Franklin County Public Health

2015-2018 Quality Improvement Plan

Developed by the FCPH Quality Improvement Council - February 2015
(Approved by Board Resolution 15-016, February 2015)

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Plan Approval & Review

Approval Required By	Annual Review – Franklin County Quality Improvement Council Full plan renewal after expiration by the Franklin County Board of Health
Date Originally Approved	February 10, 2015 (Board Resolution 15-016)
Review Frequency Required	The minimum requirement is an annual review of progress by QI Council, with a complete review of the plan every 3 years.

Review History

Reviewed By	Modifications Made?	Approval By	Date
Susan A. Tilgner	___ Yes ✓ No	Susan A. Tilgner	2/10/15
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Quality Improvement Plan
Franklin County Public Health

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Purpose & Introduction

Executive Summary

Franklin County Public Health is committed to the ongoing improvement of the quality of services it provides. This Quality Improvement Plan serves as the foundation of this commitment. We have adopted the Plan, Do, Study, Act (PDSA) QI methodology, and this methodology will be used throughout the department on an ongoing basis in order to develop a culture of quality. This plan provides a framework for the selection of QI projects, the formation of QI teams, and ultimately instilling a culture of quality throughout the agency. The implementation of this plan is the foundation of our performance management system and will assist us to achieve the priorities in our strategic plan. This plan also links to our workforce development plan, and assures that we have a trained workforce to incorporate quality improvement into our daily work. Ultimately, this plan will help us achieve our mission, to improve the health, safety and well-being of the residents of our jurisdictions.

Mission, Vision & Values

VISION: Franklin County Public Health leads our communities in achieving optimal health for all.

MISSION: Franklin County Public Health improves the health of our communities by preventing disease, promoting healthy living and protecting against public health threats through education, policies and partnerships.

VALUES: We serve our communities, our organization and each other with: integrity, accountability, excellence and respect.

Definitions & Acronyms

Introduction

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.

Definitions

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

Plan, Do, Check, Act (PDCA, also known as Plan-Do-Study-Act): An iterative, four-stage, problem-solving model for improving a process or carrying out change. PDCA stems from the scientific method (hypothesize, experiment, evaluate). A fundamental principle of PDCA is iteration. Once a hypothesis is supported or negated, executing the cycle again will extend what one has learned (Embracing Quality in Local Public Health: Michigan's QI Guidebook, 2008)

Quality Assurance (QA): Guaranteeing that the quality of a product/service meets some predetermined standard.

Quality Improvement (QI): Raising the quality of a product/service to a higher standard.

Quality Improvement Plan: A plan that identifies specific areas of current operational performance for improvement within the agency. These plans can and should cross-reference one another, so a quality improvement initiative that is in the QI Plan may also be in the Strategic Plan (PHAB Acronyms and Glossary of Terms, 2009)

Quality Improvement Project: Using the PDCA cycle and a collaborative, systematic and time-limited process to make an improvement or address a problem. A quality improvement project is usually described on a storyboard.

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 visual method for displaying a quality improvement project. Usually includes the AIM statement; improvement theory; data and results; QI tools used; and lessons learned.

Acronyms

CHA: Community Health Assessment
CHIP: Community Health Improvement Plan
QI: Quality Improvement
SMART: Specific, Measureable, Achievable, Relevant, Time-Based

Description of Quality at Franklin County Public Health

Introduction

Franklin County Public Health has a commitment to systematically evaluate and improve the quality of programs, processes and services to achieve a high level of efficiency, effectiveness and customer satisfaction. To achieve this culture of continuous improvement, QI efforts should target the department level ("Big QI") as well as the program or project level ("Small QI"). This section provides a description of quality efforts in Franklin County Public Health, including structure, staffing, culture, processes, and linkages of quality efforts to other agency documents.

Description Quality Efforts

In February 2014, Franklin County Public Health completed the 10-item Questionnaire from the *QI Maturity Tool*, a survey developed by the University of Southern Maine (USM). (Overall score = 2.4). In the area of key leadership knowledge of and commitment to quality improvement, FCPH scored high. FCPH has some groundwork laid already through selected staff training, and completion of two different grant-funded CQI projects through NACCHO and RWJF. However, FCPH does not have a fully developed pervasive culture that focuses on CQI and customer satisfaction. These will be our areas of emphasis as we build CQI in our agency.

