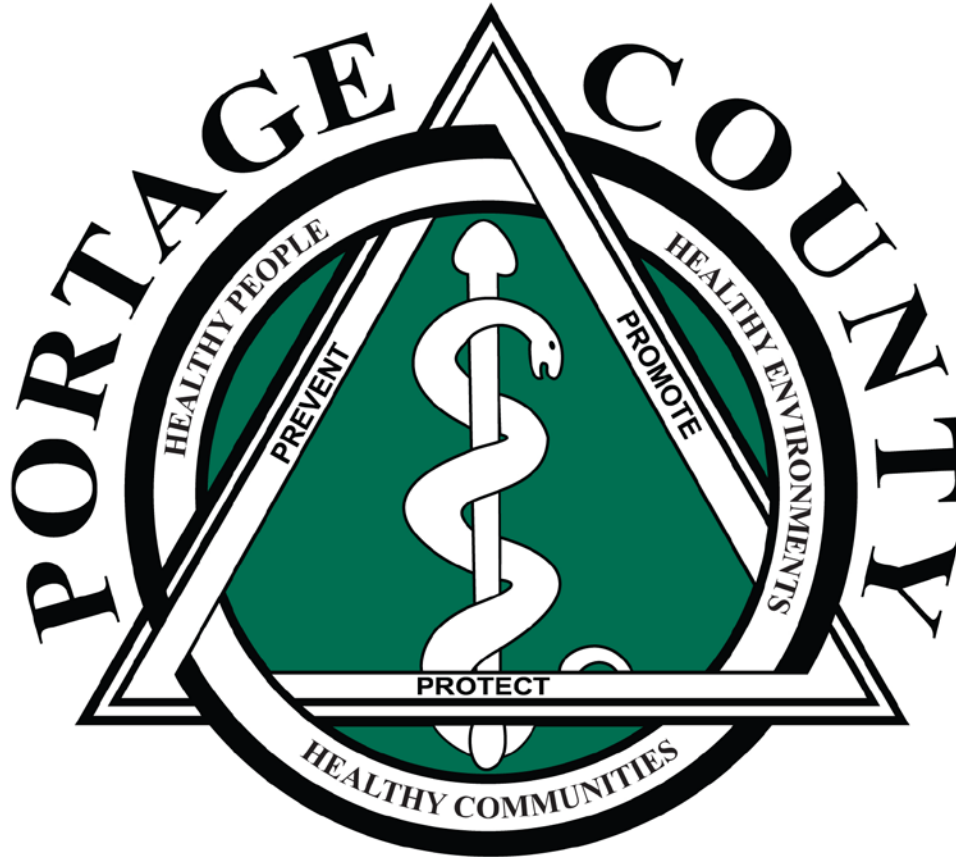


# **Portage County Combined General Health District Quality Improvement Plan**



## **HEALTH DISTRICT**

Adopted on: May 17, 2016

Revised on: August 1, 2016

June 20, 2017

June 19, 2018

# Portage County Combined General Health District Quality Improvement Plan

---

## Authorship

Joseph J. Diorio, Health Commissioner

Kevin Watson, Accreditation Coordinator

Kim Plough, Health Educator

Julie Klusty, Billing Clerk

Sherry Halas, Public Health Nurse 1

Elizabeth Ahrens, Public Health Sanitarian 2

Ali Mitchell, Public Health Educator

Justin Rechichar, Survey Program Supervisor

---

## Approval

  
\_\_\_\_\_  
Joseph J. Diorio, Health Commissioner

6/19/2018  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Portage County Board of Health

6/19/2018  
\_\_\_\_\_  
Date

# Portage County Combined General Health District Quality Improvement Plan

## Table of Contents

---

The Portage County Combined General Health District is committed to the ongoing improvement of the quality of services it provides. This Quality Improvement Plan serves as the foundation of this commitment.

### Table of Contents

This plan includes the following topics:

| Topic  | See Page |
|--|----------|
| Purpose & Introduction   | 1        |
| Description of Quality in Agency   | 3        |
| Quality Goals & Implementation   | 9        |
| Projects   | 11       |
| Training   | 12       |
| Evaluation and Monitoring  | 14       |
| Communication  | 16       |
| List of Appendices   |          |
| Appendix A: Definitions & Acronyms   | 17       |
| Appendix B: QI Team Charter Template   | 19       |
| Appendix C: QI Project Storyboard Template                                   | 20       |
| Appendix D: Commonly Used QI Tools   | 21       |
| Appendix E: Quality Improvement Resources                                    | 23       |
| Appendix F: Summary of QI Projects   | 24       |
| Appendix G: Quality Improvement Project Proposal Form                        | 25       |
| Appendix H: NACCHO Culture of Quality Self-Assessment Tool<br>Annual Results | 26       |

---

## Purpose & Introduction

---

### Executive Summary

The Portage County Combined General Health District (PCHD) is committed to the protection and improvement of the health of the residents of Portage County, now numbering over 163,000 (Census, 2013). The Portage County Combined General Health District Quality Improvement Plan serves as a key component of the agency's Performance Management Plan. These plans, along with the Portage County Community Health Assessments, Portage County Community Health Improvement Plan, and the agency's Strategic Plan and Workforce Development Plan, serve in synchrony to provide a framework for direction of the agency as it moves forward in the fulfillment of its mission.

This plan articulates the commitment to move the agency forward in development of a culture of quality improvement. Leadership of the agency commits the necessary resources of staff time and fiscal resources so that the workforce is prepared to execute basic quality improvement projects. The goal is to develop throughout the agency, led by the Quality Improvement Committee, a culture of quality improvement, in which all staff continually increase levels of skill and comfort with QI principles and the implementation of QI projects. The intention is to measure the agency's position on the spectrum of quality culture within the "Roadmap to a Culture of Quality Improvement" (NACCHO, 2012) on an annual basis, with the expectation of continual advancement (See Appendix H).

Selected projects are expected to align with the agency mission and vision, as well as identified strategic priorities. As progress is made in skill sets of staff and leadership, it is expected that projects will increase in scope.

Appendix A provides a listing of definitions and acronyms used throughout this plan.

---

### Mission, Vision & Values

#### Mission:

To promote public health, prevent disease, and protect the environment, utilizing leadership and partnership to empower individuals and communities to achieve optimal health.

#### Vision:

Healthy People. Healthy Environments. Healthy Communities.

#### Values:

Accountability, Communication, Dedication, Ethics, Innovation

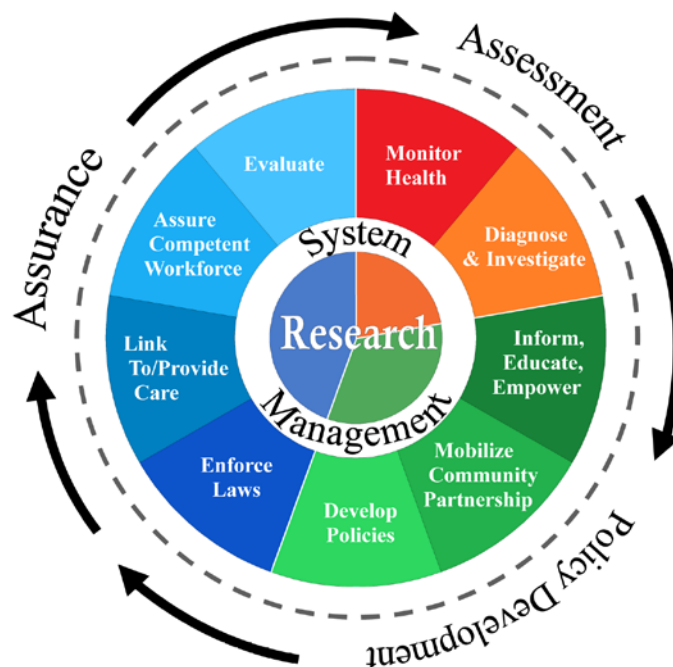
The mission, vision, and values were determined through the planning process for the creation of the agency Strategic Plan. As such, they inform and create the foundation for the selection of agency performance improvement goals, and the strategies for their achievement.

---

## Ten Essential Services

The Portage County Combined General Health District (PCHD) is committed to the ongoing improvement of the quality of services its consumers receive, as evidenced by the outcomes of those services. The agency continuously strives to assure that the Ten Essential Services of Public Health are provided in our community:

1. Monitor health status to identify and solve community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships and action to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure competent public and personal health care workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.



## Description of Quality in Agency

---

**Introduction** This section provides a description of quality efforts within the Portage County Combined General Health District, including structure, staffing, culture, processes, and linkages of quality efforts to other agency documents.

---

**Description of Quality Efforts** In August, 2015, the Portage County Combined General Health District transitioned leadership to Joseph Diorio, Health Commissioner, with a strong focus on actively pursuing public health accreditation through the Public Health Accreditation Board (PHAB). Under the previous leadership, accreditation preparation and planning had been largely limited to development of the Portage County Community Health Assessments and subsequent Community Health Improvement Plan. The Portage County Combined General Health District had historically never developed a Strategic Plan, Workforce Development Plan, Performance Management Plan/System, or Quality Improvement Plan. Development of each of these plans began in earnest under Commissioner Diorio. Each of these plans were completed in 2016, with the exception of The Workforce Development Plan which was completed in early 2017.

The original draft of this Quality Improvement Plan was completed and approved by the Board of Health on May 18, 2016. At this time the Health Commissioner, as the leader of the organization, has committed to shifting the agency toward a culture of quality improvement. This includes committing resources, improving the capacity to collect and analyze data to use as a foundation for decision-making, aligning quality improvement activities with other agency plans, and moving toward a more formal process for monitoring performance in coordination with the agency's Performance Management Plan/System.

A customer satisfaction survey program was developed and began implementation in 2016. All levels of staff have received appropriate quality improvement training. All agency job descriptions have been updated to include QI expectations. See Appendix F for information regarding completed and currently active process improvement projects.

Evaluated using the NACCHO "Roadmap to a Culture of Quality Improvement" Self-Assessment Tool, completed by the members of the QI Committee annually, the agency goal is to build capacity to engage in QI projects in all divisions, and to sustain these activities on an ongoing basis, continually increasing confidence and competence among leadership and staff to utilize QI initiatives to improve performance and outcomes of services and processes. See Appendix H for information regarding these annual self-assessment results.

