Quality improvement is an integrative process that links knowledge, structures, processes, and outcomes to enhance quality throughout an organization.

The intent of this Continuous Quality Improvement Plan is to provide a formal description of the quality improvement activities conducted by the Rhode Island Department of Health (RIDOH) to improve the performance level of key program processes and resultant outcomes within RIDOH. Additionally, this plan serves as documentation of Standard 9.2 of the Public Health Accreditation Board: “Develop and implement quality improvement processes integrated into organizational practice, programs, processes, and interventions.”

Approved by:

Nicole Alexander-Scott, MD, MPH
Director of RIDOH

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Rhode Island Quality Improvement Plan 2016-2018
I. Executive Summary

Accredited!!
2015 turned out to be an exciting year for Quality Improvement at the Rhode Island Department of Health (RIDOH). First and foremost, RIDOH received accreditation from the Public Health Accreditation Board (PHAB) on November 10, 2015, after four years of work and a monumental agency-wide effort.

RIDOH is the statewide health agency responsible for protecting and promoting the health of all 1,055,1731 Rhode Islanders, and began its preparation to public health accreditation with funding from the Centers for Disease Control and Prevention (CDC) in 2010. The unique characteristic and overriding requirement of PHAB-accredited health departments is to develop a culture of Continuous Quality Improvement (CQI). This requirement is fully described in PHAB’s Standards and Measures for Domain 9, which supports the ninth public health2 essential service to “evaluate and continuously improve health department processes, programs, and interventions.”

Second, Rhode Island’s new Governor Gina Raimondo issued an Executive Order to “make Rhode Island the benchmark state in New England for Lean thinking”. Lean is a continuous process improvement methodology that focuses on identifying and eliminating non-value added or wasteful activities within a program. This Executive Order requires state agencies to conduct at least two Lean process improvement reviews by 2016 and incorporate Lean goals in agencies’ strategic plans. Training in the utilization of the Lean tools, a Lean Steering Committee and a schedule of follow up meetings to review progress have been taking place in the last half of 2015 as implementation components of the Executive Order. Most importantly, the Governor’s Lean initiative is creating more interest and awareness about CQI, and as expected this would further help in the promotion of a CQI culture among RIDOH’s employees.

Third, RIDOH’s new Director, Dr. Nicole Alexander-Scott, established an “Academic Center” in the agency, to strengthen the integration of scholarly activities with public health. The new Academic Center is now the organizational home for the agency-wide Continuous Quality Improvement program (see appendix 1).

Fourth, RIDOH measured its progress using the “Roadmap to a culture of QI” framework from the National Association of City and County Health Officials (NACCHO). Organizationally, RIDOH falls between phase 3 (informal or ad hoc QI

---


2 Public Health Essential Service 9 is to “evaluate the effectiveness, accessibility and quality of personal and population-based health services”.
activities) and phase 4 (formal QI activities implemented in specific areas) of the framework, while staffs knowledge is distributed in all 6 phases.

Starting 2016 as an accredited health department, and aided with the Governor’s Executive Order promoting Quality Improvement, the new Academic Center at RIDOH will focus work on the coming months to reach Phase 5 of the NACCHO framework by the end of 2017, pursuing these 3 primary objectives:

1. Build and maintain CQI capacity
2. Engage staff in CQI activities
3. Foster a culture of CQI

Central to this work is the recently formed CQI Council (see Roles and Membership in Appendix 2), committed to advance the CQI agenda. After weeks of planning and discussion, the Council proposed to participate in the strategic integration between PHAB’s “opportunities for improvement” and RIDOH’s performance management system. The Council will work with a senior manager/executive to begin this integration in 2016.

Progress on the proposed goals of this plan will be assessed annually, using the following key measures:

a. Progress made to reach a culture of QI, Phase 6 of the Roadmap to a culture of QI (RIDOH was on Phase 3 in 2015)

b. Percent of staff who received the basic (1-hour) CQI training

c. Percent of QI projects (including Lean) completed

d. Percent of staff who attended the annual CQI Fair/event

e. Percent of staff recognizing CQI as part of an effective organization

Without a doubt, Continuous Quality Improvement has gained ground at the RIDOH through our recent accreditation status and the continuous support of the director and RIDOH Leadership. While we as an agency are pleased of this progress, much work still remains to be done, especially as it relates to CQI training. This plan also presents a modified strategy for CQI training, where CQI Teams will be trained each year through a blended format including a mix of workshops, distance learning and additional open ad-hoc sessions open to all. Lastly, RIDOH will now be producing the CQI Plan for a period of two-three years, with an annual progress report and an update of the goals and objectives to be produced yearly. The CQI Council will continue to be engaged in the design and review of the CQI Plan, while its role, responsibilities and term will be refined over time.

RIDOH is excited about being accredited. We are now even more than ever committed to continuous quality improvement, and sincerely thank all staff who work really hard to support CQI. More of our staff will be using the Lean tools and more staff will be trained in CQI, to further enhance outcomes of our work and better serve all Rhode Islanders.
II. Mission and Vision

The primary mission of the Rhode Island Department of Health (RIDOH) is to prevent disease and to protect and promote the health and safety of the people of Rhode Island. Our vision is that every Rhode Islander should have access to high quality, affordable healthcare, delivered at the most appropriate time and place.

As a newly accredited health department, RIDOH will continue to work to achieve a culture of continuous quality improvement (CQI). The agency-wide CQI strategy currently offers annual training to a group of around 20 staff each year since 2012, where each staff commits time to attend the training and use the tools to improve a process in their program/division. More recently, in 2015, the RIDOH’s Academic Center re-emphasized the goal of achieving a culture of CQI and culture of learning in the agency, to further promote public health goals.

At the statewide level, Governor Raimondo is also a vital supporter of CQI, first through the Executive Order to implement Lean strategies to make state operations more efficient, and secondly by supporting training to learn more about the use of QI tools. A large number of RIDOH staff have been invited and able to attend Lean 101 training and CQI is becoming part of the regular vocabulary. The first CQI Council was established in early 2015 and many other efforts are now connected to the overall goal of achieving a CQI culture. (See more details in the Progress Report, included in Appendix 3).

III. Quality Improvement at RIDOH

Current State of QI

The first agency-wide Continuous Quality Improvement group (Team 1) was convened in late 2011 and received the Train-The-Trainers comprehensive four-day session in July and August 2012. Since then, Teams 2, and 3 have graduated. Team 4 (training agenda is included in Appendix 4) is expected to graduate in the Spring 2016, (see also Appendix 5 with the summary of the all CQI projects and outcomes since 2012).

Each year the CQI training is sponsored and supported by RIDOH’s CQI Faculty and CQI Council, evaluations are then discussed to realize improvements. For Team 4, RIDOH is using a blended learning methodology by which they complete their online training portion, followed by an in-person session to apply the skills reviewed in the online materials. In addition, the curriculum includes Lean tools, and continues with hands-on workshops. Most importantly, in 2015 the CQI Faculty received approval from the Office of Training and Development at the RI Department of Administration to issue one full incentive credit to employees who complete the CQI training with this new modality. This especially innovative
approach was well-received and helped recruitment for Team 4, the first team with over 20 trainees.

CQI training was successfully developed and implemented using internal resources, without depending on an external vendor. The training has been structured in a way that the graduates continue to participate in CQI in a different level, and the CQI Council is formed by graduates of any Team (currently teams 1, 2 and 3) and will serve for a term of two years. The training cycle is ongoing and is depicted in Figure 1 below.