Links to Other Agency Plans

To be successful, a culture of quality improvement requires ongoing training. The FCPH Workforce Development Plan, established in October 2013 and revised in October 2014, emphasizes a learning culture that includes quality improvement.

In our updated FCPH Strategic Plan, 2015-2018, there are 4 broad strategic goals. Goal 3 is "Emphasize a Culture of Continuous Quality Improvement and Customer Service", which includes integrating the science and tools of continuous quality improvement into our daily work and focusing on customer service. It also includes ongoing assessment of our organizational capacity to assure effective use of resources and alignment with our mission. Building a culture of Quality Improvement will continue to be a central theme, especially as we implement our community health improvement plan (CHIP).

Quality Improvement Management, Roles & Responsibilities

Quality Improvement will be managed through a formal process at Franklin County Public Health. A Quality Improvement (QI) Council will be designated by the Health Commissioner.

Quality Improvement (QI) Council

The QI Council provides ongoing leadership and oversight of continuous quality improvement activities. The QI Council convenes at least every other month, but more often if needed.

Responsibilities:

- Champion QI efforts throughout agency
- Develop, approve, evaluate, and revise the FCPH Quality Improvement Plan, including establishing goals, priorities, and indicators of quality
- Review QI Plan annually and make adjustments as needed
- Make recommendations for improvement based on identified priority areas
- Monitor QI projects, act to solve problems, and implement quality improvements
- Assure adequate resources are devoted to QI initiatives

The QI Council consists of the Health Commissioner, the Workforce Development Coordinator and representatives from each division: Environmental Health; Prevention and Wellness; and Administration. There will be at least one (1) representative from senior management; one (1) representative from supervision, one (1) representative from professional staff and (1) representative from support services.

The Health Commissioner serves as QI Council chair; members serve a two year term, with no more than half of the team rotating off each year. Responsibilities are described below.

Council Member	Responsibility
Health Commissioner (Council chair)	Provide vision & direction for QI program; serve as chair Convene QI Council Allocate resources for activities Report to Board annually
Senior Management	Identify appropriate staff for QI teams Oversee QI efforts within division Assure QI-related performance and/or professional development goal for all division staff Encourage staff to incorporate QI into daily work Facilitate QI teams as needed Provide administrative support on rotating basis
Supervisors, professional staff and support services	Identify appropriate staff for QI teams Assist senior management to oversee QI efforts within their division Encourage staff to incorporate QI into daily work Facilitate QI teams as needed
Workforce Development Coordinator (1)	Assist the Health Commissioner to convene and facilitate the QI Council Encourage staff to incorporate QI into daily work Facilitate QI teams as needed Coordinate activities with trainers, consultants and subject matter experts

The QI Council will make decisions based on consensus. If consensus cannot be reached, decisions will be made by majority vote. Administrative support (distribution of meeting agendas, summaries, and arrangements for meeting needs) is provided by QI Council members on a rotating basis. QI Teams are accountable to the QI Council. The QI Council will determine when trainers or consultants will be needed to successfully achieve goals and objectives specified in the Quality Improvement Plan. The Health Commissioner will assure that resources are allocated to conduct QI Council activities to the extent possible.

All staff within Franklin County Public Health will: participate in QI projects as requested, nominate QI projects, participate in QI training, and incorporate QI concepts into daily work.

Quality Improvement Process

The process used for continuous quality improvement projects at Franklin County Public Health will be the Plan-Do-Check-Act (PDCA) cycle. "The ABCs of PDCA," written by Grace Gorenflo and John W. Moran in April 2010, is an introduction to quality improvement through the Plan-Do-Check-Act cycle (PDCA). This quality improvement tool maps a process to help improve processes and eliminate inefficiencies in health departments. The article demonstrates the PDCA cycle of quality improvement as it relates to public health (Appendix A).