---

As the agency continues toward pursuit of national accreditation, strong emphasis is placed on maintaining focus on quality improvement initiatives. The primary aim of PHAB's public health accreditation program, both during the process of achieving initial accredited status as well as throughout the five-year cycle of annually reporting efforts once accredited, is to advance the quality and performance of the health district in providing service to our customers. As such, it is the agency intent to continue and strengthen our commitment to quality improvement through ongoing efforts to identify and prioritize performance improvement opportunities, develop staff and management capacities, provide greater relationships and accountability with the community, and improve efficiency and effectiveness of our processes and services.

---

**Links to Other Agency Plans**

The strategic priorities set forth in the agency Strategic Plan provide a framework and direction for the activities of the QI Plan. Quality improvement projects, in turn, align with the agency's strategic mission and vision. Likewise, the activities of the quality improvement process are an essential component of the agency Performance Management Plan/System. Analysis of progress toward achieving performance goals and objectives will identify areas in need of focused improvement efforts and processes, as well as staff training and development needs in correlation with the agency Workforce Development Plan.

---

**Quality Improvement Management, Roles & Responsibilities**

---

**Quality Improvement Committee**

The Quality Improvement Committee provides ongoing leadership and oversight of continuous quality improvement activities. The Committee meets quarterly and consists of the following individuals:

- Joseph J. Diorio, Health Commissioner
- Kevin Watson, Accreditation Coordinator
- Kim Plough, Health Educator
- Julie Klusty, Billing Clerk
- Sherry Halas, Public Health Nurse 1
- Elizabeth Ahrens, Public Health Sanitarian 2
- Ali Mitchell, Public Health Educator
- Justin Rechichar, Survey Program Supervisor

The responsibilities of the Committee include:

- Endorse and champion QI efforts throughout agency
  - Assure the development, annual update, and revision of the QI Plan
  - Provide overall vision and guidance for QI activities within the agency, with a focus on aligning activities with the agency Strategic Plan and the Portage County CHIP, to include establishing priorities and goals for QI efforts at least annually
  - Approve proposed individual QI projects
  - Recommend assignment of members to individual QI project teams
  - Designate one member of the QI Committee to serve on each individual QI project team, guiding the process and ensuring proper implementation of the Plan-Do-Study-Act (PDSA) cycle
  - Review, monitor, and report on the progress of QI activities within the agency
  - Maintain QI proficiency by attending QI continuing education and completing QI training as applicable
  - Provide for recognition of staff engaged in successful QI projects within the agency
-



---

Members of the QI Committee are expected to rotate off the committee after no less than a one-year commitment, and with the identification of an alternate representative from their respective division.

### **Quality Improvement Project Teams**

Under the leadership of and with support from the QI Committee, project teams will be assembled for each QI project selected. Teams will typically consist of 3 to 7 members, including one member of the QI Committee, and at least one staff member from a division outside of the target division of the QI activity, as applicable. External stakeholders will be engaged in QI project activities as deemed appropriate. The specific duties of the QI project teams include:

- Apply QI principles and the PDSA model to the project targeted for improvement activity
- Hold project team meetings in a timely and efficient manner at a frequency dictated by the project timeline
- Complete a team charter outlining member roles and project scope, objectives, and specifics (see Appendix B for team charter template)
- Prepare/provide reports to the QI Committee as requested
- Prepare storyboards and final reports of projects
- Present project results to QI Committee and agency staff at staff meetings
- Supported by the applicable management, assure successful project outcomes are incorporated into standard operations

All staff members of the Portage County Combined General Health District are expected to commit to participation in QI projects, to participate in QI training, and to incorporate principles of QI into their daily activities.

All groups participating in quality improvement activities will commit to building consensus, and in the absence of such, agree to majority vote of respective membership.

The **Health Commissioner**, as the agency leader, will be responsible to:

- Identify and assure the provision of needed training for leadership and staff, in order to build capacity for QI activities
- Ensure adequate budget and resource allocation to support QI initiatives
- Report to the Board of Health on QI activities of the agency and staff on at least a twice annually basis

The **Board of Health** also provides leadership for the QI process by:

- Supporting and guiding implementation of QI activities throughout the agency
- Reviewing, evaluating, and approving the QI Plan

**Quality  
Improvement  
Process**

---

The Portage County Combined General Health District utilizes the Plan-Do-Study-Act (PDSA) model for implementing and managing QI projects. PDSA is a simple and straightforward improvement process, which uses the scientific method to develop, test, and analyze a hypothesis. The 4 Phases of the PDSA model are:

**PLAN** – This Phase involves identifying the quality improvement opportunity, and assembling the team to address it. A SMART aim statement is developed, identifying the problem, what is trying to be accomplished, the measurable data that will be used, the affected target population, and the timeframe for the improvement effort. The current process is analyzed and baseline data in alignment with the aim statement measures is collected and evaluated for root causes of the problem. Potential solutions are identified and refined to the one most likely to accomplish the aim statement. An improvement theory is developed indicating “If this is done, then this will result”, and a strategic action plan is developed to test the theory, detailing what will be done, by whom, and within what timeframe, as well as what data will be collected, by whom, and how it will be documented and analyzed.

**DO** – This Phase is the implementation and testing of the improvement theory, carrying out the strategic action plan. During the process, data is collected and documented, along with problems, unexpected observations, or side effects.

**STUDY** – This Phase involves analyzing the collected data and other information to determine the effect/s of the implementation of the improvement plan, and whether the measures in the aim statement were met. This is the time to determine if the quality improvement activity was successful, to consider if the results matched the improvement theory, and to determine what additional measures or tests may be needed. Results, lessons learned, and knowledge gained is to be documented.

**ACT** – This Phase is the culmination of the planning, testing, and analyzing of the improvement effort, and its purpose is to act on the results and lessons learned. If the measurable objective in the aim statement has been met, the improvement should be standardized. Alternatively, the team may decide to repeat the test, gather different or additional data, revise the test methodology, or even return to the Plan Phase to determine different root causes or solutions and develop a new improvement theory and action plan.

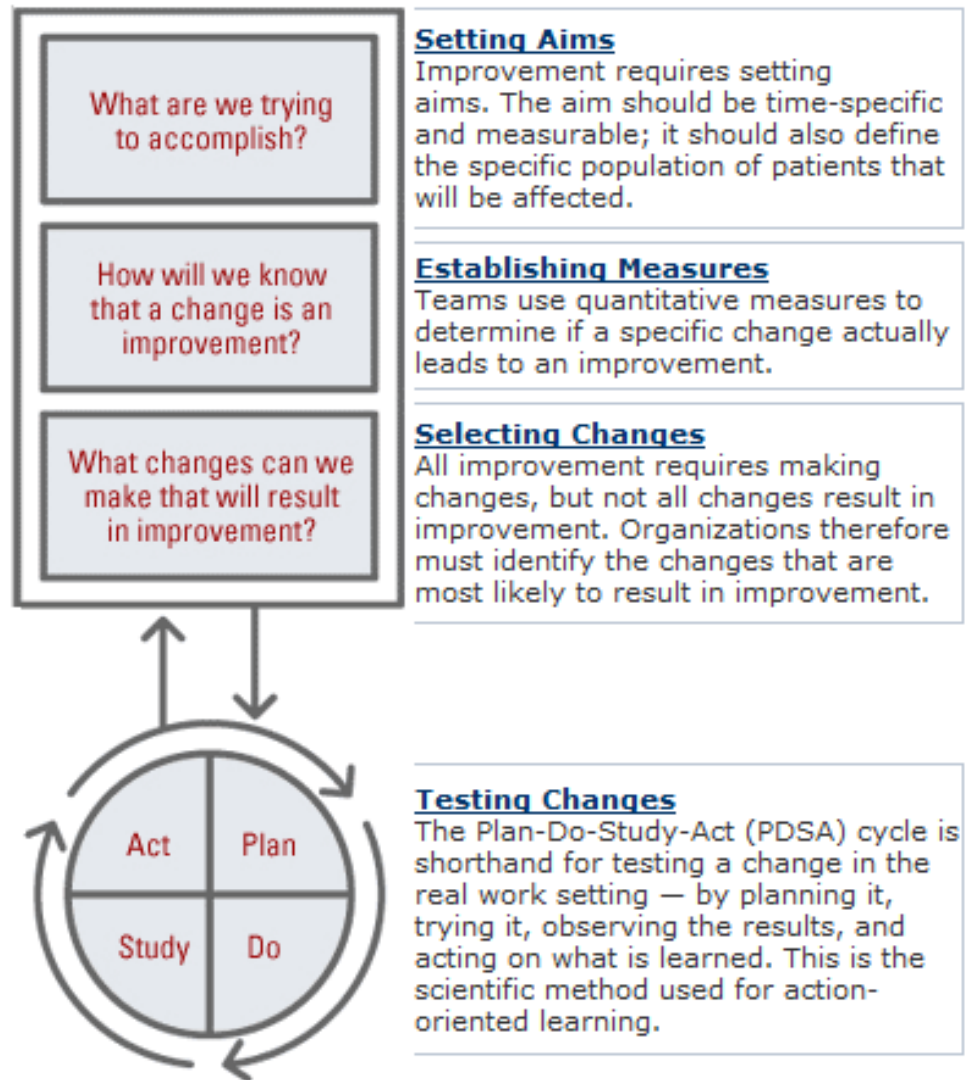
A Team Charter will be completed at the start of each QI project team. It serves as a guide for the team throughout the process, and is a living document that may be changed throughout as needed. A copy of the Team Charter template can be found in Appendix B.

---

At the conclusion of any QI team project, along with the final project report, the QI project team will complete a storyboard, which is a one page snapshot of the project through each Phase of the PDSA cycle. Appendix C contains a storyboard template.

Appendix D includes common QI tools which may be used to assist project teams in conducting quality improvement project planning and evaluation.

---



## Quality Goals & Implementation

---

**Introduction** This section presents the overall goals and implementation plan for QI at the Portage County Combined General Health District. The overarching and ongoing goal of the Quality Improvement Plan is to structure and ensure that PCHD is providing services efficiently and effectively in support of the agency mission and vision. Specific QI goals will be reviewed and determined on at least an annual basis upon review and revision of the QI Plan. Considerations for staff development and ongoing training needs, coordinated with the agency Workforce Development Plan, will be a priority.