Once a Team graduates, members are selected/nominated to become CQI Faculty, and/or join the CQI Council at any point after the graduation. All graduates become CQI Ambassadors and are expected to serve as an arm of supporters and champions to foster CQI dialogue and use of the tools in their own units, programs and divisions or at any other events. In essence, Team members’ roles can evolve in three phases, as shown in Figure 2 on next page.

![Figure 1. Quality Improvement Teams Cycle](image)

![Figure 2. CQI Team Members Roles](image)
Definitions, roles and responsibilities

a) CQI Team - A CQI Team is the group of staff selected each year to receive training and complete an improvement project in the course of about one year. Each Team has a number assigned chronologically (Team 1, 2, 3, and so on). Each CQI Team is formed with staff from the different divisions, centers and programs within the Department. Identification of the team members is done in coordination with Division Directors, and direct supervisors, and also based on their own interest.

b) CQI Faculty – Graduates from the CQI Teams are selected based on skills, CQI training and interest to form the CQI Faculty to organize, coordinate and conduct the CQI training. The first CQI Faculty was selected in 2014 and trained Team 4.

c) PHIX – The Public Health Improvement Exchange (PHIX) is the forum for faculty/mentors and mentees (i.e., new QI Team members) to provide ongoing support and technical assistance. PHIX meets as needed, with agenda items previously discussed and group’s activity documented via email to the group.

d) CQI Council – The first CQI Council was assembled in early 2015 and its Charter is included in Appendix 2. They will serve for a term of 2 years and serve as an advisory board to the CQI Director.

e) CQI Director – The CQI Director is responsible for formulating and maintaining a department-wide quality improvement initiative. The CQI Director chairs the CQI Council and CQI Faculty groups and serves as the link between RIDOH’S Leadership and all teams working in Continuous Quality Improvement. Currently, the CQI Director is the Director of the Department of Health’s Academic Center.

f) CQI Team Responsibilities – Based on the above description, members (trainees) of a CQI Team commit to the following:

1. Attend and complete the CQI 201(see definitions later in the document) training prepared by CQI Faculty.
2. Complete one CQI project from; including submitting the project’s charter and aim statement in the forms provided (see Appendices 6 and 7)
3. Present the completed project in the posterboard template provided for that purpose (see Appendix 8)
4. Upon graduation, serve as CQI faculty as needed to prepare/deliver training to new CQI team members
5. Mentor and provide technical assistance to CQI Team members of the upcoming class [Team 2 to Team 3, Team 3 to Team 4, and so on]
6. Participate/present at the PHIX meetings for technical assistance and support to all other CQI members, as well as at the annual CQI Fair to exhibit the completed work and other CQI related events

7. Provide input, support, and feedback in the preparation/review of the Department’s CQI plan, goals, activities, communication efforts, PHIX support, etc.

8. Participate in the CQI team for a minimum of two (2) years from the time the training is received, and the maximum of four years, provided that at least one CQI project is complete and at least one new member of the upcoming class is trained, mentored and completed one CQI project

9. Promote and advocate for CQI efforts as CQI Ambassadors on an ongoing basis

10. Support the Teams’ transition from Trainees to Faculty to Ambassadors

11. Support and participate, if possible, in the use and implementation of other CQI methods (Kaizen, Lean) as they become known and available in the Department

**g) CQI Project Identification:** The selection of the project can be done by discussing it with their supervisor/Division Director, and can be program-related or based on a department-wide need. When selecting each project, please keep in mind the project should meet the following criteria:

- **Strategic:** The extent to which the CQI project would advance and promote overall strategic goals and Strategic Plan(s) for RIDOH and its programs
- **Supported:** The extent to which available resources, including staff and budget (if applicable) can support the project
- **Feasible:** The extent to which the project is within the control of the program and team
- **Measurable:** The project must have an initial measure and an end measure (i.e., hours before and after, number of errors before and after, cases before and after, days before and after, etc.)
- **Complete:** The time the project would take to complete a 1st phase. The project will be “complete” when the PDSA is complete, and the poster for the project is submitted, approved and ready for Accreditation purposes

To formally review and present the CQI project, staff are asked to use the CQI Aim statement and Project charter templates (see Appendices 6 and 7).

**h) Budget and resource allocation:** Resources for the CQI effort include the CQI Director, supported by funding from the Indirect Cost and the Prevention Block Grant, as well as support from the Department of Administration’s Office of Management and Budget (OMB) with regards to Lean training, templates, and also in the form of webinars and other online learning/tools.

**Future Desired State of CQI**
The RIDOH’s goal is to foster and maintain a culture of quality improvement. RIDOH used the 6-Phases Roadmap to a Culture of QI (see Appendix 9), from the National Association of City and County Health Officials (NACCHO) to assess its progress towards the goal of fully integrated performance management systems (Phase 6).

According to the NACCHO’s QI Roadmap to QI an agency has reached phase 6 when:

“QI is fully embedded into the way the agency does business, across all levels, departments, and programs. Leadership and staff are fully committed to quality, and results of QI efforts are communicated internally and externally. Even if leadership changes, the basics of QI are so ingrained in staff that they seek out the root cause of problems. They do not assume that an intervention will be effective, but rather they establish and quantify progress toward measurable objectives.”

After conducting a reasonable search for similar instruments, no survey tool to assess staff and organizational characteristics described in NACCHO’s QI framework was found, and a 16-item questionnaire was developed. This tool was first tested and later administered to all staff, with the goals to:

a) Determine where RIDOH is on NACCHO’s Roadmap to a total institutional QI culture, and,

b) Use findings to identify strategies and prioritize staff groups to engage in QI efforts to transition them into higher Phases of NACCHO’s framework.

The survey was sent out to all staff and had a 45% response rate. Based on the findings, the RIDOH, institutionally, is in Phase 3 (informal or ad-hoc activities) and 4 (formal QI activities implemented in specific areas).

The CQI Council is focusing its efforts to further promote CQI in the agency to transition staff (clerical, administrative, field staff) who reported low CQI awareness and skills, to a higher phase of the CQI Roadmap, strengthen and expand the current CQI vocabulary in every day work, and engage in other efforts to move towards phase 5 (formal agency-wide CQI) of the Roadmap in the next two years.

Specific goals and objectives to reach Phase 5 are detailed in section IV of this plan.

**IV. CQI Plan 2016-2018**

a. Goals and Objectives
To maintain and support a culture of quality improvement in the Agency, the CQI Plan aims to achieve three main goals, as shown below.