Quality Goals & Implementation

Introduction The FCPH Quality Improvement Plan will be adopted by the Board of Health every 3 years. Goals will be reviewed annually by the QI Council and revisions will be made to the plan as needed. The Quality Improvement Goals link with other FCPH plans. The 2015-2018 FCPH strategic plan Goal #3 is to Emphasize a Culture of Continuous Quality Improvement and Customer Service by integrating the science and tools of continuous quality improvement into our daily work. The FCPH Workforce Development Plan, adopted in 2013 and revised in 2014, provides guidelines to all staff about specific required training for quality improvement. Both of these plans are directly linked to the quality goals below.

Goal	Measure	Timeframe	Person Responsible
Establish a culture of quality within the agency	QI results shared at all-staff meetings and education retreat; Increased number of staff participating on a CQI project; Results shared with stakeholders	4 times per year By December 2015 and ongoing	Health Commissioner; Managers and Supervisors; Board of Health
Support a minimum of 3 quality improvement projects annually (1 for each division) with at least 1 from a program area and 1 from an administrative area	Team documentation; storyboards	2 projects in 2015 3 projects in 2016 & 3 projects annually thereafter	QI Council; respective team members
By July 1, 2015, all position descriptions will include expectations for involvement in QI. Involvement includes: awareness and training.	Position descriptions with expectations; documentation of training.	By July 1, 2015	Senior Staff

Within the first year of employment, all staff will have completed introductory training about quality improvement in public health	Documentation in the Learning Management System of course completion	Within the first year of employment	Supervisors and Workforce Development Coordinator
By July 2015 identify quality improvement training needs of staff who will be leading QI projects (i.e. facilitation and CQI Boot Camp)	Completed course listing and identified staff required to take training	By July 2015	QI Council; Workforce Development Team
By July 1, 2015 develop a process to measure customer satisfaction within at least 1 program from each division	Completed process in use by programs	July 1, 2015	QI Council; project leads in FCPH Strategic Plan; Data and Technology Committee

Projects

Introduction

This section describes the process for QI project identification, selection, prioritization, and selection of team members. A brief description of the projects is included in Appendix B. Additional information about current and past projects may be obtained from the Workforce Development Coordinator or through the Franklin County Public Health employee portal.

Project Selection

Potential projects are selected by the Quality Improvement (QI) Council and are based on data obtained from internal and external customer feedback, program evaluations, after-action reviews, performance as reflected in reports from Ohio's Health Department Profile and Performance Database, or from within the Franklin County Public Health performance management system. Any staff member may recommend a project to the Council for consideration at any time. Project ideas will be prioritized using a criteria rating process. QI Team members will be selected so that the range of perspectives of the problem/project is represented; teams will consist of five to seven members. Projects should be from both program and administrative areas.

To identify potential projects, the QI Council will consider:

- Performance reflected in Ohio's Health Department Profile and Performance Database or within the FCPH performance management system,
- After-action reports,
- Customer satisfaction surveys,
- Staff survey results/suggestions,
- Program evaluations,
- Needs related to accreditation preparation,
- Community health assessment or systems performance assessment findings,
- Community health improvement plans, or
- Audit or compliance issues.

When selecting from among several identified project ideas, the Quality Improvement Council will consider things such as:

- Alignment with agency's mission or strategic plan,
- Number of people affected,
- Financial consequence,
- Timeliness,
- Capacity,
- Availability of baseline data or present data collection efforts, and/or
- Alignment with PHAB Domains or prior review feedback.

A summary of current and previous QI projects are listed in Appendix B.

Training

Introduction

Franklin County Public Health has incorporated QI training goals and objectives within our Workforce Development Plan (WFD). The WFD Plan includes goals, objectives, target audience (who will receive training), resources/sources of training, and the individual(s) responsible for leading each objective.

Training and Support

The Health Commissioner and members of senior staff have participated in various forms of QI training since 2009. The Environmental Health Director and the 2 Environmental Health Division Managers attended the OSU Summer Institute CQI Boot Camp in July 2014. Also in the Summer of 2014, FCPH implemented its introductory QII training for all FCPH staff. The training was provided by the Ohio State University, College of Public Health, Center for Public Health Practice. Employees completed 3 introductory on-line learning modules about QI which was followed by a 4-hour follow-up workshop conducted by OSU professional staff. This introductory training will be required for all new employees going forward.