The following represent the QI Goals for 2018:

| Goal  | Measure   | Timeframe   | Person Responsible                               |
|---|---|---|--|
| Complete a minimum of 2 additional small quality improvement team projects between June and December 2018.  | Team documentation; storyboards                                   | To be completed by December 31, 2018                  | QI Committee; respective QI project team members |
| Advance to Phase 4 along the NACCHO “Roadmap to a Culture of Quality Improvement”.  | NACCHO Self-Assessment Tool - QI Committee members average scores | To be completed by March 31, 2019                     | QI Committee                                     |
| Review lower score areas of NACCHO “Roadmap to a Culture of Quality Improvement” and assess for potential measures to improve them and the overall rating. (Collectively ID 3 Sub-elements of focus.) | NACCHO Self-Assessment Tool – QI Committee members scores         | To be completed by June 30, 2018                      | QI Committee                                     |
| Receive evaluations from all pertinent team members within one month of completion of project storyboard and final team charter.  | Team documentation; surveys                                       | To be completed within 1 month, as applicable         | QI Committee; QI Project Team members            |
| Review QI Training information for Workforce Development (WFD) and New Employee Orientation (NEO) Committees semi-annually  | Documentation of training; participation/completion certificates  | To be completed by June 30, 2018<br>December 31, 2018 | QI Committee; WFD Committee; NEO Committee       |

|   |  |  |                     |
|---|--|--|---------------------|
| Email completed QI project storyboards to all staff within one week of receipt by the QIC leader.                   | Completed storyboards; emails to staff         | To be completed within 1 week, as applicable | QI Committee leader |
| Create a Quality Improvement section on the agency website.   | QI section on website                          | To be completed by March 31, 2018            | Health Commissioner |
| Post completed QI project storyboards to QI section of agency website within one week of receipt by the QIC leader. | Completed storyboards; website postings        | To be completed within 1 week, as applicable | QI Committee leader |
| Display completed QI project storyboards and other visual QI representations on Administrative hallway wall.        | Storyboards, other materials; hallway displays | To be completed by July 31, 2018             | QI Committee        |

## Projects

---

|                          |  |
|--------------------------|--|
| <b>Introduction</b>      | <p>This section describes the process for QI project identification, selection, prioritization, and selection of team members. A brief description of current and past projects will be included in Appendix F, as completed. Additional information about current and past projects may be obtained from the QI Committee, individual QI project team leaders, or on the department network drive at: F:QUALITY IMPROVEMENT:Projects.</p>   |
| <b>Project Selection</b> | <p>Proposed QI projects will be reviewed for approval by the QI Committee. Priority for project selection will consider alignment with priorities identified in the agency Strategic Plan and the CHIP, as well as the agency Performance Management Plan standards and Workforce Development Plan goals. Additionally, consideration of national, state, and local sources of benchmarks and measures, such as the National Public Health Performance Standards, the State of Ohio Improvement Standards, and Healthy People 2020 goals will be used to assist in determination of priority areas for QI projects.</p> <p>Potential Projects may be identified by:</p> <ul style="list-style-type: none"><li>• Gaps between performance and goals established in the agency Performance Management Plan/System</li><li>• After-action reports</li><li>• Customer satisfaction/feedback surveys</li><li>• Staff survey results</li><li>• Staff suggestions via divisional “Parking Lots” and/or the Quality Improvement Project Proposal Form found in Appendix G</li><li>• Program evaluations</li><li>• Needs related to accreditation preparation</li><li>• Objectives in the CHIP or agency Strategic Plan</li><li>• Audit or compliance issues</li></ul> <p>Consideration will be given to number of people affected, required staff time, financial resources required, capacity to complete the project, timeliness and scope, and availability of baseline data or capacity for data collection and analysis. All QI projects selected will be in compliance and alignment with PHAB standards and requirements.</p> <p>Potential QI project team members will be assigned per recommendations of the QI Committee, with applicable management approval, such that the range of perspectives of the problem/project are represented. Teams will typically consist of 3 to 7 members, including one member of the QI Committee, and at least one staff member from a division outside of the target division of the QI activity, as applicable. External stakeholders will be engaged in QI project activities as deemed appropriate.</p> |

## Training

---

**Introduction** The Portage County Combined General Health District is committed to assuring its workforce is properly trained in the principles of continuous quality improvement, and has incorporated QI training goals and objectives within the agency Workforce Development Plan. The PCHD WFD Plan, including the complete QI Training Plan, can be found on the department network drive at: F:WORKFORCE DEVELOPMENT:Plan.

**Training and Support** In May and June of 2016, 7 out of the 8 Quality Improvement Committee members (Joe Diorio, Kevin Watson, Judi Rettig, Sherry Halas, Ali Mitchell, Justin Rechichar, and Melissa Stranathan) attended LeanOhio Boot Camps at various locations. These were made available through scholarships and had expert presenters from Kent State University and the University of Akron.

On September 19 and 26, 2016, all PCHD staff attended Quality Improvement Refresher Trainings presented by the Quality Improvement Committee.

On March 20, 2017, Brian Furlong, a Workshop Facilitator conducted a LeanOhio Quality Improvement Training that was mandatory for all PCHD staff. This type of training will continue to be offered annually to further the agency efforts toward a continuous culture of quality improvement.

In January and February of 2018, (replacing Judi Rettig and Melissa Stranathan) 2 new Quality Improvement Committee members (Kim Plough and Julie Klusty) attended LeanOhio Boot Camp training at Cleveland State University.

Moving forward, training on QI principles will be implemented more robustly and at different levels for various staff as deemed appropriate and as outlined in the QI Training Plan, to include:

- Orientation to agency QI initiatives, policies and projects for all new employees
- Mandatory completion of introductory online QI learning modules for all new employees
- Mandatory completion of online QI learning modules for all current staff
- Advanced QI training for QI Committee members
- Review of QI concepts at all-staff meetings
- “Just-in-time” training by QI Committee members for active QI project teams
- Participation in QI projects to engage staff in applied learning

- Other QI training events as they arise and are determined to be applicable, including: National Network of Public Health Institutes (Open Forum for Quality Improvement in Public Health), National Association of County and City Health Officials (QI training), American Society for Quality, International Society for Performance Improvement, Process Improvement 101 training for management staff provided by Strategic Leadership Solutions, etc.
- Continuing/reinforcement of staff training in QI principles and practice, as evaluated and determined needed over time
- Any additional position-specific QI training as needed

Appendix E contains a list of Quality Improvement Resources, many of which include sources of and links to QI training opportunities.



## Evaluation and Monitoring

---

**Introduction** This section describes how the QI Plan and projects will be evaluated and monitored.

---

**QI Plan** The Portage County Combined General Health District QI Plan will be evaluated and reviewed by the QI Committee at least annually, though it is anticipated that there may be reviews and revisions throughout each year as we accomplish QI projects. Annual review will be completed in the first quarter of each year. The process and methods to accomplish evaluation will include:

- Annual completion of the NACCHO “Roadmap to a Culture of Quality Improvement” Self-Assessment Tool to ascertain improvement in knowledge, abilities, and implementation of QI principles and activities
- Discussion regarding effectiveness of QI committee meetings
- Review of effectiveness of the QI Plan in overseeing quality projects and integration within the agency
- Review of QI committee and staff feedback and determination of clarity of the QI Plan components and its associated documents
- Identified lessons learned
- Progress toward and achievement of measured goals as outlined in the **Quality Goals & Implementation** section of the QI Plan
- Review of QI project team evaluations (see below)

An annual evaluation report will address each of these items, and make recommendations for change. Goals will be revised and corrective actions and revisions will be made after this annual review.

---

**QI Teams** Evaluation of QI projects and frequency of review will largely be dictated by the scope of the project. At a minimum, all QI project teams are expected to provide update reports to the QI Committee at least quarterly (or otherwise as requested by the Committee) throughout the course of the improvement project effort. Smaller projects with shorter implementation timeframes may warrant more frequent (as often as biweekly) updates. Kaizen events, which are intense five day quality improvement projects that overhaul a core work process and develop a simpler, better, and more cost-effective solution; these may only require a report at the end of the event.

All QI project teams will develop and submit project storyboards/final reports at the conclusion of the project. Within one month of a project’s finalization, all QI project team members will be surveyed to determine QI process learning, perceived contribution to the project, value of the project experience and ultimate outcome, lessons learned, and to seek suggestions for overall agency QI efforts.

---

---

Additional customer/stakeholder satisfaction surveys will be implemented as applicable for specific projects to garner feedback on services or program outcomes as a result of QI project efforts.

---

## Communication

---

**Introduction** An important component in fostering a culture of continuous quality improvement at the Portage County Combined General Health District is the regular communication of quality improvement initiatives and outcomes to the staff, the Board of Health, and the general public. This section describes how quality improvement efforts and results are shared.

---

**Quality Sharing** The following methods will be used to communicate the results of quality improvement activities and achievements, project outcomes, training initiatives, and QI Plan updates.

### **All Portage County Combined General Health District Employees**

- Regular updates via the “QI Corner” will be included within the monthly employee newsletter “Happenings in the 9919” on quality initiatives, project outcomes, policy changes, and training opportunities.
- At appropriate intervals, reports will be presented to all staff at monthly staff meetings by either QI project teams (with all members recognized) on project updates or completed project results, or by the QI Committee on plan evaluation results or updates and training initiatives.
- Completed QI project storyboards and team charters will be posted on the agency website.
- Storyboards and other visual representations of QI efforts will be posted along the walls in the Administrative hallway.
- All QI Committee meeting documents (agendas, minutes) and QI Team documents (agendas, minutes, summary reports, data tools, storyboards, etc.) will be maintained on the department network drive under F:QUALITY IMPROVEMENT, for review by all staff members at any time.

### **Board of Health**

Board of Health members will also receive at least two updates on quality initiatives annually, one of which will focus on the evaluation report and associated plan revisions.

### **Public**

Project descriptions and results (storyboards) will be featured on the agency’s website and other social media outlets as suitable, and included in the annual report to the public.

### **Other**

In addition to these regularly occurring communications, the QI Committee will seek avenues to share quality initiatives with other community partners and other state and national audiences as appropriate.

