profit, community-based organizations that do not always coordinate services with their local government public health agency. With the advent of emergency preparedness monies, LHDs were organized into regions and asked to coordinate emergency preparedness services.

As a result of the challenges faced by LHDs, the two departments initially saw serving as a PHAB beta test site as an exciting opportunity to explore the capacity of their health departments to form a functional regional entity. The process of self-assessment as a combined entity allowed the departments to explore their individual and
collective ability to meet PHAB standards and to more fully examine the advantages and disadvantages of regionalizing. Northampton and the Quabbin were interested in serving as a test site not only for the accreditation process, but also as a way of assessing how the accreditation process and regionalization would interrelate and potentially enhance capacity. At the time of the application, it was becoming clear that accreditation and regionalization were in the forefront of public health services, and the state was concurrently undertaking its own process to enhance and support opportunities for improved infrastructure and regional service delivery. By initially combining three very dedicated LHDs with different strengths and resources, NHD and QHD expected they would be able to effectively manage the self assessment and evaluation of accreditation and regionalization possibilities. Ultimately, the goal was to encourage other western Massachusetts communities to participate with NHD and QHD in regionalization and accreditation efforts. They anticipated that serving as a beta test site would serve two important functions:

- Formally document the strengths and weaknesses of NHD and QHD’s programs in delivering the core competencies of public health services delivery and lay out a future blueprint for improvement.
- Provide expanded opportunity and a funding stream to further investigate whether regionalization of programs and activities is a workable method to meet core competencies standards within Massachusetts’ unique, but disjointed and under-funded, system of public health delivery.

**BETA TEST SELF ASSESSMENT**

As a unique beta test site where two distinct health departments used the self assessment to evaluate their combined capacities to meet PHAB standards, NHD and QHD faced some challenges in this process. The amount of time staff could devote to the self assessment was limited. NHD and QHD decided to hire an outside consultant and the hiring process was conducted in February 2010; Gail Gramarossa was hired in mid-March 2010. The directors of Northampton and Quabbin, Ben Wood and Judy Metcalf respectively, met bi-weekly with the consultant for several months to review the PHAB standards, discuss what type of documents each department could contribute to demonstrate compliance with standards, and which documents were the best examples of departmental capacity and high-level organizational functioning. The process to review the standards and to determine which readily available documents best represented compliance with the standards took several months. Staff found that many documents were related to the requirements and standards, but were frequently short of fully demonstrating the measure, that is the content was not complete, documents were not dated, there was not documentation of the most recent review and approval, and documents were in hard copy but not electronic format. Reaching consensus on whether documents fully demonstrated PHAB measures involved intensive discussion and review by the three key team members. Because NHD and QHD had their own ways of creating and approving documents, there were challenges with finding consistency among examples and with determining which documents to submit. Staff also found that there were documents created by regional and/or county-wide entities, such as the emergency preparedness coalitions or local hospitals, that supported certain measures, but those documents also included the capacities of additional health departments. NHD and QHD also looked at statewide documentation and procedural manuals to illustrate the laws and policies that LHDs are required to adhere to in Massachusetts, but those documents were not necessarily localized to either LHD.

The process of self assessment was useful and informative as it clearly identified the organizational and services gaps in both LHDs, particularly in the areas of comprehensive community health assessments, strategic planning, community health improvement planning, and integrating QI processes into ongoing operations. NHD and QHD found that they were strong in their environmental inspectional services, the infrastructure to support human resources and budgeting capabilities, promulgation and enforcement of local and state laws, and the provision
of state-mandated public health services. They were somewhat challenged in the broader areas of prevention, healthcare access for special populations, wellness programs, and the use of evidence-based community health interventions. The self assessment process and site visit report held few surprises for NHD and QHD because it was very clear during those processes where deficiencies were in relation to the national standards and measures. If NHD and QHD were to engage in this process again, they would submit different and additional documentation demonstrating the work they do, especially in regard to the collaborations they have with community partners that are actively engaged in public health service delivery. These collaborations and shared services provide additional ways to meet the measures and standards of accreditation. NHD and QHD also felt that as local public health is currently structured in Massachusetts, the PHAB standards are likely impossible to meet for the vast majority of health authorities, with the possible exception of the largest metropolitan agencies.