Different types of training will be expected of QI Council Members, QI Team leaders and facilitators with consideration to maintaining QI knowledge among employees over time. Training will include:

- Orientation to agency QI initiatives, policies and projects for all new employees
- Mandatory completion of online QI learning modules for all new employees
- Mandatory completion of online QI learning modules for all current staff
- Review of QI concepts at all-staff meetings
- Just-in-time training by QI Council for active QI teams
- QI training and 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, etc.

The FCPH QI Training Plan is in Appendix E.

Evaluation and Monitoring

Introduction

This section describes the evaluation and monitoring for the QI Plan and projects.

QI Plan

This QI Plan will be reviewed and evaluated by the Council annually. Evaluation will occur through a survey of members and subsequent facilitated discussion. Evaluation will address:

- effectiveness of meetings,
- effectiveness of the QI Plan in overseeing quality projects and integration within the agency,
- clarity of the QI Plan and its associated documents,
- lessons learned,
- progress toward and/achievement of goals as outlined in the Goals, Objectives and Implementation section, and
- review of QI Team evaluations (see below).

An 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

QI Teams will provide project progress reports to the QI Council regularly. All teams will develop and submit project storyboards at the conclusion of the project. Within one month of a project's finalization, all 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.

Communication

Introduction

In order to support quality as a usual-way-of-business, quality-related news is communicated on a regular basis using a variety of methods to staff, Board of Health, and the general public. This section describes how quality and quality initiatives are shared.

Quality Sharing

All Franklin County Public Health Employees

- At least every other month, the Health Commissioner and other health department leadership will provide regular updates on quality initiatives, including QI Council membership, project outcomes, policy changes, and training opportunities to all staff
- At the Annual All-Staff Education retreat in the spring of each year:
    - QI projects completed within the past 12 months will report experiences and results
    - Team members will be recognized
    - A Quality Council representative will report plan progress and evaluation results
- Project storyboards will be posted in the main hallway by the mailboxes or in the lobby as appropriate.
- All QI Council meeting documents (agendas, summaries) and QI Team documents (agendas, summaries, data tools, storyboards, etc.) will be maintained on the FCPH employee portal for review by all staff members at any time.

Board of Health

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

Public

Project descriptions and results will be featured on the Franklin County Public Health website, and included in the annual report to the public.

Other

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

References and Resources

The Public Health Memory Jogger II: A Pocket Guide of Tools for Continuous Improvement and Effective Planning. Developed in partnership between GOAL/QPC and the Public Health Foundation. 2007.

Embracing Quality in Public Health: A Practitioner's Quality Improvement Guidebook. Michigan Public Health Institute.

List of Appendices

The following documents are included as appendices to this plan:

Appendix A: The ABC's of PDCA
Appendix B: Summary of QI Projects
Appendix C: QI Team Charter Template
Appendix D: QI Project Submission Form
Appendix E: QI Project Progress Reporting Form
Appendix F: QI Meeting Agenda & Notes Template
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Appendix H: QI Training Plan
Appendix I: QI Activity Timeline

Appendix A

The ABCs of PDCA

Grace Gorenflo and
John W. Moran[1]

The Public Health Accreditation Board's (PHAB) voluntary accreditation program emphasizes the importance of quality improvement, and has catalyzed health department activity in this arena. The Accreditation Coalition, comprising national public health leaders, defines quality improvement in public health as the following:

> "Quality improvement in public health is the use of a deliberate and defined improvement process, such as Plan-Do-Check-Act, which is focused on activities that are responsive to community needs and improving population health. It refers to a continuous and ongoing effort to achieve measurable improvements in the efficiency, effectiveness, performance, accountability, outcomes, and other indicators of quality in services or processes which achieve equity and improve the health of the community."[2]

The Plan-Do-Check-Act cycle (PDCA) has been embraced as an excellent foundation for, and foray into, quality improvement for public health departments, as it is both simple and powerful. Its simplicity comes from the systematic, straightforward and flexible approach that it offers. Its power is derived from its reliance on the scientific method, i.e., it involves developing, testing, and analyzing hypotheses. This foundation offers a means to become comfortable with a host of quality improvement methods and techniques, and to progressively evolve into addressing more complex problems, employing additional QI tools, and migrating to system-wide approaches to QI.