## Appendix A: Definitions & Acronyms

|                     |   |
|---------------------|---|
| <b>Introduction</b> | A common vocabulary is used agency-wide when communicating about quality and quality improvement. Key terms and frequently used acronyms are listed alphabetically in this section.   |
| <b>Definitions</b>  | <hr/> <p><b>Continuous Quality Improvement (CQI):</b> A systematic, department-wide approach for achieving measurable improvements in the efficiency, effectiveness, performance, accountability, and outcomes of the processes or services provided. Applies use of a formal process (PDSA, etc.) to “dissect” a problem, discover a root cause, implement a solution, measure success/failures, and/or sustain gains.</p> <p><b>Goal:</b> A general statement expressing what is aspired to be achieved, or an intended outcome or effect.</p> <p><b>Healthy People 2020:</b> A document that provides science-based, 10-year national objectives for improving the health of all Americans. For three decades, Healthy People has established benchmarks and monitored progress over time in order encourage collaborations across sectors; guide individuals toward making informed health decisions and measure the impact of prevention activities.<br/>(<a href="http://www.healthypeople.gov/2020">www.healthypeople.gov/2020</a>)</p> <p><b>Measure:</b> an indicator which helps quantify the achievement of a goal; end result which lets us know if we are achieving a goal.</p> <p><b>Plan, Do, Study, Act (PDSA, also known as Plan-Do-Check-Act):</b> An iterative, four-stage, problem-solving model for improving a process or carrying out change. PDSA stems from the scientific method (hypothesize, experiment, evaluate). A fundamental principle of PDSA is iteration. Once a hypothesis is supported or negated, executing the cycle again will extend what one has learned.</p> <p><b>Quality Assurance (QA):</b> Guaranteeing that the quality of a product/service meets some predetermined standard.</p> <p><b>Quality Improvement (QI):</b> The use of a deliberate and defined improvement process, such as Plan-Do-Study-Act, which is focused on activities that are responsive to community needs and improving population health. It refers to a continuous and ongoing effort to achieve measurable improvements in the efficiency, effectiveness, performance, accountability, outcomes, and other indicators of quality in services or processes which achieve equity and improve the health of the community.</p> <hr/> |

---

**Quality Culture:** 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. (Roadmap to a Culture of Quality Improvement, NACCHO, 2012)

**Storyboard:** A graphic representation of a QI project team’s quality improvement journey.

**Acronyms**

---

|               |  |
|---------------|--|
| <b>CHA</b>    | Community Health Assessment                              |
| <b>CHIP</b>   | Community Health Improvement Plan                        |
| <b>QI</b>     | Quality Improvement                                      |
| <b>NACCHO</b> | National Association of County and City Health Officials |
| <b>PCHD</b>   | Portage County Combined General Health District          |
| <b>PHAB</b>   | Public Health Accreditation Board                        |
| <b>SMART</b>  | Specific, Measurable, Achievable, Relevant, Time-framed  |
| <b>WFD</b>    | Workforce Development                                    |

---


## Appendix B: QI Team Charter Template



**PORTAGE COUNTY COMBINED GENERAL HEALTH DISTRICT (PCHD)**  
**705 OAKWOOD ST, RAVENNA, OHIO 44266**  
**QI Team Charter**

|  |  |                               |
|--|--|-------------------------------|
| <b>Team Name:</b>  | <b>Project Title:</b>                            |                               |
| <b>Problem / Opportunity Statement:</b>  |  |                               |
| <b>Team Sponsor:</b>   | <b>Target Division/Process Improvement Area:</b> |                               |
| <b>Performance Improvement AIM (Mission):</b>                                      |  |                               |
| <b>Strategic Alignment:</b>  |  |                               |
| <b>Team Members:</b>   | <b>Roles and Responsibilities:</b>               |                               |
| 1.   | Leader   |                               |
| 2.   | Facilitator                                      |                               |
| 3.   | Scribe   |                               |
| 4.   |  |                               |
| 5.   |  |                               |
| 6.   |  |                               |
| 7.   |  |                               |
| 8.   |  |                               |
| 9.   |  |                               |
| <b>Scope (Boundaries)/Team Authority:</b>  |  |                               |
| <b>Customers (primary and other):</b>  | <b>Customer Needs Addressed:</b>                 |                               |
| 1.   |  |                               |
| 2.   |  |                               |
| 3.   |  |                               |
| <b>Objectives: SMART - Specific, Measurable, Achievable, Relevant, Time-Framed</b> |  |                               |
|  |  |                               |
| <b>Improvement Theory:</b>   |  |                               |
| <b>Success Metrics (Measures):</b>   |  |                               |
| <b>PDSA Timeline:</b>  | <b>Projected Date Completed:</b>                 | <b>Actual Date Completed:</b> |
| <b>Plan:</b>   |  |                               |
| <b>Do:</b>   |  |                               |
| <b>Study:</b>  |  |                               |
| <b>Act:</b>  |  |                               |
| <b>Considerations (Assumptions/Constraints/Obstacles/Risks):</b>                   |  |                               |
| <b>Needed/Available Resources:</b>   |  |                               |
| <b>Meeting Frequency/Duration &amp; Team Member Time Commitments:</b>              |  |                               |
| <b>Communication Plan (Who, How, and When):</b>                                    |  |                               |

## Appendix C: QI Project Storyboard Template

|  |  |  |
|--|--|--|
|                                       | <p align="center"><b>PROJECT NAME</b></p> <p align="center">PORTAGE COUNTY COMBINED GENERAL HEALTH DISTRICT (PCHD)<br/>         705 OAKWOOD ST, RAVENNA, OHIO 44266<br/>         34 EMPLOYEES / POPULATION SERVED: 163,862</p> |  |
| <p align="center"><b>PLAN</b><br/>         Identify a Problem or Opportunity<br/>         and Plan for Improvement</p> | <p align="center"><b>DO</b><br/>         Test the Theory for Improvement</p>   | <p align="center"><b>STUDY</b><br/>         Use Data to Study Results<br/>         of the Test</p> |
| <p><b>Background Information</b></p>   | <p><b>Test the Theory</b></p>  | <p><b>Study the Results</b></p>  |
| <p><b>Assemble the Team</b></p>  |  |  |
| <p><b>Define the AIM</b></p>   | <p align="center"><b>ACT</b><br/>         Standardize the Improvement and<br/>         Establish Future Plans</p>  |  |
| <p><b>Analyze Current Approach</b></p>   | <p><b>Standardize the Improvement<br/>         or Develop New Theory</b></p>   |  |
| <p><b>Identify Potential Solutions</b></p>   | <p><b>Establish Future Plans</b></p>   |  |
| <p><b>Develop an Improvement Theory</b></p>  |  |  |

## Appendix D: Commonly Used QI Tools

### Quality Improvement (QI) Toolbox



| <i>QI Tool</i>                           | <i>What the Tool Does</i>   | <i>Public Health Memory Jogger II</i> |
|--|---|---------------------------------------|
| Activity Network Diagram/<br>Gantt Chart | Used to: Schedule sequential and simultaneous tasks <ul style="list-style-type: none"> <li>Gives team members the chance to show what their piece of the plan requires and helps team members see why they are critical to the success of the project.</li> <li>Helps teams focus its attention and scarce resources on critical tasks.</li> </ul>  | Page 3<br>                            |
| Affinity Diagram                         | Used to: Gather and group ideas <ul style="list-style-type: none"> <li>Encourages team member creativity by breaking down communication barriers.</li> <li>Encourages ownership of results and helps overcome "team paralysis" due to an array of options and a lack of consensus.</li> </ul>   | Page 12<br>                           |
| Brainstorming                            | Used to: Create bigger and better ideas <ul style="list-style-type: none"> <li>Encourages open thinking and gets all team members involved and enthusiastic.</li> <li>Allows team members to build on each other's creativity while staying focused on the task at hand.</li> </ul>   | Page 19<br>                           |
| Cause and Effect/Fishbone Diagram        | Used to: Find and cure causes, not symptoms <ul style="list-style-type: none"> <li>Enables a team to focus on the content of the problem, not the problem's history or differing personal issues of team members.</li> <li>Creates a snapshot of the collective knowledge and consensus of a team around a problem.</li> <li>Focuses the team on causes, not symptoms.</li> </ul>   | Page 23<br>                           |
| Check Sheet                              | Used to: Count and accumulate data <ul style="list-style-type: none"> <li>Creates easy-to-understand data ~ makes patterns in the data become more obvious.</li> <li>Builds a clearer picture of "the facts", as opposed to opinions of each team member, through observation.</li> </ul>   | Page 31<br>                           |
| Control Charts                           | Used to: Recognize sources of variation <ul style="list-style-type: none"> <li>Serves as a tool for detecting and monitoring process variation. Provides a common language for discussing process performance.</li> <li>Helps improve a process to perform with higher quality, lower cost, and higher effective capacity.</li> </ul>   | Page 36<br>                           |
| Data Points                              | Used to: Turn data into information <ul style="list-style-type: none"> <li>Determines what type of data you have</li> <li>Determines what type of data is needed</li> </ul>   | Page 52<br>                           |
| Flowchart                                | Used to: Illustrate a picture of the process <ul style="list-style-type: none"> <li>Allows the team to come to agreement on the steps of the process. Can serve as a training aid.</li> <li>Shows unexpected complexity and problem areas. Also shows where simplification and standardization may be possible.</li> <li>Helps the team compare and contrast the actual versus the ideal flow of a process to help identify improvement opportunities.</li> </ul> | Page 56<br>                           |
| Force Field Analysis                     | Used to: Identify positives and negatives of change <ul style="list-style-type: none"> <li>Presents the "positives" and "negatives" of a situation so they are easily compared.</li> <li>Forces people to think together about all aspects of making the desired change as a permanent one.</li> </ul>  | Page 63<br>                           |
| Histogram                                | Used to: Identify process centering, spread, and shape <ul style="list-style-type: none"> <li>Displays large amounts of data by showing the frequency of occurrences.</li> <li>Provides useful information for predicting future performance.</li> <li>Helps indicate there has been a change in the process.</li> <li>Illustrates quickly the underlying distribution of the data.</li> </ul>  | Page 66<br>                           |


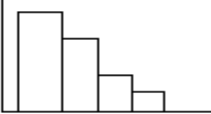
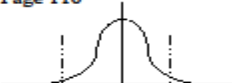
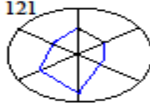
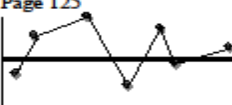


Developed from *The Public Health Memory Jogger II* (2007)