### Highlights from Self-Assessment Results

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<th>Standard/ Measure</th>
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| Domain 5.2 B      | Develop and implement a health department organizational strategic plan  
  ● As a result of the self assessment that identified the lack of a formal plan as a weakness, NHD will partner with local agencies and community resources to embark on a strategic planning process based on input and information from internal and external stakeholders, community health data, and known best practices. |
| Domain 3.2.1 B    | Provide information on public health mission, roles, processes, programs, and interventions to improve the community’s health  
  ● As a result of the self assessment and lessons learned during the QI project, NHD and QHD developed three easy-to-read, accessible consumer education handouts on the basic functions of LHDs and will use these as a model for future educational tools to inform the public about the mission and services of local public health agencies. |
| Domain 1.1.3B     | Collect additional primary and secondary data on population health status and public health issues from multiple sources  
  ● The NHD PhotoVoice project description and slide presentation demonstrated an innovative method for participatory community health assessment and data gathering; local residents and consumers were involved in a process of collecting information and using photography on environmental health issues. They communicated their findings to officials and the larger community. The information resulted in further data analysis, future plans for LHD policy development, media communication about the project goals and achievements, and expansion of the LHD’s role in shaping the community’s response to address health disparities. |
| Domain A1.4       | Maintain a human resources system  
  ● QHD and NHD were pleased that the submitted employment manuals and personnel policies/procedures demonstrated a well-defined and structured human resources system for the consistent recruitment, training, evaluation, retention and management of qualified employees to deliver public health services at the local level. |

### QUALITY IMPROVEMENT PROCESS (PLAN-DO-CHECK-ACT)

#### PLAN

*Assembling the Team*

The QI team composition was proposed and developed by the two directors of the collaborating LHDs in discussion with the project consultant. The inspectional, public health nursing, and administrative staff members who deliver most of the on-the-ground local services were asked to join the team and participate in planning meetings. Each of these staff members regularly interacts with the public, other city/town officials, and community members; they are the primary staff persons that respond to phone, e-mail, and walk-in inquiries, requests for information or services, and complaints from consumers in the geographic communities served. The
volunteer health literacy consultant was recruited to assist with the development of accessible, one-page educational materials that would be provided to consumers during the process of resolving the complaint. These materials were designed to increase consumers’ basic knowledge of health codes and the role of LHDs and to highlight additional community resources. Based on the small number of staff at each of the LHDs, it was somewhat of a challenge to schedule meetings, deliver introductory staff training in QI, and dedicate time to the QI project analysis and overall plan development. Several of the staff members at both LHDs are part-time, making group scheduling even more of a challenge. Bi-weekly meetings between the project consultant and two directors were scheduled on a consistent day to facilitate planning; the initial meetings with the full QI team were held during normal staff meeting times and were extended to accommodate the additional agenda content needed. The composition of the QI team remained the same throughout the process with each staff member having a clearly defined role in the root cause analysis, data collection, and planning phases of the overall process. NHD and QHD used the skills and experience of both inspectional staff and administrative staff members as each has their unique perspective on the details of the consumer complaint process and how to improve it.

Identifying the Problem
During bi-weekly meetings held from June through August, the directors and the project consultant brainstormed potential QI projects based on PHAB self assessment domains with lower scoring. In the self assessment, NHD and QHD did not fully demonstrate either of the following measures in Domain 9, “Evaluate and Continuously Improve Processes, Programs and Interventions:”

- Measure 9.1.3 B: Establish goals, objectives and performance measures for processes, programs, and interventions
- Measure 9.1.6: Implement a systematic process for assessing and improving customers’ satisfaction with agency services

QHD had previously developed a mechanism for obtaining consumer feedback using a postcard mailer, but it had not been consistently implemented in its ongoing operations. The team agreed that both LHDs would have baseline data about the chosen problem and that it would cross the boundaries of geography and specific community differences. Both directors also wanted the selected problem to be one that occurred frequently in their departments and have significant consumer participation and feedback elements. The problem selected to was the of response to consumer complaints about environmental health issues—the most common types of complaints received by both departments included garbage, trash/waste dumping, odor, noise, foodborne illnesses, air quality, and housing code issues especially landlord/tenant conflicts. The issue of whether or not to narrow the focus exclusively on complaints about food service establishments was discussed at length. The team agreed that although Northampton has over 180 food establishments to regularly monitor, the number of such sites in the QHD service area was far fewer and was somewhat less of an issue in QHD communities. This imbalance was seen as a potential problem in conducting QI data collection and testing improvement ideas equally with both LHDs. The team also discussed whether to focus exclusively on complaints related to housing issues, but decided to keep the focus broader than a single type of complaint.