<table>
<thead>
<tr>
<th>Goal 1. Build and maintain CQI capacity</th>
<th>Objective</th>
<th>Timeframe</th>
<th>Responsible Person(s)</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1a. Strengthen the implementation of the Performance Management System (see Appendix 10) in relation to CQI</td>
<td>Ongoing</td>
<td>CQI Council M.Angeloni T.Cooper N.Duffy J.Coyne T.Marak M.Wilson S.Aguiar C.Farrow A.Lemire E.Norcini P.DiPippo</td>
<td>- Number of QI projects completed by the CQI Teams 5 and 6 that addressed the opportunities for improvement from the PHAB report issued in 2015 - Number of CQI projects identified from the Dashboard that were addressed and completed by CQI Teams 5 and 6</td>
</tr>
<tr>
<td></td>
<td>1b. Train and support the annually identified CQI Team throughout completion of the project</td>
<td>Ongoing</td>
<td>QI Faculty M.Angeloni S.Aguiar C.Farrow E.Norcini</td>
<td>- % of staff who signed up for the CQI Team and completed the project (# staff completed the project/# staff signed up for training) - % Team members who completed the training and received incentive credit</td>
</tr>
<tr>
<td></td>
<td>1c. Increase the proportion of staff who received basic CQI 101 training (1-hour TRAIN webinar course ID 1058705)</td>
<td>Measured annually</td>
<td>Division Directors A.Norais L.Green E.D’Arezzo C.Goulette E.King S.Powell</td>
<td>- % of staff who attended the 1-hour webinar during each calendar year starting 2016 - % of new employees who view the 1-hour webinar in the first 2 months of employment</td>
</tr>
<tr>
<td></td>
<td>1d. Increase the use of CQI tools for individual benefit</td>
<td></td>
<td>CQI Faculty M.Angeloni S.Aguiar C.Farrow E.Norcini</td>
<td>- # of CQI workshops or events (i.e., CQI Clinic) offered each year and # of attendees to each - # of staff who reported the use of CQI tools in individual projects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal 2. Engage staff in CQI activities</th>
<th>Objective</th>
<th>Timeframe</th>
<th>Responsible Person(s)</th>
<th>Measure</th>
</tr>
</thead>
</table>
2b. Increase the number of “all employees” meetings that include a CQI update

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsible Parties</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarterly</td>
<td>CQI Council</td>
<td>Number of all employees’ meetings that included CQI on the agenda</td>
</tr>
</tbody>
</table>

2c. Maintain and update the Intranet sections for CQI, Accreditation and Performance Improvement

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsible Parties</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing</td>
<td>Magali Angeloni CPHC</td>
<td>Number of hits on the CQI section of the Intranet pages</td>
</tr>
</tbody>
</table>

2d. Exhibit posters at lobby to promote CQI, Accreditation and public health

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsible Parties</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarterly</td>
<td>Magali Angeloni</td>
<td>Number of posters displayed at the central lobby and Laboratories building</td>
</tr>
</tbody>
</table>

2e. Conduct a CQI fair/event to exhibit all projects to staff at least once a year

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsible Parties</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>At least annually</td>
<td>Magali Angeloni CQI Team</td>
<td>Percentage of staff attending the CQI fair/event</td>
</tr>
</tbody>
</table>

2f. Publish articles via a department-wide newsletter “now@RIDOH” (appendix 11) sharing most recent CQI news and updates (e.g. related performance measures, CQI projects, fun facts, and accreditation updates)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsible Parties</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly</td>
<td>Magali Angeloni</td>
<td>-Percentage of monthly editions issued during a calendar year that include CQI and/or accreditation topics (100% = 12)</td>
</tr>
</tbody>
</table>

2g. Progress made to address PHAB “opportunities for improvement”

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsible Parties</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing, with reporting in Dec. each year</td>
<td>CQI Council M.Angeloni T.Cooper N.Duffy J.Coyne T.Marak M.Wilson S.Aguiar C.Farrow A.Lemire E.Norcini P.DiPippo</td>
<td>Number of opportunities of improvement fully addressed each year</td>
</tr>
</tbody>
</table>

3. Foster a culture of QI at RIDOH

3a. Engage leadership and staff in CQI

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsible Parties</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every other month or quarterly</td>
<td>Magali Angeloni Policy and Leadership Committee</td>
<td>- Number of ongoing CQI projects presented to Policy and Leadership Committee -Conduct an annual review of the CQI organizational “map” (see appendix 13)</td>
</tr>
</tbody>
</table>
### 3b. Reach a CQI culture measured by the 6 phases of the NACCHO’s Roadmap

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually</td>
<td>Magali Angeloni</td>
</tr>
</tbody>
</table>

- RIDOH’s reach to Organizational Phase 5 of the Roadmap to a culture of CQI in 2017 (baseline phase 3 in 2015)

### 3c. Create opportunities to gather input in the design of the CQI plan

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually</td>
<td>Magali Angeloni</td>
</tr>
</tbody>
</table>

- Number of CQI council members participating in the revision/feedback of the CQI plan

### 3d. Disseminate the “lessons learned” from the CQI projects in a format that can be shared widely

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually</td>
<td>Magali Angeloni</td>
</tr>
</tbody>
</table>

- Include the “lessons learned” in the Now@RIDOH newsletter, and also in the CQI posters, the Intranet and other venues, if possible

### 3e. Integration and implementation of CQI in the RIDOH’s Strategic Plan, Improvement Plan, and Workforce Development Plan

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsibility</th>
</tr>
</thead>
</table>

- # of CQI goals/activities included in each of the plans
- Progress made on the formulated goals/activities in each plan

### 3f. Develop a mechanism to engage CQI team members in the ongoing use of CQI methods beyond completion of their project

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsibility</th>
</tr>
</thead>
</table>

- Explore and/or pilot CQI-community gathering or support group in the form of a “CQI alumni association”, “CQI community of practice”, or “CQI chapter” in one or more RIDOH’s divisions

### 3g. Maintain a CQI Council to support and promote a culture of QI

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing</td>
<td>Magali Angeloni</td>
</tr>
</tbody>
</table>

- # of members of the Policy and Leadership Committee in the CQI Council
- # of Divisions represented in the Council (n=6)
- # members in the Council with CQI expertise beyond RIDOH training

## b. Plan monitoring

Monitoring of the CQI Plan will be the responsibility of the CQI Director, and will include preparation of an Annual Report available to all staff. The Report will also be presented by the CQI Council to the Policy and Leadership Committee and shared...
with all staff via the Intranet, newsletter, all employees’ staff meeting or other Department-wide mechanism. This annual report will include, at minimum:
  - Number of CQI projects completed
  - Number of staff participating in the CQI Team(s)
  - Number of staff trained on the basics of CQI
  - Lessons learned, devised from the CQI completed projects
  - Priorities for the next year

c. Plan Evaluation

To assess the effectiveness of this CQI Plan, the CQI Annual Report will include results on all goals and objectives listed in this plan. The plan will also include four measures:

1. Activity measure: This will involve the annual CQI Fair to exhibit the completed projects and invite all staff to view and discuss results. This is expected to be a highly visible event, including workshops and other informative kiosks that inform and engage staff in CQI dialogue.
   
   Measure: Percentage of employees attending CQI Fair/events.

2. Capacity Measure: This will measure the capacity that RIDOH, as a whole, has created for CQI. A target will be proposed and/or revised for achieving this measure in the next year.
   
   Measure: Percentage of staff who viewed the 1-hr CQI webinar
   
   Percentage of Policy and Leadership staff who attended the Lean 101 and the 1 hour CQI webinar

3. Process measure: This will measure those CQI projects that were completed during a calendar year from among all CQI projects conducted during that period.
   
   Measure: Percentage of CQI projects (including Lean) completed during the year

4. Outcome measure: This will measure in what phase (1-6) of the Roadmap to a Culture of CQI RIDOH is in as an organization.
   
   Measure: Reach Phase 5 of the Roadmap to a Culture of CQI by end of 2017

5. Balancing measure: To ensure CQI efforts are not affecting other parts of the organization, there will be a “balancing” measure, expecting an increase at the proportion of staff reporting their views of the CQI as an intrinsic part of the work we do. This will be measured using data from the annual CQI survey.
   