## Appendix D: Commonly Used QI Tools, *continued*

### Quality Improvement (QI) Toolbox



| Interrelationship Digraph | Used to: Look for drivers and outcomes <ul style="list-style-type: none"><li>Encourages team members to think in multiple directions rather than linearly.</li><li>Explores the cause and effect relationships among all the issues.</li><li>Allows a team to identify root cause(s) even when credible data doesn't exist.</li></ul>   | Page 76    |      |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
|---------------------------|---|---|------|-------|-----|-----|-------|---|---|-----|------|-----|---|---|---|---|---|---|----|---|---|----|---|---|---|---|---|
| Matrix Diagram            | Used to: Find relationships <ul style="list-style-type: none"><li>Makes patterns of responsibilities visible and clear so that there is even distribution of tasks.</li><li>Helps a team come to consensus on small decisions, enhancing the quality and support for the final decision.</li></ul>  | Page 85 <table border="1" data-bbox="1109 562 1326 653"><tr><th></th><th>A</th><th>B</th><th>C</th></tr><tr><th>1</th><td></td><td></td><td></td></tr><tr><th>2</th><td></td><td></td><td></td></tr><tr><th>3</th><td></td><td></td><td></td></tr></table>  |      | A     | B   | C   | 1     |   |   |     | 2    |     |   |   | 3 |   |   |   |    |   |   |    |   |   |   |   |   |
|                           | A   | B   | C    |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| 1                         |   |   |      |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| 2                         |   |   |      |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| 3                         |   |   |      |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| Nominal Group Technique   | Used to: Rank for consensus <ul style="list-style-type: none"><li>Allows every team member to rank issues without being pressured by others.</li><li>Makes a team's consensus visible.</li><li>Puts quiet team members on an equal footing with more dominant members.</li></ul>  | Page 91 <table border="1" data-bbox="1105 714 1339 823"><tr><th></th><th>Jo</th><th>Bob</th><th>Hal</th><th>Total</th></tr><tr><th>A</th><td>3</td><td>4</td><td>4</td><td>11</td></tr><tr><th>B</th><td>2</td><td>1</td><td>2</td><td>5</td></tr><tr><th>C</th><td>4</td><td>3</td><td>3</td><td>10</td></tr><tr><th>D</th><td>1</td><td>2</td><td>1</td><td>4</td></tr></table> |      | Jo    | Bob | Hal | Total | A | 3 | 4   | 4    | 11  | B | 2 | 1 | 2 | 5 | C | 4  | 3 | 3 | 10 | D | 1 | 2 | 1 | 4 |
|                           | Jo  | Bob   | Hal  | Total |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| A                         | 3   | 4   | 4    | 11    |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| B                         | 2   | 1   | 2    | 5     |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| C                         | 4   | 3   | 3    | 10    |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| D                         | 1   | 2   | 1    | 4     |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| Pareto Chart              | Used to: Focus on key problems <ul style="list-style-type: none"><li>Helps teams focus on those causes that will have the greatest impact if solved. (Based on the Pareto principle ~ 20 % of the sources cause 80% of any problem.)</li><li>Progress is measured in a highly visible format that provides incentive to push on for more improvement.</li></ul>   | Page 95    |      |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| Prioritization Matrices   | Used to: Weigh your options <ul style="list-style-type: none"><li>Forces a team to focus on the best thing(s) to do and not everything they could do.</li><li>Increases the chance of follow-through because consensus is sought at each step in the process (from criteria to conclusions)</li></ul>   | Page 105 <table border="1" data-bbox="1105 1014 1339 1092"><tr><th>Cost</th><th>A</th><th>B</th><th>C</th><th>Total</th></tr><tr><th>A</th><td></td><td>1/5</td><td>1/10</td><td>0.3</td></tr><tr><th>B</th><td>5</td><td></td><td>1</td><td>6</td></tr><tr><th>C</th><td>10</td><td>1</td><td></td><td>11</td></tr></table>  | Cost | A     | B   | C   | Total | A |   | 1/5 | 1/10 | 0.3 | B | 5 |   | 1 | 6 | C | 10 | 1 |   | 11 |   |   |   |   |   |
| Cost                      | A   | B   | C    | Total |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| A                         |   | 1/5   | 1/10 | 0.3   |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| B                         | 5   |   | 1    | 6     |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| C                         | 10  | 1   |      | 11    |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| Process Capability        | Used to: Measure conformance to customer requirements <ul style="list-style-type: none"><li>Helps a team answer the question "Is the process capable?"</li><li>Helps to determine if there has been a change in the process.</li></ul>  | Page 116   |      |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| Radar Chart               | Used to: Rate organization performance <ul style="list-style-type: none"><li>Makes concentrations of strengths and weaknesses visible.</li><li>Clearly defines full performance in each category.</li><li>Captures the different perceptions of all the team members about organization performance.</li></ul>  | Page 121   |      |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| Run Chart                 | Used to: Track trends <ul style="list-style-type: none"><li>Monitors the performance of one or more processes over time to detect trends, shifts, or cycles.</li><li>Allows a team to compare a performance measure before and after implementation of a solution to measure its impact.</li></ul>  | Page 125   |      |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| Scatter Diagram           | Used to: Measure relationships between variables <ul style="list-style-type: none"><li>Supplies the data to confirm a hypothesis that two variables are related.</li><li>Provides a follow-up to a Cause &amp; Effect Diagram to find out if there is more than just a consensus connection between causes and the effect.</li></ul>  | Page 129   |      |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |
| Tree Diagram              | Used to: Map the tasks for implementation <ul style="list-style-type: none"><li>Allows all participants (and reviewers outside the team) to check all of the logical links and completeness at every level of plan detail.</li><li>Reveals the real level of complexity involved in the achievement of any goal, making potentially overwhelming projects manageable, as well as uncovering unknown complexity.</li></ul> | Page 140   |      |       |     |     |       |   |   |     |      |     |   |   |   |   |   |   |    |   |   |    |   |   |   |   |   |

Developed from *The Public Health Memory Jogger II* (2007)

## Appendix E: Quality Improvement Resources

There are a growing number of resources to support quality improvement in public health. The following table lists some of those resources, both state and national. The list is in no way exhaustive. Resources are listed in alphabetical order.

| Resource   | Location & Description  |
|--|---|
| <b>American Society for Quality</b>  | <a href="http://asq.org">http://asq.org</a><br>A membership organization whose mission is: <i>to increase the use and impact of quality in response to the diverse needs of the world.</i> Training, resources, certifications, and learning communities.   |
| <b>Association of State and Territorial Health Officials</b>   | <a href="http://www.astho.org">http://www.astho.org</a><br>Membership organization for state health officials. Resources, links to QI and performance management tools.   |
| <b>Center for Public Health Practice,<br/>The Ohio State University<br/>College of Public Health</b> | <a href="http://cph.osu.edu/practice">http://cph.osu.edu/practice</a><br>Live and online competency-based training and other organizational development resources.<br><a href="https://www.cphplearn.org/">https://www.cphplearn.org/</a><br>Learning content management system; searchable catalog.  |
| <b>Center for Public Health Quality</b>  | <a href="http://www.centerforpublichealthquality.org/">http://www.centerforpublichealthquality.org/</a><br>A new, national resource with training, toolkits, consultation, and technical assistance.  |
| <b>Centers for Disease Control and Prevention</b>  | <a href="http://www.cdc.gov/stltpublichealth/performance/">http://www.cdc.gov/stltpublichealth/performance/</a><br>Concepts, resources, and links about quality improvement and performance management.   |
| <b>Journal of Public Health Management and Practice</b>  | Volume 18 (1) January/February 2012 - pg. 1-101,E1-E16<br>Volume 16 (1) January/February 2010 - pg. 1-85,E1-E17<br>Journals dedicated to quality improvement.   |
| <b>Michigan Public Health Institute</b>  | <a href="https://www.mphiaccredandqi.org/qi-guidebook/">https://www.mphiaccredandqi.org/qi-guidebook/</a><br>Practitioners Quality Improvement Guidebook.<br><a href="http://mphiaccredandqi.org/PMQITraining/Login.aspx">http://mphiaccredandqi.org/PMQITraining/Login.aspx</a><br>Performance Management/QI online course.                                |
| <b>National Association of County and City Health Officials (NACCHO)</b>                             | <a href="http://www.naccho.org/programs/public-health-infrastructure/quality-improvement">http://www.naccho.org/programs/public-health-infrastructure/quality-improvement</a><br>QI resources, literature, training, templates, examples, etc.<br><a href="http://qiroadmap.org/">http://qiroadmap.org/</a><br>Roadmap to a Culture of Quality Improvement. |
| <b>National Network of Public Health Institutes (NNPHI)</b>  | <a href="https://nnphi.org/resource-directory/?focus_areas%5B%5D=performance-quality-improvement">https://nnphi.org/resource-directory/?focus_areas%5B%5D=performance-quality-improvement</a><br>Performance and quality improvement resources.   |
| <b>Public Health Quality Improvement Exchange (PHQIX)</b>  | <a href="https://www.phqix.org/">https://www.phqix.org/</a><br>Online community for learning and sharing about quality in public health. Searchable; forum for online dialogue and sharing (uploading) example documents (including example QI Plans).  |
| <b>Public Health Accreditation Board (PHAB)</b>  | <a href="http://www.phaboard.org/">http://www.phaboard.org/</a><br>Non-profit organization that oversees public health agency accreditation. Accreditation standards, measures, and requirements; training, resources, accreditation.   |
| <b>Public Health Foundation (PHF)</b>  | <a href="http://www.phf.org/focusareas/pmqi/pages/default.aspx">http://www.phf.org/focusareas/pmqi/pages/default.aspx</a><br>Performance management and quality improvement website, including Turning Point framework.   |
| <b>TRAIN/Ohio TRAIN</b>  | <a href="http://www.train.org">www.train.org</a> ; <a href="https://oh.train.org/DesktopShell.aspx">https://oh.train.org/DesktopShell.aspx</a><br>Searchable public health-related continuing education opportunities offered by affiliates from across the country, including Ohio.  |

## Appendix F: Summary of QI Projects

### Currently Active Projects:

| Project Name (focus) | Project Mission | Status/Outcome |
|----------------------|-----------------|----------------|
|                      |                 |                |
|                      |                 |                |

### Completed Projects:

| Project Name (focus)                                | Project Mission   | Outcome   |
|---|---|---|
| FBI (Food Borne Illness)                            | To develop and implement a process to appropriately route incoming food complaints and standardize follow-up by December 31, 2016.  | Completed. Overall Improvement was 76%. *See attached Storyboard in this Appendix.  |
| Travelers (Travel immunizations clinic)             | To develop and implement a process to provide community members with appropriate and efficient travel services to include: education, disease prevention and vaccinations by June 2017. | Completed. Overall improvement was 76%. *See attached Storyboard in this Appendix.  |
| Chatty Cathy's (Phone system functionality)         | To determine the functionality of the existing phone system and to develop a phone administrative process guide. To provide training on the phone system to all staff members.          | Completed. Two staff presentations completed. Staff suggestions evaluated and implemented. *See attached storyboard in this Appendix. |
| Small Potato's (Temporary Food licensing procedure) | Identify areas/elements during the temporary food licensing/application process where increased efficiency and reduction of staff time expenditure can be implemented.                  | Completed. New licensing packet and procedure developed and implemented. *See attached storyboard in this Appendix.                   |
| Time Trackers (Staff time accountability)           | To review all agency methods of tracking time for staff and develop a standardized format by May 31, 2017.  | Completed. Staff Training. Staff training with each division.* See attached storyboard in this Appendix.                              |

# Portage County Health District - The FBI (Food Borne Illness) Quality Improvement Storyboard

**TEAM SPONSOR:** JOSEPH DIORIO

**FACILITATOR:** SUSAN FORGACS

**TEAM:** ELIZABETH AHRENS, SHERRY HALAS, MARIANNE KITAKIS, ALI MITCHELL, JESSICA OFFINEER, KEVIN WATSON, DEBBIE WINE



## PLAN

### Background Information

The PCHD Quality Improvement Committee (QIC) selected this project from a proposed staff submission on the department "parking lot", recognizing that there was no consistent process for handling incoming food complaints. The reporting, documenting, investigating, and follow-up procedures were not standardized. As a result, not all customers were receiving the expected action and response. This project, then, was determined to align well with the department's mission, values, and strategic focus on improved customer service.