Aim statement revised on Dec. 9, 2010: By Dec. 1, 2010,QHD and NHD will respond to consumer complaints about environmental health issues (with an initial phone call, e-mail contact, or inspection appointment scheduled) within 48 hours during normal business hours and obtain feedback from 50 percent of complainants; 75 percent of these complainants will report increased knowledge of basic LHD functions and satisfaction with the response process as measured by a brief survey.
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Final aim statement revised on Aug 30, 2010: QHD and NHD will improve their environmental services by responding to complaints (with an initial phone call, e-mail contact, or inspection appointment scheduled) within 48 hours during normal business hours and obtaining customer feedback from 50 percent of complainants by Dec. 1, 2010; 75 percent of these complainants will report increased knowledge of basic LHD functions and satisfaction with the complaint response process as measured by a brief survey.

First aim statement from June 18, 2010: QHD and NHD will improve delivery of their environmental public health services (food service inspections, Title V/septic system inspections, housing inspections, nuisance complaint investigations) by obtaining written service user feedback following the receipt of LHD services from 50 percent of customers by October 2010 and 95 percent of customers by December 2010 and documenting that 90 percent of customers report a high level of user satisfaction.

Second aim statement revised on July 23, 2010: QHD and NHD will improve environmental public health services by responding to complaints within 24 to 48 hours (during normal business hours), educating complainants about basic LHD functions, and obtaining customer feedback (via surveys) from 50 percent of complainants by October 2010 and 75 percent of complainants by December 2010; 75 percent of the citizens responding to the survey will report increased knowledge of LHD functions and satisfaction with the complaint response process.

Examine the Current Approach
The project consultant facilitated meetings with each of the department’s staff members available for the QI project team. Both departments outlined their current processes for receiving, documenting, addressing, and resolving consumer complaints about environmental health issues. For the purpose of the flowchart included in this report, the project consultant analyzed the common procedures from each department and compiled one flowchart that depicts the steps currently implemented by both departments. It was clear from the two meetings that the individual LHDs have some specific steps unique to their internal operations; those steps were not included in the final flowchart. (See Appendix 2 for flowchart).

Root Cause Analysis
The project consultant facilitated 90-minute group meetings with each of the two LHD staff teams; the fishbone diagram method was used to conduct a root cause analysis and document the underlying causes of the problem. Staff members verbally generated a list of factors that pose problems for responding to consumer complaints and then categorized these factors as primarily related to one of four categories: (1) people, (2) policy, (3) methods/procedures, and (4) materials/equipment (see Appendix 3 for the fishbone diagram). The combined results from the two group meetings indicated that primary root causes were a lack of knowledge among consumers about the basic core functions of LHD and consumers’ limited knowledge about the process to resolve a complaint. The team also noted that perceived delays in responding resulted in increased anxiety on the part of consumers, which in turn lead to dissatisfaction with the LHD’s actions. In addition to these primary issues, the following factors were noted to interfere with the smooth response to consumer complaints about environmental health issues:

Methods/procedures
- Not keeping complainant informed
- Need more expertise to deal with complaint
- Need input from other staff
- No process for e-mail complaints (QHD)
- Time delay in responding to calls that come in from other sites
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- Key gatekeeper staff members need time off

People
- Consumers lack knowledge about basic LHD functions and may be misinformed, angry, and/or worried about the perceived health violation
- Increased anxiety with delays
- Callers give incorrect site address
- Complainants do not show up for appointments with inspectors; complainants do not leave a phone number for follow-up calls

Materials/equipment
- Do not have standard information handouts/packets to give to complainants
- Lack some equipment when onsite
- Redundancy in paperwork to document complaints (i.e., phone pads, forms, electronic databases, files)
- Lack of software to create joint calendars of inspections scheduled
- Key gatekeeper staff does not have own calendar

Policy
- LHD not authorized to take action expected or desired by complainant
- Verbal report of preliminary findings is given to complainant when they may expect a written report; current policy is that the written report is completed and provided later