   Measure: Percent of staff recognizing CQI as part of the regular work

Each year the CQI Plan will be revised using the results of the projects, findings from the annual survey, and feedback from the CQI Teams. A draft plan will be made available to all staff for comments via the Intranet for no more than three weeks. The CQI team will review the comments and the final plan will be then posted on the Intranet.
V. CQI Activities and Resources

a. Internal Communications

CQI activities are currently communicated to staff utilizing several channels, including:

- **Policy and Leadership Committee** – Formed by the Leads of each of the Centers of the RIDOH, this group meets weekly for one hour. The CQI Council will present to this group at least twice a year to gain and continue to foster leadership support.

- **Division’s and program’s staff meetings** – CQI Council members have been asked to offer updates, lessons learned or resources about CQI at their divisions and programs’ staff meetings to serve as a voice to the Department.

- **Department-wide e-newsletter**: A monthly internal electronic e-newsletter (i.e., Now@RIDOH) is available to all staff through via email and on the Intranet. Articles contained therein related to Quality Improvement and accreditation may also be used in staff trainings and/or for documentation required for accreditation.

- **QI/Event Fair**: Held at least once a year, this event exhibits the CQI projects completed by the CQI Team. The event will also serve to introduce the next CQI Team and recognize the work of the latest CQI Team.

- **Posters**: CQI project storyboards and lobby displays posted in the Cannon Building and the State Health Laboratories help provide higher levels of visibility in promoting the CQI culture and providing updates to staff. Besides being displayed at CQI Fairs, these materials may also be re-used for training purposes, presentations at programs or other local research fairs.

- **Presentations**: Additional efforts and presentations are made to staff and small groups to promote or support current CQI efforts. Some may be made available upon request.

- **Intranet**: A section of the Intranet contains all information about CQI, accreditation and performance measures and is updated on an ongoing basis (see Appendix 13)

b. Other Resources

National agencies and collaborators make available a number of resources to support Continuous Quality Improvement. Some of these resources are listed below.

- The Public Health Memory Jogger II – [www.goalqpc.com](http://www.goalqpc.com)
c. Definitions

**CQI “Continuous Quality Improvement”:** QI in public health is the use of a deliberate and defined improvement process, such as the Plan-Do-Study-Act method, which focuses on activities that are responsive to community needs and improving population health. QI 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. QI responds to the question “How can improve what we do?” (see more about the difference between QA vs. QI in Appendix 14)
**CQI Culture:** NACCHO describes the last of 6 phases of the roadmap for QI when “QI is fully embedded into the way the agency does business, across all levels, departments, and programs. In phase 6, leadership and staff are fully committed to quality, and results of QI efforts are communicated internally and externally. Even if leadership changes, the basics of QI are so ingrained in staff that they seek out the root cause of problems. They do not assume that an intervention will be effective, but rather they establish and quantify progress toward measurable objectives.” (See [http://qiroadmap.org/how-to-use-the-qip-roadmap/](http://qiroadmap.org/how-to-use-the-qip-roadmap/) and also Appendix 9)

For RIDOH, this goal will be reached when every program, initiative, and event supported, sponsored and maintained by RIDOH uses the CQI principles. This involves having all staff trained in the basic principles of CQI, maintaining a CQI team and favoring an organizational structure where QI is encouraged, supported, and recognized as part of RIDOH itself.

**CQI Team Members:** Upon completion of CQI training, members conduct at least one CQI project, and participate in PHIX meetings as the forum to give and receive CQI support and technical assistance.

**CQI Faculty/Mentors:** CQI team members who have received CQI training, have conducted at least one CQI project, and are thereby prepared to serve as faculty to train and mentor new CQI team members in the use and practice of the PDSA, Lean and other CQI tools.

**CQI Ambassador:** CQI Team members who complete at least one CQI project and mentor at least one other CQI team member until the completion of the project commit to utilize CQI tools in their regular work at RIDOH, and support other ongoing CQI efforts.

**CQI101:** A one-hour introductory on-demand course available through TRAIN (Course ID 1058705) for all RIDOH staff to gain a basic understanding/overview of quality improvement.

**CQI201:** A 15-hour, intermediate quality improvement training available to RIDOH staff and taught by RIDOH’s CQI Faculty. This in person/hands on training is offered yearly to staff interested in conducting a 10-month quality improvement project and usually starts in the Spring.

**Kaizen:** Japanese word that means “change for the better”. Kaizen is a continuous quality improvement (CQI) method that uses many tools to improve a process and achieve rapid results.

**Lean:** Lean is a continuous process improvement methodology that focuses on identifying and eliminating non-value added or wasteful activities. Value is defined from the perspective of the community/populations we serve. Knowing what your community/population values, helps one to identify the value-added steps (those activities which are truly needed).
**Model for Improvement (MFI):** The Model for Improvement (MFI) is the QI roadmap that provides a step-by-step guide for implementing the five principles of improvement. The framework was developed by Associates in Process Improvement and adapted from the work of W. Edwards Deming. It has been used broadly and successfully in health care and in public health. The MFI is made up of three fundamental questions that drive improvement:

- What are we trying accomplish? (AIM)
- How will we know that a change is an improvement? (MEASURES)
- What change can we make that will result in improvement (CHANGES)-changes are tested and implemented iteratively using Plan-Do-Study-Act cycles explaining the model for improvement. (See a 3-minute video at [http://www.ihi.org/education/IHIOpenSchool/resources/Pages/AudioandVideo/Whiteboard3.aspx](http://www.ihi.org/education/IHIOpenSchool/resources/Pages/AudioandVideo/Whiteboard3.aspx)

**PDSA “Plan-Do-Study-Act”:** According to the “Evolution of the PDSA Cycle”, PDSA is an iterative four-step management method used in business for the control and continuous improvement of processes and products. It is also known as the Deming circle/cycle/wheel, Shewhart cycle or control circle/cycle. The PDSA model is also often referred to as Plan-Do-Check-Act (PDCA) and these terms are relatively interchangeable. (RIDOH chooses to use “study” due to the deeper level of data analysis this term conveys, compared to “check.”)

**QA “Quality Assurance”:** QA measures compliance against certain necessary standards developed for quality assurance. QA responds to the question “Are we meeting the standards?” (See more about the difference between QA vs QI in Appendix 14)
VI. Appendices
Appendix 1: RIDOH’s Academic Center

RI Department of Health’s Academic Center Programs

**Vision:** Excellence in public health practice while producing the next generation of multidisciplinary public health practitioners

**Mission:** To assure a competent public health workforce with subject matter expertise, researching for new insights and innovative solutions to health problems while evaluating effectiveness and quality of public health services

**Goal:** To strengthen the integration of scholarly activities with public health practice, by instilling a culture of learning and innovative implementation along with continuous quality improvement.

**Outcomes:** Improved public health functioning (assessment, policy development and assurance), enhanced public health outcomes, health equity.

![Diagram of programs]

12/16/2015
Appendix 2: CQI Council Charter

RIDOH’s Continuous Quality Improvement (CQI) Council

Continuous Quality Improvement (CQI) is one of four programs within the RIDOH Academic Center, which also oversees and coordinates department-wide Public Health Research, Public Health Education, and Workforce Development.