### Assemble the Team

The QIC selected team members focusing on representation from the nursing, environmental, and clerical divisions which have the greatest role in the food complaint process. Additional representation for outside unique perspective was added from the health education division.

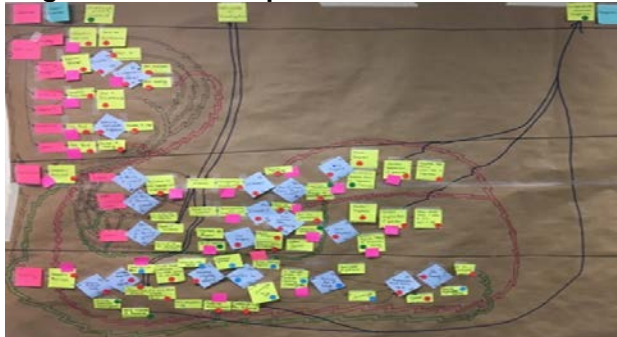
### Performance Improvement AIM

To develop and implement a process to appropriately route incoming food complaints and standardize follow-up by December 31, 2016.

### Analyze Current Approach

Data regarding food related complaints received within the previous 3 months was collected, and consideration was given to how further handling was completed and accounted for. Multiple gaps were identified, and the team engaged in a brainstorming exercise to identify primary contributing factors to the problem, with a deliberate focus on the voice of the customer for possible solutions. A current-state process map was developed using Lean principles and guidance. Review of this process map revealed several inefficiencies, redundancies, and gaps in communication and accountability. As a result of these evaluations, it was determined that a formalized policy and procedure, standardized forms, a shared database to log and access all activity, and staff training would be needed.

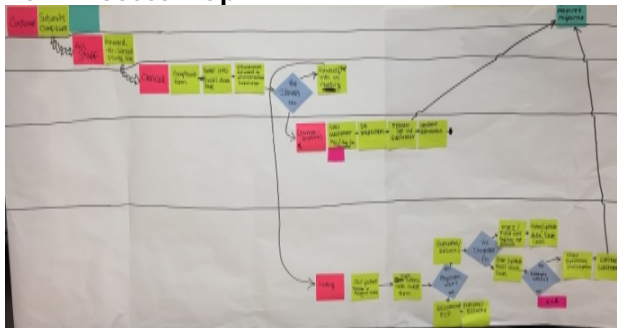
### Original Process Map



### Develop Revised Approach

A desired future-state process map was developed to reflect the intended process improvement, in alignment with identified and selected solutions to the root causes of the problem.

### New Process Map



## DO

In accordance with determined improvement needs and the new process map, the following were created:

- A comprehensive Food Complaint Policy and Procedure document
- A standard Food Facility Complaint Form
- A standard Food-Borne Illness Complaint Form
- A shared Food Complaint log and tracking Excel Database on the department F: drive.

Additionally, front line clerical staff and applicable nursing and environmental staff were trained on the use of the forms and the database, and all PCHD staff were presented with the new policy and procedure.

The team investigated our phone system capabilities and found that the initially desired ideal procedure of forwarding all incoming food complaint calls to a shared clerical line was outside of the team's scope.

## STUDY

Personnel changes and scheduling delays impeded the project concluding by the original AIM target date. The new process began in April 2017. Initial feedback from staff has been positive regarding streamlining of the process and consistency of information sharing.

Assessing the revised process reveals substantial improvements in simplification and efficiency:

| Process Map Data  | Before | After | Change |
|-------------------|--------|-------|--------|
| Process Steps     | 62     | 21    | 66%    |
| Decision Steps    | 20     | 4     | 80%    |
| Delays            | 22     | 1     | 95%    |
| Total Improvement | 104    | 26    | 76%    |

This project team will meet quarterly for at least one year to review and evaluate:

- Effective implementation of policy and forms
- Accuracy and completeness of database entries
- Customer feedback survey scores/comments regarding food complaint handling
- PCHD staff feedback regarding effectiveness of and any issues with the new process

The new process provides for consistent efficient documentation of incoming food complaints, standardized transfer to the appropriate staff for further handling, and a collective database to ensure proper sharing of information across divisions and accountability for proper follow-up. All of this should ensure faster and more consistent delivery of appropriate information, response, and action to and for our customers.

## ACT

Pursuant to evaluative measures, this revised Food Complaint Process will be comprehensively reviewed in one year; and the policy and procedures, forms, and database will be amended as needed per the continuous PDSA cycle.

# PORTAGE COUNTY HEALTH DISTRICT - THE TRAVELERS STORYBOARD

**TEAM SPONSOR:** JOSEPH DIORIO

**FACILITATOR:** ROSEMARY FERRARO

**TEAM:** SUSAN FORGACS, JUDITH RETTIG, MELISSA STRANATHAN, KERRY MCKEEN, JUSTIN RECHICHAR



## 1. Problem Statement: (PLAN)

- Inconvenient class and clinic times for customers.
- Multiple visits required for customers.
- Many steps in creating delays in service.
- Experienced travelers did not see value in the class.

## 2. Scope:

- **Start:** Customer inquires about recommended/required vaccinations for travel.
- **End:** Customer receives recommended/required vaccines and receives relevant education regarding travel.

## 3. Performance Improvement AIM (Mission):

- To develop and implement a process to provide community members with appropriate and efficient travel services to include: education, disease prevention and vaccinations by June 2017.

## 4. Project Goals: (DO)

- Decrease the amount of time spent by customers and staff for the travel clinic process by 25% by the end of 2017.
- Increase the number of travel clinic customers by 10% by the end of 2017.
- Review provided educational materials every 6 months to assure that they are current.

## 5. Process Mapping Data (STUDY)

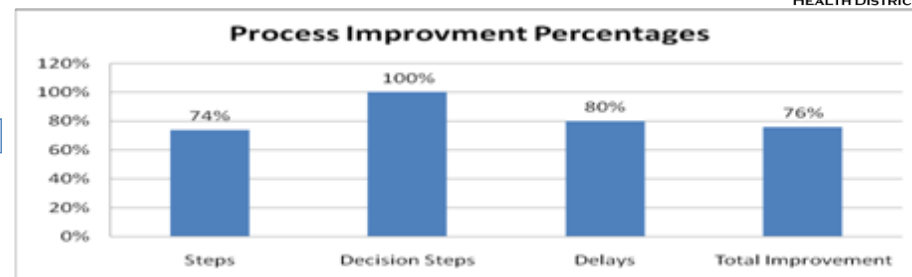
|                   | Before | After | Change |
|-------------------|--------|-------|--------|
| Steps             | 65     | 17    | 74%    |
| Decision Steps    | 4      | 0     | 100%   |
| Delays            | 10     | 2     | 80%    |
| Total Improvement | 79     | 19    | 76%    |

## 6. Previous Observations:

- The travel course was required to receive immunizations. This was inconvenient for some customers.
- Bi-weekly classes were time consuming and offered generic travel information.
- Multiple visits for customers were a source of frustration, when they may just want vaccines.
- Mailing of the anti-malaria prescriptions caused a delay in care.
- The time from start of the service to the end of service was not as optimal as it could be.

## 8. Discussion: (ACT)

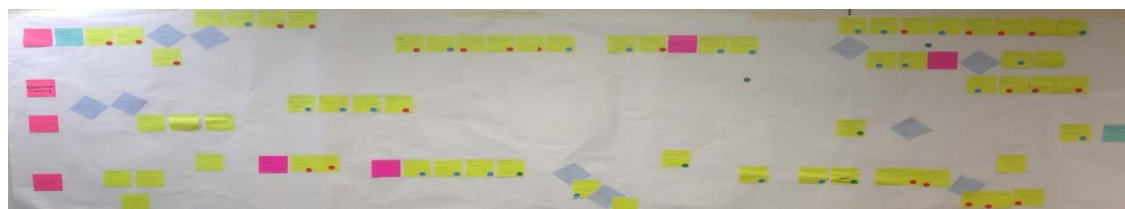
- Number of steps in process decreased from 79 to 19; 76% improvement.
- Eliminated 80% of delay steps in process.
- Client is better prepared for clinic visit since they are informed of vaccines and cost ahead of time.
- Ability to tailor educational material to client.



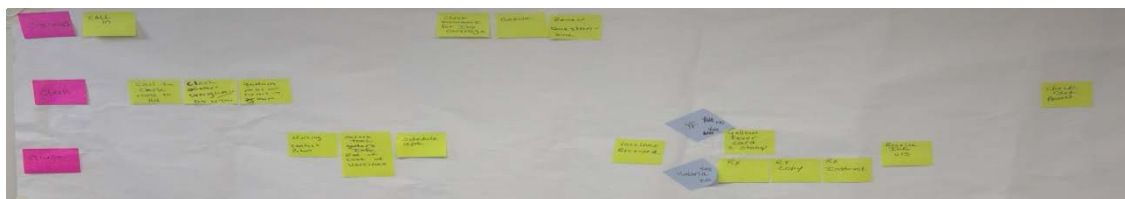
## 7: Future Observations:

- Clinic nurses screen customers via phone.
- Make recommendations for vaccines and anti-malaria vaccinations.
- Inform of cost up front and advise to contact insurance companies prior to visit regarding possible coverage.
- Schedule appointment for vaccine administration and one-on-one consultation.
- Streamline the process.
- Revisit monthly for changes in process.
- Customers receive vaccines, anti-malaria prescription, and educational material in one visit.
- Increased flexibility for customers to schedule and receives immunizations.
- Process started ahead of schedule in March 2017.