Identify Potential Improvements
The LHD directors and their staff members explored numerous improvement theories related to the selected topic. Frontline staff and administrators fully acknowledged that the nature of public health regulatory action and its legal authority are such that consumers may not be fully satisfied with the outcome of a complaint regardless of the speed and manner in which the compliant was resolved. In other words, the LHD is often required by law to take actions that do not match the expectations of consumers. From the perspective of the complainant, these actions may seem severely punitive; conversely, consumers may be dissatisfied with the outcome if the LHD appears to be too lenient or is unable to take the specific action the consumer desired. In these cases, the experience of both LHDs is that when the outcome is not in accordance with their expectations, consumers are often unclear as to the role of the LHD and the parameters and limits of its authority. As a result, the team decided early in the QI planning process that the focus of the project would be on the promptness of the response and the type of information that could be provided to consumers. The team would measure satisfaction with the process as a gauge of improvement. The theory behind this decision was that even if the consumer is unhappy with the outcome of a complaint, a brief survey could help determine if the LHD provided prompt, professional, and informative services. It is fair to say that the team expected that even if a consumer was unhappy with the outcome, they may be more satisfied if they had an increased understanding of the compliant resolution process and LHD actions. Another element of the theory was that providing accessible, easy-to-read information to consumers about the role of the LHD and its authority would also improve the consumer’s perception of and experience with the LHD.

As part of the group discussions of root causes and current processes, time was devoted to analyzing what factors could and would improve the process to respond to complaints. Staff generated a list of ideas related to the timeliness and informational/educational aspects of the process. Again, the regulatory nature of what LHDs can and must do may lead complainants to be dissatisfied with the outcome of the process—an outcome that is often required by law and for which no other option exists. As a result, the staff wanted to focus the improvements to be tested on more objective factors such as the manner in which complaints are responded to and the opportunity to further educate the public about the role of the LHD. The QI process was identified as an
opportunities to both improve current response processes and begin to identify community knowledge needs. A longer-term goal is to develop ways to improve overall community understanding of the LHD’s role and functions.

**Measurable Improvement Goals**

a. By Dec. 1, 2010, LHD staff will respond to 90 percent of complaints (with an initial phone or e-mail contact) within 48 hours during normal business hours.

b. By Dec. 1, 2010, staff will receive feedback from 50 percent of complainants; 75 percent will report increased knowledge of basic LHD functions and satisfaction with the complaint response process as measured by a brief survey.

**The Improvement Theory**

“If LHD staff respond promptly to consumer complaints and provide accessible information about public health risks, the role and legal authority of LHD, and the necessary steps to resolve a complaint, then consumer satisfaction with environmental health services will be improved.”

The planned test methodology will include (1) documenting/tabulating the response time to complaints received; (2) consistently implementing and tabulating the results of the consumer survey; and (3) providing accessible, one-page informational handouts to consumers relevant to the health topic of their complaint. The survey will be given to complainants at the conclusion of their complaint; the aggregate surveys will be tabulated weekly and the database will be updated accordingly. The results of the surveys will be analyzed by the directors in conjunction with their staff members as part of team meetings and the structured oversight of the QI process.

Types of baseline data collected from both NHD and QHD:

1) Number of complaints received in a three-month period from June 1 to Aug. 31, 2010
2) Number and percent of consumer complaints responded to within 48 business hours
3) Number and percent of consumer complainants that received written information about the role of the LHD or health code relevant to their complaint
4) Number and frequency of use of a means to obtain formal customer feedback on the complaint response process

Test data to be collected from Oct. 15 to Nov. 10, 2010:

- Number of consumer complaints received in the designated time period
- Number and percent of consumer complaints responded to (with an inspection appointment scheduled, phone call or e-mail) within 48 business hours
- Number and topics of the one-page informational handouts distributed
- Data from consumer satisfaction feedback surveys: Staff will develop an anonymous, self-addressed, postage-paid postcard and an online (surveymonkey) version of a simple (five questions with yes/no answers) follow-up consumer satisfaction survey for consumers to complete; staff will encourage consumers to complete and submit the survey during the onsite inspections and phone or e-mail communications

Consumer survey questions:

1. When you first contacted the health department to make your complaint, did the staff respond to you in a timely way? (Y/N)
2. Did the health department staff handle your complaint in the way you expected? (Y/N)
   If you answered ‘No’, did the health department staff give you an explanation as to why they handled it differently? (Y/N)
3. Did the health department staff communicate with you effectively? (Y/N)
4. Did the health department staff provide you with any written information about the health issue you complained about? (Y/N)
5. Do you feel that you know more about the functions of the local health department than you did before you placed the complaint? (Y/N)

Roles and Responsibilities of Team Members
The health directors (Ben Wood and Judy Metcalf) oversaw the QI process and monitored its progress in consultation with the project consultant. They approved the content of the consumer feedback survey, documentation forms, and informational handouts. The clerical/administrative staff (Heather McBride, Mary Grenier, and Betty Barlow) were most likely to receive and document the initial complaint phone call or e-mail. They continued to respond to requests for information, to refer complaints to health inspectors and to schedule inspections as warranted. The inspectional services staff (Aimee Petrosky, Javeria Iqbal Mir, and Ryan Fitzemeyer) received referrals/appointments from the clerical staff and responded to complaints via phone and e-mail within 48 business hours and conducted onsite inspections as warranted. The public health nursing staff was consulted and engaged in the process when the complaint involved foodborne illness or a mandated reportable communicable disease. The health inspectors and the clerical staff members provided a hard copy of the survey (a stamped, self-addressed postcard so consumers could complete the survey anonymously) and information about taking the survey online for consumers at the conclusion of the complaint. These same staff members also provided consumers with the one-page educational handouts designed to inform consumers about specific health codes and LHD functions relevant to their complaint. Clerical staff received, tabulated, and filed the hard copies of the surveys and assisted with the tabulation of the online surveys for the designated test period. The directors reviewed the survey data and shared the results of the QI project with their respective staff teams.

DO
Run the Test/Launch the Pilot Improvement(s)
The test phase proceeded as planned—both LHDs’ staff members documented consumer complaints as they came into the respective offices via phone or e-mail; the timeframe for response was documented; consumer satisfaction surveys were distributed via mail and online; based on the nature of the complaint, educational handouts were offered and distributed via mail and online; and data on the number and type of surveys and handouts distributed was collected. The designated timeframe for data collection was Oct. 15 through Nov. 10, 2010 (see Appendix 4 for a summary data chart).

CHECK
The team readily documented the data for one of their measurable goals: the timeframe in which a complaint call was responded to by staff members. All of the complaints (22/22; 100%) were responded to within 48 hours. However, staff received very few completed consumer satisfaction surveys; only three of the 12 complainants (25%) who received surveys actually submitted their completed surveys. The team had no online surveys that were completed; the three completed surveys received were in postcard format. They had set a goal that 50 percent of the consumers would submit a completed survey. During the process, it became clear that one barrier to distributing and receiving completed surveys was the timing of the request. Most of the complaints were still under investigation during the test time period. Therefore, complainants did not yet have enough...
interaction with staff and experience with the entire process to provide significant informed feedback. Staff felt it would be much more effective to obtain consumers’ opinions once the cases were closed, which was one of the major lessons learned during the process. Staff also guessed that consumers were generally less likely to complete a survey when their experience was reasonably satisfactory, that is, they may be more likely to provide feedback when extremely dissatisfied or conversely if their experience significantly exceeded expectations. The team found that when surveys were completed, the 75 percent of respondents would express increased knowledge and a high level of satisfaction with the process goal was exceeded and 100 percent of respondents expressed this. Staff were pleased that the feedback received was quite positive.

ACT
The staff at both LHDs did not find the process of documenting response time and the distribution of surveys and information to consumers to be burdensome; it is a staff training issue to adopt the process whereby surveys and handouts become a routine step in closing a complaint case and documenting it. Because of the short test timeframe, the team concluded that a more useful procedure would be for the surveys to be distributed once a complaint is fully resolved and the case is closed. The team intends to adapt and adopt these procedures as part of ongoing operations in managing consumer complaints in the future. Although staff had limited baseline data on previous response time, Northampton was able to improve the documentation of its response time when compared to prior to the test. The QHD system provided for the scheduling of an inspectional appointment at the time of the compliant, so all consumers were responded to within 48 hours. As a result of the QI project, NHD will modify their standard complaint intake form to create a check box to record the specific date and time of response. NHD also intends to add check boxes to the form to record when satisfaction surveys and educational handouts are given to consumers. These changes to the paper form will also be incorporated into the online electronic database for accurate documentation. Staff intend to translate the survey and three handouts into Spanish and to use the format and easy-to-read language of the materials as a model for future consumer fact sheets. Feedback will be solicited from consumers using the survey after the complaints are fully resolved and cases closed; staff will mail/e-mail surveys and make follow-up phone calls/e-mails to remind consumers about the survey to try to improve the response rate. Results of surveys will be reviewed at staff meetings so that further potential improvements can be identified, discussed, and implemented. Staff will evaluate the success of this effort through monthly review of complaints received and the accuracy and completeness of the paperwork to document them. For the future, QHD intends to apply the QI process to reducing the time needed to secure compliance with LHD-issued remediation orders after a complaint has been investigated and analyzed.