PDCA is based on the "Shewhart cycle," and was made popular by Dr. W. Edwards Deming, considered by many to be the father of modern quality control.[3] During his lectures in Japan in the early 1950s, Deming noted that the Japanese participants shortened the cycle's steps to the now traditional plan, do, check and act. It is interesting to note that Deming preferred plan, do, *study*, act because the translation of "study" from Japanese to English has connotations closer to Shewhart's intent than does "check."[4] This model has been around for 60 years and it is relevant in today's public health world, providing a defined and well tested process to achieve lasting improvement to the problems and challenges public health is now facing.

Appendix A

[1] Grace Gorenflo is Director, Accreditation Preparation and Quality Improvement, NACCHO and John W. Moran is Senior Quality Advisor to the Public Health Foundation and a Senior Fellow at the University of Minnesota School of Public Health in the Division of Health Policy and Management

[2] This definition was developed by the Accreditation Coalition Workgroup (Les Beitsch, Ron Bialek, Abby Cofsky, Liza Corso, Jack Moran, William Riley, and Pamela Russo) and approved by the Accreditation Coalition on June 2009.

[3] http://en.wikipedia.org/wiki/PDCA - accessed 12/2/2009

[4] http://en.wikipedia.org/wiki/PDCA - accessed 12/2/2009

Spending adequate time in each phase of the PDCA cycle is imperative to having a smooth and meaningful quality improvement process. The elements put forth here comprise a deliberate process based on the scientific method, and help ensure that improvement efforts are conducted in a way that will maximize the degree of success achieved.

Before beginning the PDCA process, it is important to assemble the team that will participate and to develop a communications plan about the effort.

Assemble the team

PDCA involves a team approach to problem solving. To begin, designate a team leader and team members, and address the following questions:

- Do we have the right people (i.e., those who are directly involved with the area needing improvement)?
- Does the team need training?
- Who will facilitate the team and process?

Another key step is to develop a team charter[5], which serves to provide focus and clarity regarding the team's work. Additional resources on tending to teams as they move through the PDCA process may prove useful to optimize the team's performance.[6]

Communication plan

Those involved with or impacted by improvements must be kept informed of the changes, timing, and status of the quality improvement project. It's important to establish a communication plan at the outset of the improvement effort, and to communicate and post progress on a regular basis, in a highly visible location, for all to see. Storyboards[7] offer a cogent picture of key points in the PDCA cycle, and can be an effective venue to tell the story as the team moves through its improvement work.

Phases of the PDCA Model

The phases of the PDSA model below assume that just one underlying, or root, cause will be addressed by testing just one intervention. When undertaking the PDCA process, the team may decide to address more than one root cause, and/or to test more than one intervention to address a root cause. In such instances, it will be important to measure the effect of *each* intervention on the root cause it is intended to address.

Appendix A

[5] J. Moran and G. Duffy. Team Chartering. *Quality Texas Newsletter*, April 10, 2010 (available at www.naccho.org/toolbox/ in the Quality Improvement Toolkit)

[6] Team Assessment, team charter, team manager self-assessment, team process review checklist, and T. Kuras and J. Moran. 20 Questions to Ask Your Team. *The Quality Management Forum*, Winter Edition, Vol. 23, Number 4, 1997 are all available at www.naccho.org/toolbox/ in the Quality Improvement Toolkit

[7] A number of national efforts to support QI in public health have used a storyboard format that was developed by the Michigan department of public health and can be accessed at http://nnphi.org/CMSuploads/Storyboard-Guidelines-FINAL-05868.pdf (accessed 3/26/10)

Plan: The purpose of this phase is to investigate the current situation, fully understand the nature of any problem to be solved, and to develop potential solutions to the problem that will be tested.