Process Before:



Process After:





# Portage County Health District - The Chatty Cathy's Quality Improvement Storyboard

Team Sponsor: Joseph Diorio

Facilitator: Susan Forgacs

Team: Justin Rechichar (Leader), Becky Lehman (Member), Philesia Condor (Member), Dan Robinson (Member), Dorothy Filing (Member)



## Chatty Cathy QI - Suppliers, Input, Process, Output, Customers

### PLAN

#### Background Information

The phone is PCHD's primary means of communication with internal and external customers. As a result of recent phone updates and improvements, there is a need for functionality-training based on the phone system targeted to our internal customers. Based on employee survey, the Quality Improvement Committee (QIC) selected the phone system as a QI project.

#### Assemble the Team

The QIC selected team members focusing on representation from all divisions within the Health District, since all staff utilize the phone system.

#### Performance Improvement AIM

The team will determine the functionality of our phone system and develop a phone administration process and training for staff (internal customers).

#### Strategic Alignment

(2.3.1) Improve staff knowledge, skills, and abilities related to customer service via the improved phone system.

SMART Objectives were developed:

Develop phone answering policy and procedure to include reference guides and employee/program directory by 12/8/17.

Provide phone training and reference materials to staff by 12/31/17.

| Suppliers   | Input   | Process   | Output  | Customers  |
|---|---|---|---|--|
| <ul style="list-style-type: none"> <li>PCHD staff</li> <li>Derby Communications</li> <li>Spectrum</li> <li>On Hold messaging program</li> </ul> | <ul style="list-style-type: none"> <li>Functioning internet / phone system</li> <li>Quick reference guides</li> <li>Employee/program directory</li> </ul> | <ul style="list-style-type: none"> <li>Someone has a question</li> <li>Calls PCHD</li> <li>Connects to correct person</li> <li>Receives answer</li> </ul> | <ul style="list-style-type: none"> <li>Policy and procedure</li> <li>Reaching person</li> </ul> | <ul style="list-style-type: none"> <li>Customers</li> <li>Staff</li> </ul> |

### DO

A written phone answering procedure was created along with a visual phone manual. Training for all PCHD staff was conducted on 12/18/17 and 12/21/17.



Additional materials created and distributed at the staff trainings included a PCHD phone directory (programs, PCHD staff members, and extensions) and an Environmental Program Territory Guide (map with EH Survey programs and staff names).

### STUDY

A follow-up survey was sent to staff via email for input on the training on 1/26/18.

#### Results of Survey:

Please rate your knowledge of the phone system prior to the training: 5.06

Please rate your knowledge of the phone system after the training: 8.47

Learning how to "park" a call was identified as the highest learning outcome of the training.

Staff identified the training manual as helpful for understanding the phone system.

### ACT

As a result of feedback from the staff via the training and survey, revisions were made to the manual on 3/5/18.

The phone answering procedure and phone manual will be updated as needed per the continuous PDSA cycle.

# Portage County Health District - The Small Potatoes Quality Improvement Storyboard



Team Sponsor: Joseph Diorio/Justin Rechichar      Facilitator: Becky Lehman  
Team: Beth Ahrens (Leader), Kim Plough (Member), Kevin Watson (Member), Will Duck (Member), Debbie Wine (Member)

## PLAN

### Background Information

The PCHD temporary food license fees have increased in recent years. Agency discussions have occurred regarding the need to ensure that these fees are as reasonable as possible, to best serve our customers while covering our costs. State-mandated cost methodologies dictate how fees are calculated; the Board of Health already subsidizes a portion of the fees. The Quality Improvement Committee (QIC) selected this project and authorized the use of a Kaizen event, in order to consider changes to the temporary food license process that would result in the reduction of the fees.

### Assemble the Team

The QIC selected team members, focusing on representatives from the environmental and finance divisions, who had the largest role in the food program. For an outside perspective and additional guidance, representation was added from the health education division.

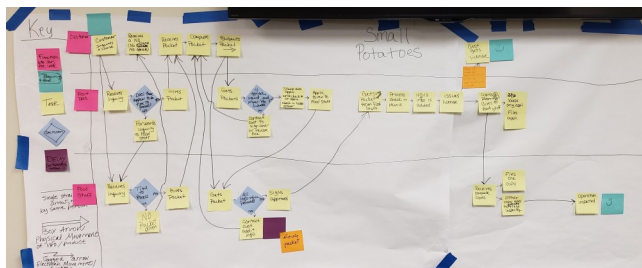
### Performance Improvement AIM

Identify areas/elements during the temporary food license/application process where increased efficiency and staff time reduction can be implemented.

### Analyze Current Approach

A current-state process map was developed using Lean principles and guidance. Review of this process map revealed that there were few opportunities to revise the steps in licensing process. Minor recommendations were considered and implemented.

### Process Map



After the existing data was assessed, deficiencies in the application became apparent. These deficiencies yielded unnecessary staff time expenditures with applicants, explaining how/why to complete the application correctly. Therefore, the team brainstormed improvement ideas. The result was a revised application that provided clear education, with corresponding instruction, giving applicants the information they needed to complete the application correctly (with minimal involvement from PCHD staff).

Resultant SMART Objectives were developed:

- By March 15<sup>th</sup>, update temporary food license application packet.
- By April 15<sup>th</sup>, create a written procedure for staff to utilize in licensing temporary food facilities.

## DO

In accordance with determined improvement needs, the following objectives were accomplished:

- A revised temporary food license application/guidance packet was created and implemented.
- A written license procedure was developed and implemented.

- Additional recommendations beyond the scope of this QI project were developed to further assist management with methods to reduce fees.

## STUDY

Initial staff and customer response to the revised has been positive.

The new temporary food license application packet provides education and guidance; it is designed to limit extraneous staff involvement. As such, it is imperative that food program staff ensure use of the new packet by applicants. Annually-returning, as well as new applicants, will be surveyed for feedback on the packet.

Throughout the 2018 license season, food program staff will keep a written record of staff and customer feedback, and will record observations regarding staff and customer usage of the new materials. Issues and corrections will be noted.

Additionally, tracking of staff time through HDIS will continue to provide data on time savings achieved in the temporary food program.

## ACT

The QI project team will reconvene following the conclusion of the 2018 temporary food license season, to review and evaluate the information garnered through staff and customer usage of the new materials.

Accordingly, prior to the next license period, the temporary food license packet and written procedure will be amended as needed per the continuous PDSA cycle.

# Portage County Health District - The Time Trackers Quality Improvement Storyboard



Team Sponsor: Joseph Diorio

Team: Debbie Stall (Leader), Judi Rettig (Member), Lindsey Smith (Member), Ali Mitchell (Member), Carol Pillsbury (Member),

Julie Klusty (Member)

## PLAN

### Background Information

Staff time was tracked by various methods for each division. Our team was to come up with an opportunity to provide a standardized format of tracking time for the entire staff.

### Assemble the Team

The QIC selected team members focusing on representation from all divisions within the Health District, since all staff track their time some way or another.

### Performance Improvement AIM

The team will review all agency methods of tracking time for staff and develop a standardized format by May 31, 2017. (A multi-day event is required)

### Strategic Alignment

(2.4.1) The tracking of staff time includes the use of software/data systems such as HDIS and MUNIS.

### SMART Objectives were developed:

Measure how much time spent on payroll.

Develop a time tracking form that could be used universally for the staff.

Provide a form that had staff and directors signature to staff accountable for time.

Provide a staff training on how to use the new tracking form system.

## 1st Draft

## 2nd Draft

## Analyze Current Approach:

We first looked at how each division track their time to get paid. Environmental seemed to be the easiest because their time was tracked in percentages. Nursing and Health Education had to deal with grants. Some were deliverables and some grants didn't require that. We also needed to come up with a tracking system of time taken off (personal, sick, vacation, comp/flex, misc.) We ended up having 2 drafts of time tracking sheets.

## DO

When rolling out the new time tracking sheet we knew that it was going to be difficult for people to get used to. These time sheets had to be filled out for what employees worked every two weeks. Signed by them, and verified by directors and turned in for payroll no later than the Monday after the payroll end date. The Time trackers team wanted to get acclimated in June 2017 and launch the tracking sheet July 2017. In that way we would have 6 months data the old tracking system and 6 months in the new tracking system.

## STUDY

During the rollout of the new tracking sheet. We had lack of cooperation from staff at first. There were questions on how to fill out the sheet. Debbie Stall who was the leader of the time trackers had a separate meeting again with each divisions on how to go over time tracking and payroll reporting. The time sheet was also a way to help staff balance their own hours and time that is taken off within the pay period.

## ACT

The time sheet has been modified a few different times. We always had the 2nd draft but we kept coming back to the table seeing what we could change and modify to make it easier. We added a column for "total hours worked" and another column for "hours paid" we then added a 3rd column for "extra hours earned". It has helped payroll balance out employees time off and making sure everything adds off. Debbie has been able to see if people were off sick and but didn't fill out sick slips through these forms.