The RIDOH Continuous Quality Improvement (CQI) Program involves:

- Staff training and engagement to use CQI tools in their individual, program, and departmental efforts
- Continuous assessment to achieve even more effective and efficient operations using CQI methodologies
- Annual assessment and reporting of accomplishments and progress toward a “QI culture”, as defined by the National Association of City and County Health Officials (NACCHO)’s framework

To promote and support the goals of the CQI Program, a CQI Council was established in early 2015, and it serves as an advisory board that mirrors and upholds the organizational values and priorities of the RIDOH Academic Center:

**Vision:** Excellence in public health practice while producing the next generation of multidisciplinary public health practitioners

**Mission:** To assure a competent public health workforce with subject matter expertise, researching for new insights and innovative solutions to health problems while evaluating effectiveness and quality of public health services

**CQI Goal:** A culture of Continuous Quality Improvement

The CQI Council currently works under the following principles:

**Operational Structure:**
- CQI council members shall serve for two-year term, and members may extend their term through a request to the CQI Council and their vote for approval.
- CQI Council is chaired by the RIDOH’s Academic Center Director
- CQI Council Members must have previous CQI training
- CQI Council Members are selected by nomination (from any of the CQI team graduates, previous and current CQI Council members, QI faculty, or )
- CQI Council includes at least one representative from each of the RIDOH’s Divisions, based on the most recent organization chart
- Meetings are held on an as-needed basis.
- Summary of meetings decisions and next steps are emailed to the group
- Meetings are conducted with at least 60% of the members present
Members Roles and Responsibilities:

- Foster, advocate for, and support a culture of Continuous Quality Improvement for the RIDOH
- Maintain institutional knowledge and serve as steward for protecting core, foundational CQI values and Public Health Accreditation Board (PHAB) accreditation standards (e.g. PDSA and Lean methodology)
- Facilitate implementation of the RIDOH’s performance management system (the four components of the system include Standards, Performance Measurement, Quality Improvement and Reporting) as it relates to the CQI component
- Serve as mentors to new CQI trainees
- Participate and conduct periodic review of the RIDOH’s Continuous Quality Improvement Plan and recommend new initiatives related to:
  - Annual goals, identifying Improvement targets and department-wide CQI gaps
  - Council membership and structure
  - CQI Team membership and structure
  - Training opportunities for new CQI members, staff, supervisors and leadership as needed
  - Identify and support Academic Center opportunities for internal and external collaborations
  - Evaluation and reporting
  - Strategically communicate the goals of a culture of CQI to internal and external partners, as applicable, related to CQI training, initiatives, available tools and resources, success stories, research and data derived from CQI activities, workforce development outcomes and public health accreditation

QI Council Members serving for the period 2015-2017:

<table>
<thead>
<tr>
<th>RIDOH Division</th>
<th>Current QI Council Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Center Director</td>
<td>Chair, Magali Angeloni</td>
</tr>
<tr>
<td>Policy, Information and Communications</td>
<td>Tara Cooper</td>
</tr>
<tr>
<td>State Laboratories and Medical Examiners</td>
<td>Nicole Duffy</td>
</tr>
<tr>
<td>Preparedness, Response, Infectious Diseases and Emergency Medical Services</td>
<td>Jim Coyne, Teddy Marak, Michelle Wilson</td>
</tr>
<tr>
<td>Community Health and Equity</td>
<td>Stacey Aguiar, Christelle Farrow, Angela Lemire</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>Erica Norcini, Peter DiPippo</td>
</tr>
<tr>
<td>Customer Service</td>
<td>- 0 -</td>
</tr>
</tbody>
</table>

Overall QI Progress: Four Key Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of staff who received the CQI training through the CQI Team only (cumulative)</td>
<td>47/430*</td>
<td>11%</td>
<td>72/430</td>
</tr>
<tr>
<td>Percent of QI projects completed by CQI Team</td>
<td>9/14</td>
<td>64%</td>
<td>12/16</td>
</tr>
<tr>
<td>Percent of attendees at the annual CQI Fair.</td>
<td>134/430</td>
<td>31%</td>
<td>105/430</td>
</tr>
</tbody>
</table>

* For ease of calculation, we use 430 as the number of employees.

RIDOH’s Progress towards the 6-phases of a culture of QI

<table>
<thead>
<tr>
<th>CQI Domain</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall RIDOH staff</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Clerical</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Field Staff</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Management &amp; Admin.</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Data, Measurement &amp; Evaluation</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Leadership</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

- Awareness
- Relevance to own work
- Relevance to organizational mission
- Knowledge
- Individual practice (level)
- Individual practice (# of projects)
- Individual practice (% of work time)
- Team practice (level)

RIDOH surveyed staff in 2015, using NACCHO’s 6-phases Roadmap to a culture of Quality Improvement (QI) framework to measure where we are as an organization in the process to build a QI culture. We concluded we are between phases 3 (informal or ad hoc QI activities) and 4 (formal QI activities implemented in specific areas) of a culture of QI. As shown in the table above, overall the agency is in phase 3 with respect to QI a) awareness and d) knowledge; in phase 4 with respect to b) relevance to our work and c) our mission; and in phase 2-3 when it comes to QI practice (e, f, g, h). Other findings include:

- Awareness and practice of QI is low among the clerical and field staff, as well as staff who are fairly new in the agency
- Non-supervisory, non-leadership, and data staff could benefit from QI training
- Enhanced outreach, training and staff involvement would be beneficial to further engage staff in QI
**Goal 1: Build and maintain CQI capacity at RIDOH**

<table>
<thead>
<tr>
<th>1a. Strengthen the connection between CQI and the Dashboard, components of the Performance Management system</th>
<th>Dialogue with Team 3 and Team 4 in this regard was initiated. Additionally, a CQI Council was formed in early 2015 and met several times to discuss their role in the operationalization of the performance management system and the connection to CQI. A proposal is drafted and will be presented to the Director and Executive Management Team in 2016. A presentation of the Department’s new priorities and the connection to the Performance Management System was made to the “Policy and Leadership Committee” in December 2015.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1b. Maintain a CQI Team working and promoting QI activities throughout the year</td>
<td>CQI Team number 4 was selected in the Spring of 2015, with a total number of 27 staff. The interest in participating seemed to be increased this year due to the incentive credit offered by the Department of Administration, which approved the process presented by RIDOH.</td>
</tr>
<tr>
<td>1c. Provide CQI training for the CQI Team</td>
<td>The CQI Team 4 received training in the QI tools in a different format this year. The training included an online portion, which was purchased from the Institute for Healthcare Improvement (<a href="http://www.ihi.org">www.ihi.org</a>). This online training was paired with in-person workshops to review the material and provide support to attendees to craft and conduct their CQI project.</td>
</tr>
<tr>
<td>1d. Develop a method to report department-wide CQI activity, including projects conducted, capacity and training beyond the CQI Teams</td>
<td>No specific process has been formulated yet, other than the annual contact each of the Division Directors for the number of CQI projects completed during the calendar year. Capturing the number of staff with training in CQI would be the next step.</td>
</tr>
<tr>
<td>1e. Advance the CQI knowledge in other tools, methods, or practices (e.g. Kaizen, Lean, etc.)</td>
<td>This year, CQI Team 4 was trained on some of the Lean tools, including the Kaizen event, the SWIS and other tools. In addition, RI’s new Governor issued an Executive Order to engage state agencies to conduct at least two Lean reviews per year, starting 2015. As a result of this effort, RIDOH identified 4 Lean Ambassadors to complete one Lean review each. One review was completed in 2015 and three others are scheduled for 2016. Additional training opportunities were also made available to Lean Ambassadors and staff. Over 50 staff attended the 3-hour Lean 101 session and others were able to join other networking and training efforts as well.</td>
</tr>
</tbody>
</table>