1. **Identify and prioritize quality improvement opportunities**. Usually a team will find that there are several problems, or quality improvement opportunities, that arise when programs or processes are investigated. A prioritization matrix[8] may help in determining which one to select. Once the quality improvement opportunity has been decided, articulate a problem statement. Revisit and, as appropriate, revise the problem statement as you move through the planning process.

2. **Develop an AIM statement**[9] that answers the following questions:
    a. What are you seeking to accomplish?
    b. Who is the target population?
    c. What is the specific, numeric measure(s) you are seeking to achieve?
    d. The measurable improvement objective is a key component of the entire quality improvement process. It's critical to quantify the improvement you are seeking to achieve. Moreover, the entire aim statement also will need to be revisited and refined as you move through the planning phase.

3. **Describe the current process** surrounding the problem in order to understand the process and identify areas for improvements. Flow charts and value stream mapping are two examples of methods to accomplish this.

4. **Collect data on the current process**. Baseline data that describe the current state are critical to further understanding the process and establishing a foundation for measuring improvements. The data may address, for example, time, people, space, cost, number of steps, adverse events, and customer satisfaction. A host of tools are available to collect and interpret data on the process, such as Pareto charts, histograms, run charts, scatter plots and control charts. The data collected must be aligned with the measures listed in the aim statement.

5. **Identify all possible causes** of the problem and determine the root cause. While numerous causes will emerge when examining the quality improvement opportunity,

it is critical to delve in and carefully identify the underlying, or root, cause of the problem, in order to ensure that an improvement or intervention with the greatest chance of success is selected. Brainstorming is a useful way to identify possible causes and a cause and effect/fishbone diagram and the 5 Whys are useful for determining the actual root cause.

[8] Bialek, R., Duffy, G. L., Moran, J. W. (2009). *The Public Health Quality Improvement Handbook.* Milwaukee, WI: ASQ Quality Press. This resource contains all of the quality improvement tools mentioned in this paper.
[9] http://www.accreditation.localhealth.net/MLC-2%20website/Michigans_QI_Guidebook.pdf - accessed 3/26/10

6. **Identify potential improvements** to address the root cause, and agree on which one to test. Once the improvement has been determined, carefully consider any unintended consequences that may emerge as a result of the implementing improvement. This step provides an opportunity to alter the improvement and/or develop countermeasures as needed to address any potential unintended consequences. Revisiting the aim statement and revising the measurable improvement objectives are important steps at this point.

7. **Develop an improvement theory**. An improvement theory[10] is a statement that articulates the effect that you expect the improvement to have on the problem. Writing an improvement theory crystallizes what you expect to achieve as a result of your intervention, and documents the connection between the improvement you plan to test and the measurable improvement objective.

8. **Develop an action plan** indicating what needs to be done, who is responsible, and when it should be completed. The details of this plan should include all aspects of the method to test the improvements – what data will be collected, how frequently data are collected, who collects the data, how they are documented, the timeline, and how results will be analyzed.

***Do*:** The purpose of this phase is to implement the action plan.

1. **Implement the improvement.**
2. **Collect and document the data.**
3. **Document problems, unexpected observations, lessons learned and knowledge gained.**

***Check/Study*:** This phase involves analyzing the effect of the intervention. Compare the new data to the baseline data to determine whether an improvement was achieved, and whether the measures in the aim statement were met. Pareto charts, histograms, run charts, scatter plots, control charts and radar charts are all tools that can assist with this analysis.

Appendix A

1. Reflect on the analysis, and consider any additional information that emerged as well. Compare the results of your test against the measurable objective.

2. Document lessons learned, knowledge gained, and any surprising results that emerged.

Act: This phase marks the culmination of the planning, testing, and analysis regarding whether the desired improvement was achieved as articulated in the aim statement, and the purpose is to act upon what has been learned. Options include:

1. **Adopt**: Standardize the improvement if the measurable objective in the aim statement has been met. This involves establishing a mechanism for those performing the new process to measure and monitor benchmarks on a regular basis

[10] Ibid.

to ensure that improvements are maintained. Run charts or control charts are two examples of tools to monitor performance.