## Appendix G: Quality Improvement Project Proposal Form



**PORTAGE COUNTY COMBINED GENERAL HEALTH DISTRICT (PCHD)**  
**705 OAKWOOD ST, RAVENNA, OHIO 44266**  
**Quality Improvement Project Proposal Form**

|   |                                      |
|---|--------------------------------------|
| <b>Project title:</b>   | <b>Submitted by:</b>                 |
| <b>Date Submitted to QI team:</b>   |                                      |
| <b>Briefly describe the program, project or process that should be addressed with a quality improvement project:</b>  |                                      |
| <b>Priority:</b> <input type="checkbox"/> High<br><input type="checkbox"/> Medium<br><input type="checkbox"/> Low   | <b>Notes:</b>                        |
| <b>Departmental Implications:</b><br><br>1. How does this project support our mission, vision, and/or strategic directions?<br><br>2. Who are the stakeholders (internal and external) and what are their concerns?<br><br>3. What resources and support will be needed to complete the project?<br><br>4. What potential impact could there be on other programs/activities if this QI project is conducted? |                                      |
| <b>What are we trying to accomplish? How will we know that a change is an improvement?</b>  |                                      |
| <b>What baseline data is available/What measure(s) will be used?</b>  |                                      |
| <b>Anticipated Start Date:</b>  | <b>Anticipated Project Duration:</b> |
| <b>Additional Notes/Comments?</b>   |                                      |

**Appendix H:**  
**NACCHO “Roadmap to a Culture of Quality Improvement” Self-Assessment Tool**  
**Annual Results**

## Scoring Summary

### Organizational Culture of Quality Self Assessment Tool

Portage County Health District

3/9/2018

| FOUNDATIONAL ELEMENT                  | SUB-ELEMENT   | SUB-ELEMENT SCORE | FOUNDATIONAL ELEMENT SCORE | SELECTED TRANSITION STRATEGIES TO IMPLEMENT DURING THIS PLANNING CYCLE | STRATEGY PRIORITY Level | EVIDENCE SUBSTANTIATING CURRENT SCORE |
|---------------------------------------|---|-------------------|----------------------------|--|-------------------------|---------------------------------------|
| 1. Employee Empowerment               | 1.1 Enabling Performance  | 3.8               | 3.725                      |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 1.2 Knowledge, Skills and Abilities                             | 3.65              |                            |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
| 2. Teamwork and Collaboration         | 2.1 Team Performance  | 4                 | 3.7                        |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 2.2 Communities   | 3.4               |                            |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
| 3. Leadership                         | 3.1 Culture   | 3.28              | 3.24                       |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 3.2 Resourcing and Structure                                    | 3.2               |                            |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
| 4. Customer Focus                     | 4.1 Understanding the Customer                                  | 3.7               | 3.32                       |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 4.2 Satisfying the Customer through the Value Stream            | 3.1               |                            |  |                         |                                       |
|                                       | 4.3 Reprioritizing and Creating Programs and Services           | 3.16              |                            |  |                         |                                       |
| 5. Quality Improvement Infrastructure | 5.1 Strategic Planning  | 4.4               | 3.925                      |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 5.2 Performance Measurement                                     | 4                 |                            |  |                         |                                       |
|                                       | 5.3 Annual Quality Improvement Planning                         | 3.8               |                            |  |                         |                                       |
| 6. Continual Process Improvement      | 5.4 Administrative and Functional Process and Systems (e.g. HR) | 3.5               | 3.185714286                |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 6.1 Selecting and Applying Methods                              | 3.6               |                            |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 6.2 Planning for Process Improvements                           | 3                 |                            |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 6.3 Testing Potential Solutions                                 | 3.1               |                            |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 6.4 Extracting Lessons Learned                                  | 3.4               |                            |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 6.5 Sharing of Best Practices                                   | 2.9               |                            |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 6.6 Effectively Installing Standardized Work                    | 3.3               |                            |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |
|                                       | 6.7 Process Management, Results and Continual Improvement       | 3                 |                            |  |                         |                                       |
|                                       |   |                   |                            |  |                         |                                       |

**TOTAL SCORE: 3.422571429**

#### NACCHO Roadmap to a Culture of Quality Phases

| Total Score | Roadmap Phase  |
|-------------|--|
| <2          | Phase 1: No Knowledge of QI                              |
| 2-2.9       | Phase 2: Not Involved with QI Activities                 |
| 3-3.9       | Phase 3: Informal or Ad Hoc QI                           |
| 4-4.9       | Phase 4: Formal QI in Specific Areas of the Organization |
| 5-5.9       | Phase 5: Formal Agency-Wide QI                           |
| 6           | Phase 6: Culture of Quality                              |

## Scoring Summary

### Organizational Culture of Quality Self Assessment Tool

Portage County Health District

3/15/2017

| FOUNDATIONAL ELEMENT                  | SUB-ELEMENT   | SUB-ELEMENT SCORE | FOUNDATIONAL ELEMENT SCORE | SELECTED TRANSITION STRATEGIES TO IMPLEMENT DURING THIS PLANNING CYCLE | STRATEGY PRIORITY Level | EVIDENCE SUBSTANTIATING CURRENT SCORE |
|---------------------------------------|---|-------------------|----------------------------|--|-------------------------|---------------------------------------|
| 1. Employee Empowerment               | 1.1 Enabling Performance  | 3.6               | 3.635                      |  |                         |                                       |
|                                       | 1.2 Knowledge, Skills and Abilities                             | 3.67              |                            |  |                         |                                       |
| 2. Teamwork and Collaboration         | 2.1 Team Performance  | 4.2               | 3.73                       |  |                         |                                       |
|                                       | 2.2 Communities   | 3.26              |                            |  |                         |                                       |
| 3. Leadership                         | 3.1 Culture   | 3.4               | 3.45                       |  |                         |                                       |
|                                       | 3.2 Resourcing and Structure                                    | 3.5               |                            |  |                         |                                       |
| 4. Customer Focus                     | 4.1 Understanding the Customer                                  | 4                 | 3.45333333                 |  |                         |                                       |
|                                       | 4.2 Satisfying the Customer through the Value Stream            | 3.1               |                            |  |                         |                                       |
|                                       | 4.3 Reprioritizing and Creating Programs and Services           | 3.26              |                            |  |                         |                                       |
| 5. Quality Improvement Infrastructure | 5.1 Strategic Planning  | 4.66              | 3.98                       |  |                         |                                       |
|                                       | 5.2 Performance Measurement                                     | 3.9               |                            |  |                         |                                       |
|                                       | 5.3 Annual Quality Improvement Planning                         | 4.1               |                            |  |                         |                                       |
|                                       | 5.4 Administrative and Functional Process and Systems (e.g. HR) | 3.26              |                            |  |                         |                                       |
| 6. Continual Process Improvement      | 6.1 Selecting and Applying Methods                              | 3.95              | 2.951428571                |  |                         |                                       |
|                                       | 6.2 Planning for Process Improvements                           | 3.75              |                            |  |                         |                                       |
|                                       | 6.3 Testing Potential Solutions                                 | 2.66              |                            |  |                         |                                       |
|                                       | 6.4 Extracting Lessons Learned                                  | 2.8               |                            |  |                         |                                       |
|                                       | 6.5 Sharing of Best Practices                                   | 2.3               |                            |  |                         |                                       |
|                                       | 6.6 Effectively Installing Standardized Work                    | 2.5               |                            |  |                         |                                       |
|                                       | 6.7 Process Management, Results and Continual Improvement       | 2.7               |                            |  |                         |                                       |

**TOTAL SCORE: 3.426646825**

#### NACCHO Roadmap to a Culture of Quality Phases

| Total Score | Roadmap Phase  |
|-------------|--|
| <2          | Phase 1: No Knowledge of QI                              |
| 2-2.9       | Phase 2: Not Involved with QI Activities                 |
| 3-3.9       | Phase 3: Informal or Ad Hoc QI                           |
| 4-4.9       | Phase 4: Formal QI in Specific Areas of the Organization |
| 5-5.9       | Phase 5: Formal Agency-Wide QI                           |
| 6           | Phase 6: Culture of Quality                              |

## Scoring Summary

### Organizational Culture of Quality Self Assessment Tool

Portage County Health Department

2/19/2016

| FOUNDATIONAL ELEMENT                  | SUB-ELEMENT   | SUB-ELEMENT SCORE | FOUNDATIONAL ELEMENT SCORE | SELECTED TRANSITION STRATEGIES TO IMPLEMENT DURING THIS PLANNING CYCLE | STRATEGY PRIORITY Level | EVIDENCE SUBSTANTIATING CURRENT SCORE |
|---------------------------------------|---|-------------------|----------------------------|--|-------------------------|---------------------------------------|
| 1. Employee Empowerment               | 1.1 Enabling Performance  | 2.8               | 2.55                       |  |                         |                                       |
|                                       | 1.2 Knowledge, Skills and Abilities                             | 2.3               |                            |  |                         |                                       |
| 2. Teamwork and Collaboration         | 2.1 Team Performance  | 2.4               | 2.35                       |  |                         |                                       |
|                                       | 2.2 Communities   | 2.3               |                            |  |                         |                                       |
| 3. Leadership                         | 3.1 Culture   | 2.1               | 2.15                       |  |                         |                                       |
|                                       | 3.2 Resourcing and Structure                                    | 2.2               |                            |  |                         |                                       |
| 4. Customer Focus                     | 4.1 Understanding the Customer                                  | 1.8               | 1.866666667                |  |                         |                                       |
|                                       | 4.2 Satisfying the Customer through the Value Stream            | 1.3               |                            |  |                         |                                       |
|                                       | 4.3 Reprioritizing and Creating Programs and Services           | 2.5               |                            |  |                         |                                       |
| 5. Quality Improvement Infrastructure | 5.1 Strategic Planning  | 2.4               | 2.125                      |  |                         |                                       |
|                                       | 5.2 Performance Measurement                                     | 2.2               |                            |  |                         |                                       |
|                                       | 5.3 Annual Quality Improvement Planning                         | 1.7               |                            |  |                         |                                       |
|                                       | 5.4 Administrative and Functional Process and Systems (e.g. HR) | 2.2               |                            |  |                         |                                       |
| 6. Continual Process Improvement      | 6.1 Selecting and Applying Methods                              | 1.2               | 1.528571429                |  |                         |                                       |
|                                       | 6.2 Planning for Process Improvements                           | 1.3               |                            |  |                         |                                       |
|                                       | 6.3 Testing Potential Solutions                                 | 1.3               |                            |  |                         |                                       |
|                                       | 6.4 Extracting Lessons Learned                                  | 1.9               |                            |  |                         |                                       |
|                                       | 6.5 Sharing of Best Practices                                   | 1.6               |                            |  |                         |                                       |
|                                       | 6.6 Effectively Installing Standardized Work                    | 1.7               |                            |  |                         |                                       |
|                                       | 6.7 Process Management, Results and Continual Improvement       | 1.7               |                            |  |                         |                                       |

**TOTAL SCORE: 1.951686508**

#### NACCHO Roadmap to a Culture of Quality Phases

| Total Score | Roadmap Phase  |
|-------------|--|
| <2          | Phase 1: No Knowledge of QI                              |
| 2-2.9       | Phase 2: Not Involved with QI Activities                 |
| 3-3.9       | Phase 3: Informal or Ad Hoc QI                           |
| 4-4.9       | Phase 4: Formal QI in Specific Areas of the Organization |
| 5-5.9       | Phase 5: Formal Agency-Wide QI                           |
| 6           | Phase 6: Culture of Quality                              |