**Goal 2: Engage Staff in CQI activities**

<p>| 2a. Engage the Executive Committee in ongoing strategic dialogue relevant to CQI | With the changes in the organization and the transition between Directors the Executive Committee is now called the “Executive Management Team” or EMT. The agency was also reorganized and the goals and priorities for the Department are now set. Engagement and conversations with the Executive Committee are being planned for 2016. |
| 2b. Maintain and update the Intranet sections for CQI, Accreditation and Performance Improvement | Sections of the Intranet were updated accordingly, after the Department officially received the accreditation from the Public Health Accreditation Board. Additionally, and with the reorganization of the Department, a new “Academic Center” was formed and the CQI program is part of this new center. An external page (website) was also formulated with the goals of the Academic Center. |
| 2c. Exhibit posters at lobby to promote CQI and Accreditation efforts, and public health | A poster of the Academic Center was posted in the lobby of the building for display in December 2015. |</p>
<table>
<thead>
<tr>
<th>2d. Conduct a CQI event to exhibit all projects to staff at least once a year</th>
<th>The CQI Fair was conducted in April 2015 to exhibit all the CQI projects that were completed and were also in progress. The number of RIDOH staff visiting the fair was lower this year, however.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2e. Publish articles via a department-wide employee newsletter sharing most recent CQI news and updates (e.g. related performance measures, QI projects, and accreditation updates)</td>
<td>A number of updates have been distributed to staff throughout the year, via regular “Friday Updates” email sent by the Chief of Staff each week, as well as from the “Now@RIDOH” monthly e-newsletter. The formal celebration for accreditation is organized for January 2016.</td>
</tr>
</tbody>
</table>

### Goal 3: Foster a culture of CQI

<table>
<thead>
<tr>
<th>3a. Engage leadership and staff in the review and update of CQI projects</th>
<th>This engagement currently takes place in 2 ways: through presentations at the Leadership Committee and the All Employees meeting. Additional ideas are being discussed by the CQI Council.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3b. Measure progress in the effort to establish a culture of CQI</td>
<td>In 2015, and using the NACCHO framework a ‘Roadmap to a culture of CQI’, RIDOH developed and administered a survey to all staff to assess the current status in our effort to achieve a CQI Culture. The results of the survey were presented via round table at the American Public Health Association conference in November 2015. Organizationally, RIDOH is currently between phases 3 and 4 (out of the 6 phases) to achieve a culture of CQI. The survey will be administered again each year and findings will be utilized to refine the CQI goals for each year.</td>
</tr>
<tr>
<td>3c. Offer basic CQI training to all staff</td>
<td>CQI Team 4 in 2015 has been the largest thus far since the agency-wide CQI program started in 2011. In addition, the leadership of the Department attended the 3-hour Lean 101 training, as the new RI Governor is engaging state agencies in Lean reviews. Additional training has been identified for all staff, which will start in 2016.</td>
</tr>
<tr>
<td>3d. Create opportunities to gather input in the design of the CQI plan</td>
<td>With the establishment and routine meetings with the CQI Council since early 2015, there is now a mechanism to actively work with the group and gather input on the design of the CQI plan. In addition, and with the results of the CQI culture survey and the Accreditation requirements, the CQI Council can now use the PHAB standards and the performance management system as a framework to base its work and further promote CQI in the Department.</td>
</tr>
<tr>
<td>3a. Disseminate the “lessons learned” from the CQI projects in a format that can be shared widely</td>
<td>The lessons learned, collected by each of the past CQI teams, are now posted in the Intranet for access to all staff.</td>
</tr>
<tr>
<td>3f. Link the CQI plan with RIDOH’s Strategic Plan, Health Assessment and Improvement Plan, and Workforce Development Plan</td>
<td>The three plans (the Strategic Plan, the Health Improvement Plan and the Workforce Development Plan) include some of the goals of the CQI plan and mention the goal of building a culture of CQI in the agency.</td>
</tr>
<tr>
<td>3g. Develop a mechanism to engage CQI team members in the ongoing use of CQI methods beyond completion of their project</td>
<td>CQI team members are engaged primarily through the CQI Council. Additional ways to engage members of the past CQI teams is being discussed with the CQI Council.</td>
</tr>
</tbody>
</table>
## Appendix 4: Continuous Quality Improvement (CQI 201) 2015 Training Agenda

### QI Training Schedule (revised 6/22/2015)

<table>
<thead>
<tr>
<th>Course/Workshop</th>
<th>Date</th>
<th>Time</th>
<th>Duration</th>
<th>Method</th>
<th>Instructor(s)</th>
<th>Deliverable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Course introduction</td>
<td>6/9/2015</td>
<td>11-noon</td>
<td>1h</td>
<td>In class</td>
<td>HEALTH's faculty (Angeloni)</td>
<td>N/A</td>
</tr>
<tr>
<td>2 QI 101: Fundamentals of Improvement</td>
<td>By 6/19/2015</td>
<td>1h</td>
<td>1h 30m</td>
<td>Online</td>
<td>#8 Open School</td>
<td></td>
</tr>
<tr>
<td>3 QI 101A: Project selection, PDCA review, QI resources</td>
<td>6/30/2015</td>
<td>10:30-12</td>
<td>1h 30m</td>
<td>In class</td>
<td>HEALTH’s faculty (Norconi)</td>
<td></td>
</tr>
<tr>
<td>4 QI 102: The Model for Improvement: Your Engine for Change</td>
<td>By 7/5/2015</td>
<td>1h</td>
<td>1h 30m</td>
<td>Online</td>
<td>#8 Open School</td>
<td></td>
</tr>
<tr>
<td>5 QI 102A: Building the Project Charter and aim statement</td>
<td>7/9/2015</td>
<td>11:12-30</td>
<td>1h 30m</td>
<td>In class</td>
<td>HEALTH’s faculty (Angeloni, Norconi)</td>
<td></td>
</tr>
<tr>
<td>6 QI 201: Guide to the QI Open School Quality Improvement</td>
<td>By 7/14/2015</td>
<td>1h</td>
<td>1h 30m</td>
<td>Online</td>
<td>#4 Open School</td>
<td>Submit project charter</td>
</tr>
<tr>
<td>7 QI 103A: QI tools workshop</td>
<td>8/4/2015</td>
<td>1-2:30</td>
<td>1h 30m</td>
<td>In class</td>
<td>HEALTH’s faculty (Aguar, Farrow)</td>
<td></td>
</tr>
<tr>
<td>8 QI 103: Measuring for Improvement</td>
<td>By 8/21/2015</td>
<td>1h</td>
<td></td>
<td>Online</td>
<td>#6 Open School</td>
<td></td>
</tr>
<tr>
<td>9 QI workshop: baseline, measurement and data collection</td>
<td>9/10/2015</td>
<td>11-12:30</td>
<td>1h 30m</td>
<td>In class</td>
<td>HEALTH’s faculty (Angeloni, Norconi)</td>
<td></td>
</tr>
<tr>
<td>10 QI 106: Mastering PDCA Cycles and Run Charts</td>
<td>By 9/25/2015</td>
<td>2h</td>
<td></td>
<td>Online</td>
<td>#6 Open School</td>
<td>Submit aim statement</td>
</tr>
<tr>
<td>11 QI 104A: Lean Tools workshop 1</td>
<td>10/15/2015</td>
<td>9-10:30</td>
<td>1h 30m</td>
<td>In class</td>
<td>HEALTH’s faculty (Aguar, Farrow)</td>
<td></td>
</tr>
<tr>
<td>12 QI 105: The Human Side of Quality Improvement</td>
<td>By 10/10/2015</td>
<td>1h</td>
<td>1h 30m</td>
<td>Online</td>
<td>#6 Open School</td>
<td></td>
</tr>
<tr>
<td>13 QI 106A: Lean Tools workshop 2</td>
<td>11/5/2015</td>
<td>9-10:30</td>
<td>1h 30m</td>
<td>In class</td>
<td>HEALTH’s faculty (Aguar, Farrow)</td>
<td></td>
</tr>
<tr>
<td>14 QI 104: The Life Cycle of a Quality Improvement Project</td>
<td>By 11/20/2015</td>
<td>1h</td>
<td>1h 30m</td>
<td>Online</td>
<td>#6 Open School</td>
<td>Show QI tool used</td>
</tr>
<tr>
<td>15 QI 202: Quality Improvement in Action: Stories from the Field</td>
<td>By 12/11/2015</td>
<td>1h</td>
<td></td>
<td>Online</td>
<td>#6 Open School</td>
<td></td>
</tr>
<tr>
<td>16 QI 105A: QI project management and sustainability</td>
<td>1/7/2016</td>
<td>10-11:30</td>
<td>1h 30m</td>
<td>In class</td>
<td>HEALTH’s faculty (Angeloni, Norconi)</td>
<td></td>
</tr>
<tr>
<td>17 L101: Becoming a Leader in Health Care</td>
<td>By 01/11/2016</td>
<td>1h</td>
<td>1h 30m</td>
<td>Online</td>
<td>#6 Open School</td>
<td></td>
</tr>
<tr>
<td>18 QI 201A: Individual or group technical assistance for each project</td>
<td>TBD 1h</td>
<td></td>
<td></td>
<td>In class</td>
<td>HEALTH’s faculty (Angeloni, Norconi)</td>
<td></td>
</tr>
<tr>
<td>19 QI 202A: Presentation of the QI project</td>
<td>Jan-Apr 2016</td>
<td>1h</td>
<td></td>
<td>In class</td>
<td>HEALTH’S faculty (All)</td>
<td>Powerpoint/storyboard</td>
</tr>
</tbody>
</table>