RESULTS, NEXT STEPS, AND ACCREDITATION
The experience of planning and conducting a formal QI process was new for both LHDs. NHD and QHD felt that it was important for staff to receive introductory and ongoing training in the principles and practice of QI and to participate in an inaugural project that focused on a routine occurrence at each office. The team was confident that starting with a focus that was familiar to staff would build support and minimize any apprehension about a new process. The QI process provided the time to examine the current approach and to plan an intervention that provided useful data and learning opportunities. NHD and QHD plan to adapt and adopt some of what they learned in the QI process and to further examine ways that they can more consistently and regularly obtain consumer feedback about services. NHD and QHD also intend to further explore simple, low-cost ways to educate the public about the basic functions of LHDs. The survey and educational handout tools developed for this specific QI project can be adapted and modified for use in other projects and serve as models for future efforts. Because QI has not been a fully integrated aspect of NHD and QHD’s services, it will take consistent leadership and resource allocation on the part of directors and the respective boards of health to truly build a
culture of QI at NHD and QHD. The experience has also shown staff that QI requires dedicated time and attention to plan, implement the plan, analyze results, and incorporate any changes into ongoing activities. The experience has increased the LHDs’ capacity to conduct QI activities and to prepared staff for meeting those standards if and when accreditation is pursued.

LESSONS LEARNED
Based on the goal of using the self-assessment and QI processes to evaluate current services and further examine the need for and capacities to regionalize services, the team’s experience confirmed suspicions and provided significant insight to guide them in the future. Staff learned that meeting the PHAB standards for accreditation is nearly impossible for a small, LHD based on current infrastructure, staffing, and resources. The overall structure of public health systems in Massachusetts hinders the process to fully meet the standards. NHD and QHD will continue to advocate with state officials that systems be modified to better reflect state-of-the-art thinking about regional public health service delivery. The team also learned that the need for collaborations with community agencies is paramount when considering accreditation. While NHD and QHD maintain highly qualified staff trained to investigate communicable diseases/environmental health problems and have good relationships with agencies to accomplish these activities, they need further work to develop some of the basic building blocks for accreditation. NHD and QHD have not meet standards for several pre-requisites such as comprehensive community health assessments; strategic plans; community health improvement plans; and formal workforce development plans. They know that the strategic planning process would help engage the board members, staff, and community partners in giving direction to the LHDs and help NHD and QHD sustain the work regardless of the individual(s) in office. NHD and QHD also learned that the documentation of their work does not always accurately reflect the full extent or quality of services provided. NHD and QHD need to prioritize the improvement of their documentation systems so that they fully capture data, but do not overburden the staff. The LHDs will look to apply the practice of QI to improving their record-keeping and documentation. Although the specific QI project provided useful information and was a positive experience for the staff, NHD and QHD acknowledge that the have significant work to do to build the required culture of QI into daily work. The LHDs hope to offer more training, encourage staff to seek online training, and begin to weave QI practices into ongoing activities. They want to build their in-house capacity to use and apply QI tools and serve as models for the broader municipal services with which they interface. Although both LHDs are committed to branching beyond legally mandated services and addressing the emerging public health issues facing residents, they do not currently have the resources to embark on the required prevention/wellness services. NHD and QHD will collaboratively use regional, statewide, and national resources, such as the Massachusetts Department of Public Health, the National Association of Local Boards of Health, and NACCHO to increase capacity for QI and expanded public health services.

APPENDICES

Appendix 1: Storyboard

Additional Appendices:

Appendix 2: Current Process Flowchart
Appendix 3: Fishbone Diagram
Appendix 4: QI Project Data Results