**Total HRS: 26h 30m**

**Additional:** From September 2015 through April 2016, there will be a 3 hour “PHIK” (public health improvement exchange) technical assistance /feedback meeting
Appendix 5: QI projects’ outcomes

## Quality Improvement Outcomes 2012-2014

**QI projects completed since 2012**
This is a list of the completed projects (by measures of efficiency or effectiveness) completed since 2012 when the QI agency-wide effort started at RIDOH. Each year RIDOH offers in-house training and support to a group of staff who identify an opportunity for improvement; results are shown at an annual event called “Quality Improvement” Fair.

### Efficiency

| 1. | Improving Licensing of Lead, Asbestos & Radon Professionals | 1A | Time saved | 3 |
| 2. | Open Licensee Data | 1A | Reduced number of steps | 1 |
| 3. | Streamlining Influenza Hospital Reporting | 1A | Revenue generated due to billable services |
| 4. | Improving Disease Surveillance Protocols | 1B | Costs saved |
| 5. | | 1E | Costs avoided |
| **TOTAL** | | | **4** |

### Effectiveness

| 1. | Addressing the “Address Problem” | 2B | Increased customer/staff satisfaction |
| 2. | Expanding the Reach of Health Connections | 2B | Increased reach to a target population |
| 3. | Expanding the Reach of Health Connections 2 | 2C | Dissemination of information, products, or evidence-based practices |
| 4. | Increasing Consumer Awareness of Healthcare Quality Reports | 2C | |
| 5. | Making Time for Birth Registration | 2D | Quality enhancement of services of programs |
| 6. | Conducting Surveillance of High-Risk Foods: Soft and Raw Milk Cheeses | 2D | Quality enhancement of data systems |
| 7. | Conducting Timely Re-inspections | 2D | Organizational design improvements |
| 8. | Collaborating with Early Intervention (Part C) to analyze timeliness of Individual Family Service Plan dates (IFSP) entered into KIDSNET | 2E | Increased preventive behaviors |
| 9. | Decrease Sample Logging Errors | 2E | Decreased incidence/prevalence of disease |
| 10. | Centralize Perinatal and Early Childhood Health (PECH) Policies & Procedures | 2F | |
| 11. | The Quest to Reach ISO/IEC 17025: Accreditation of the Food Microbiology and Food Chemistry Laboratories | 2F | |
| 12. | Improving Lead Screening in Rhode Island | 2G | |
| 13. | Increasing Adolescent Immunizations | 2G | |
| 14. | Increasing Prenatal Referrals to Home Visiting | 2G | |
| 15. | Let’s Make Our Service Count | 2D | |
| 17. | Evaluating Special Pathogens Laboratory | 2E | |

**TOTAL 17**

*Additional projects were initiated and not completed mostly due to staff changes or resources.*
Appendix 6: RI Aim Statement Template (2014)

AIM STATEMENT TEMPLATE

We aim to: (What are we trying to accomplish? Use words like improve, reduce, and increase to identify the overall goal. Make it specific, measurable, achievable, and relevant.)

by how much: (include the baseline number you are starting from, and how much you hope to increase, decrease, or change that baseline)

by when: (specific time frame, i.e., month/year in which you intend to complete the improvement)

because: (Why is it important? Answer the “so what” question and describe the rational and reasons to work on this improvement project.)

for: (Who is your specific target population/customer?)

Example of Aim Statement:

The XX Program will reduce the time it takes to produce the Director’s weekly report for from 10 hours to 2 hours, by February 2015. This is important because the Director uses the report in his weekly meetings.
# Appendix 7: RI Project Charter Template (2014)

## Continuous Quality Improvement Project Charter

<table>
<thead>
<tr>
<th>Date:</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>CQI Project Lead(s):</td>
<td></td>
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</tbody>
</table>

### Aim Statement

The **Aim** of this project is to:

<p>| | |</p>
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### Deliverables

1. 
2.  
3.  
4. Powerpoint and posterboard of the project

<p>| | |</p>
<table>
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### Scope

<table>
<thead>
<tr>
<th>In Scope</th>
<th>Out of Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

### Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Role for the Project</th>
</tr>
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<tbody>
<tr>
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### Team Meeting Schedule:

<table>
<thead>
<tr>
<th>Regular meetings</th>
<th>Ad-hoc meetings</th>
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<tr>
<td></td>
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</table>

### Stakeholders

<table>
<thead>
<tr>
<th>Stakeholder Name</th>
<th>Impact on Project</th>
<th>Strategies to Communicate and/or Gain Support</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
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Rhode Island Quality Improvement Plan 2016-2018
Appendix 8: RI QI Poster Template for Final Submission
Appendix 9: NACCHO 6-Phases Roadmap to a Culture of QI
Appendix 10: Public Health and RIDOH’s Performance Management Systems

RIDOH’s Performance Management System

**Performance Standards**
- Identify relevant standards
- Select indicators
- Set goals and targets
- Communicate expectations

**Performance Measurement**
- Refine indicators
- Define measures
- Develop data systems
- Collect data

**Reporting of Progress**
- Analyze and interpret data
- Report results broadly
- Develop a regular reporting cycle

**Quality Improvement**
- Use data for decisions to improve policies, programs, outcomes
- Manage changes
- Create a learning organization

**Leadership & Culture**

*Healthy People 2020 Performance Measures*

*Annually or as needed Performance Reports*

*Lean, PDSA QI Council Quality Improvement*
From the Director: We Did It! Let’s Celebrate!!!

Dear Colleagues,

Every fall, one of our priorities in public health is flu vaccination and stopping the spread of this serious illness. In public health, we talk about a flu shot being the easiest and most effective way to protect ourselves and our families from influenza. I’ve recently reviewed the numbers from the 2014-2015 flu season and overall, the data look good.

Rhode Island ranks number two in the entire country (second only to South Dakota) for the highest overall influenza vaccination rate at 58.7%. Our overall flu vaccination rate is five percentage points higher than any other New England state and more than 10 percentage points above the national average. We do an amazing job protecting the youngest Rhode Islanders. Since 2010, Rhode Island has had the highest flu vaccination rate for children ages six months to 17 years. In the 2014-2015 flu season, our vaccination rate for this age group was 78.6%. Healthy People 2020 has also set the goal that 90% of healthcare workers get the flu shot. In 2014-2015, an impressive 86.5% of our state’s healthcare workers got vaccinated. That means that providers are staying healthy, and they are less likely to pass the flu virus to sick patients.

Success stories like this are a prime example of why the Department received official accreditation from the Public Health Accreditation Board (PHAB) earlier this month! Rhode Island is one of only 12 state public health departments who achieved this impressive recognition. PHAB agrees that RIDOH meets the national standards of public health department performance and that we are committed to continuous quality improvement in order to meet the needs of all Rhode Islanders as effectively as possible.

This most definitely is a well-deserved honor for the Department! Stay tuned for details on a celebration we are planning. I wish each and every one of you a safe and healthy Thanksgiving, and enjoy the time with your family and friends.

Sincerely,

Dr. Alexander-Scott
health.director@health.ri.gov
Appendix 12: Continuous Quality Improvement Intranet Homepage

Quality Improvement

Policies & Procedures

- Purpose
- Performance Measures

Public Health Accreditation

ACCREDITED!
Yes, as of November 13, 2015, the Rhode Island Department of Health is now accredited for five years through the Public Health Accreditation Board (PHAB). Accreditation for public health departments became available nationally in September of 2011, with PHAB as the accrediting body. This milestone accomplishment is official recognition that RI DOH meets or exceeds the rigorous standards established by the non-profit, non-governmental Public Health Accreditation Board (PHAB). The national accreditation program works to improve and protect the health of the public by advancing the quality and performance of the nation’s state, local, Tribal and territorial public health departments.

What does it mean to be accredited? Accreditation means that the RI DOH is committed to continuous quality improvement so that we can meet our community’s needs as effectively as possible. PHAB accreditation demonstrates our accountability and credibility to everyone with whom we work.

PHAB used the 10 essential services of public health as the guiding principles for determining the accreditation status of local health departments in the United States.
Appendix 13: Continuous Quality Improvement organizational “mapping”

**2015 QUALITY IMPROVEMENT INFOGRAPHIC 1a**
Percent of staff who participated in a RIDOH QI Team (2012-2015)

**Key to CQI Infographic 1a**
Numerator: Staff participated in RIDOH QI Team
Denominator: Total staff in each Center/Division
Aggregate for RIDOH: 70/478 = 15%

NOTE: The numbers shown here are the closest approximation possible given the reorganization, staff departures, staff working in a different division, etc. These numbers present ONE dimension of the work towards CQI and are meant to inform the status of our involvement in CQI at the end of 2015. These numbers were also used to prepare Infographic 1b.
2015 QUALITY IMPROVEMENT INFOGRAPHIC 1c

POLICY, INFORMATION & COMMUNICATION
- Public Health Communications
- Health Data & Analysis
- Systems Policy & Regulations
- Legislative Affairs

LAB AND MEDICAL EXAMINER
- Environmental Sciences
- Forensic Sciences
- Biological Sciences
- Lab Support Services
- Medical Examiners

PREPAREDNESS, RESPONSE, INF. DISEASE, EMS
- Acute Infectious Diseases
- HIV, Hepatitis, STDs & Tb Epidemiology
- Emergency Preparedness
- Emergency Medical Services

COMMUNITY HEALTH & EQUITY
- Health Disparities & Access to Care
- Chronic Disease
- Health Promotion
- Perinatal & Early Childhood Health
- Preventive Services

ENVIRONMENTAL HEALTH
- Healthy Homes
- Chronic Disease
- Drinking Water Quality
- Health Facilities Regulations
- Professional Boards & Commissions

CUSTOMER SERVICE
- Professional Licensing
- Vital Records

Key to QI Infographic 1c
Shaded units conducted Kaizen events in 2015
Appendix 14: Difference between “QA vs. QI” Presentation

QA vs. QI

Differences, definitions, approaches for each

QA sets a procedure for reviewing completeness and quality of data

QI consists of systematic and continuous actions that lead to measurable improvement
Let’s look at differences between the two

QA AND QI

Problem: Phone messages taken by clerical staff are not complete and not delivered to staff in a timely manner.

- QA would be a process to find out "who" was not getting complete information and delivering the message in a timely manner. (Reactive)

- QI would be a process in which the entire task of taking/delivering messages are looked at and a uniform method is developed for all clerical staff to use. (Proactive process to improve)
What is the difference between Quality Improvement and Quality Assurance?

Quality assurance (QA) measures compliance against certain necessary standards.

Quality improvement is a continuous improvement process.

QA is required and normally focuses on individuals, while QI is a proactive approach to improve processes and systems. Standards and measures developed for quality assurance, however, QA CAN inform the quality improvement process.

Excerpt from presentation made by Dan Ward, Idaho Department of Health and Welfare
What if we were to add up all of the QA forms (125)?
Sample QI Data Report

How QA and QI relate to one another

- Both can improve quality

- QA can identify trend data that can drive a QI project
  1. QA – The measures are too much or too little
  2. QA – Insanity rule: If you are measuring something bad that keeps happening over and over again, . . . You probably should do something about it. Therefore, aggregate to get a rate/percentage and apply QI to make improvements

Excerpt from presentation made by Don Ward, Idaho Department of Health and Welfare
The central QA question:
“Are we meeting the standards?”
"Are we doing a task the way we agreed it is supposed to be done?"

The central QI question:
- “Why didn’t we meet the standard? What can we do to meet and then exceed the standard?”
  "How can we improve the way we do things?"

### QA or QI?

<table>
<thead>
<tr>
<th>QA or QI?</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A new copy machine was purchased and the instruction manual was distributed to staff</td>
<td></td>
</tr>
<tr>
<td>A computer software was no longer supported by the vendor, and a new software was installed</td>
<td></td>
</tr>
<tr>
<td>The waiting time at a dentist office was reduced from 30 minutes to 20 minutes</td>
<td></td>
</tr>
<tr>
<td>An electronic signature was used to save time from personally signing over 30 letters daily. The manager is now using that time to do other work.</td>
<td></td>
</tr>
<tr>
<td>After the schedule annual inspection, the protocols were updated</td>
<td></td>
</tr>
<tr>
<td>90% of the meals served as a fast food restaurant were served within 4 minutes of the order being placed, and with a new automated system food is now served in less than 2 minutes</td>
<td></td>
</tr>
<tr>
<td>All inspections conducted at food restaurants take less than 1 hour</td>
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</tbody>
</table>
Staff reaction to being in a QI project

Excerpt from presentation made by Dan Ward, Idaho
Department of Health and Welfare

Teamwork

Excerpt from presentation made by Dan Ward, Idaho
Department of Health and Welfare