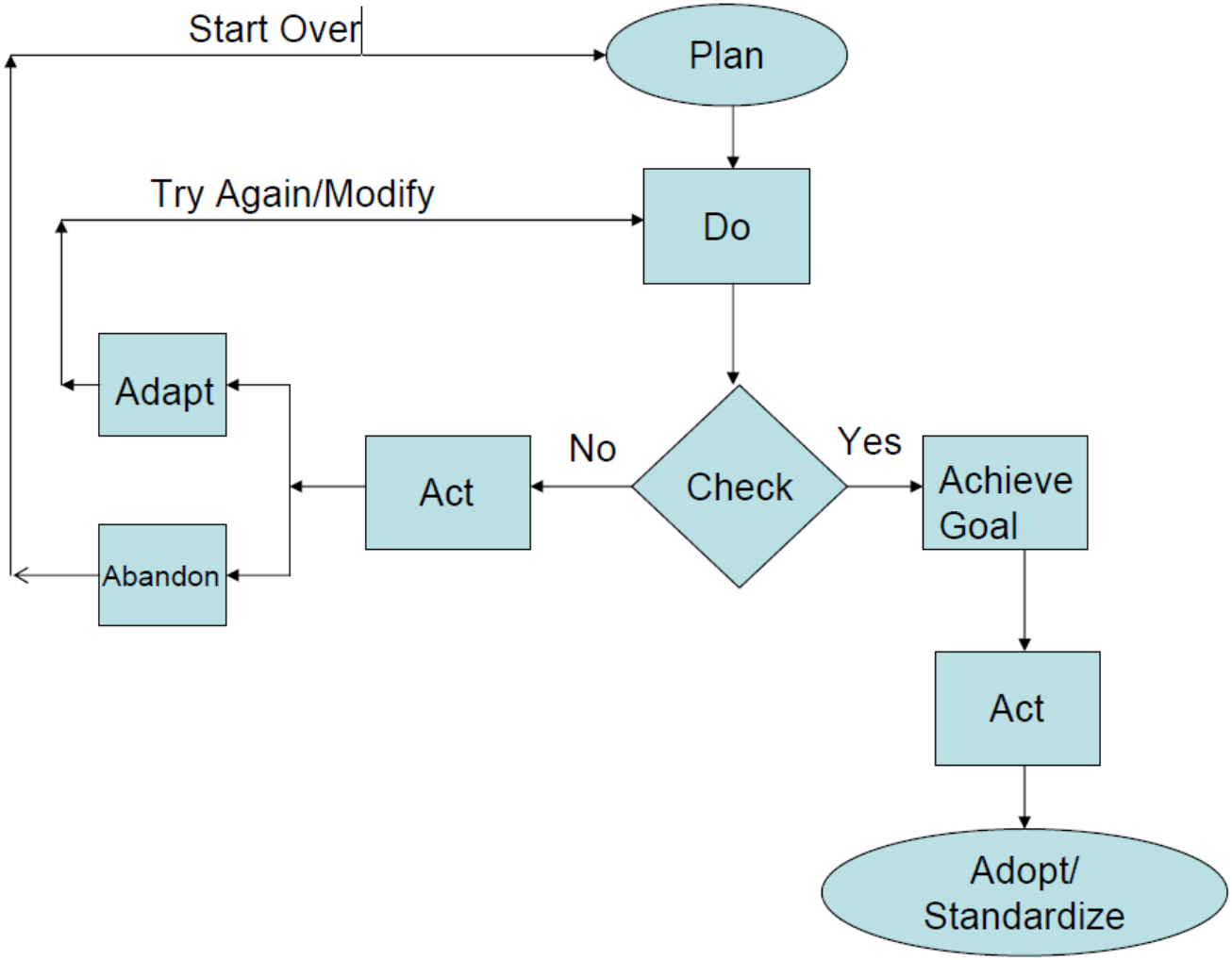
2. **Adapt**: The team may decide to repeat the test, gather different data, revise the intervention, or otherwise adjust the test methodology. This might occur, for example, if sufficient data weren't gathered, circumstances have changed (e.g., staffing, resources, policy, environment, etc.), or if the test results fell somewhat short of the measurable improvement goal. In this case, adapt the action plan as needed and repeat the "Do" phase.

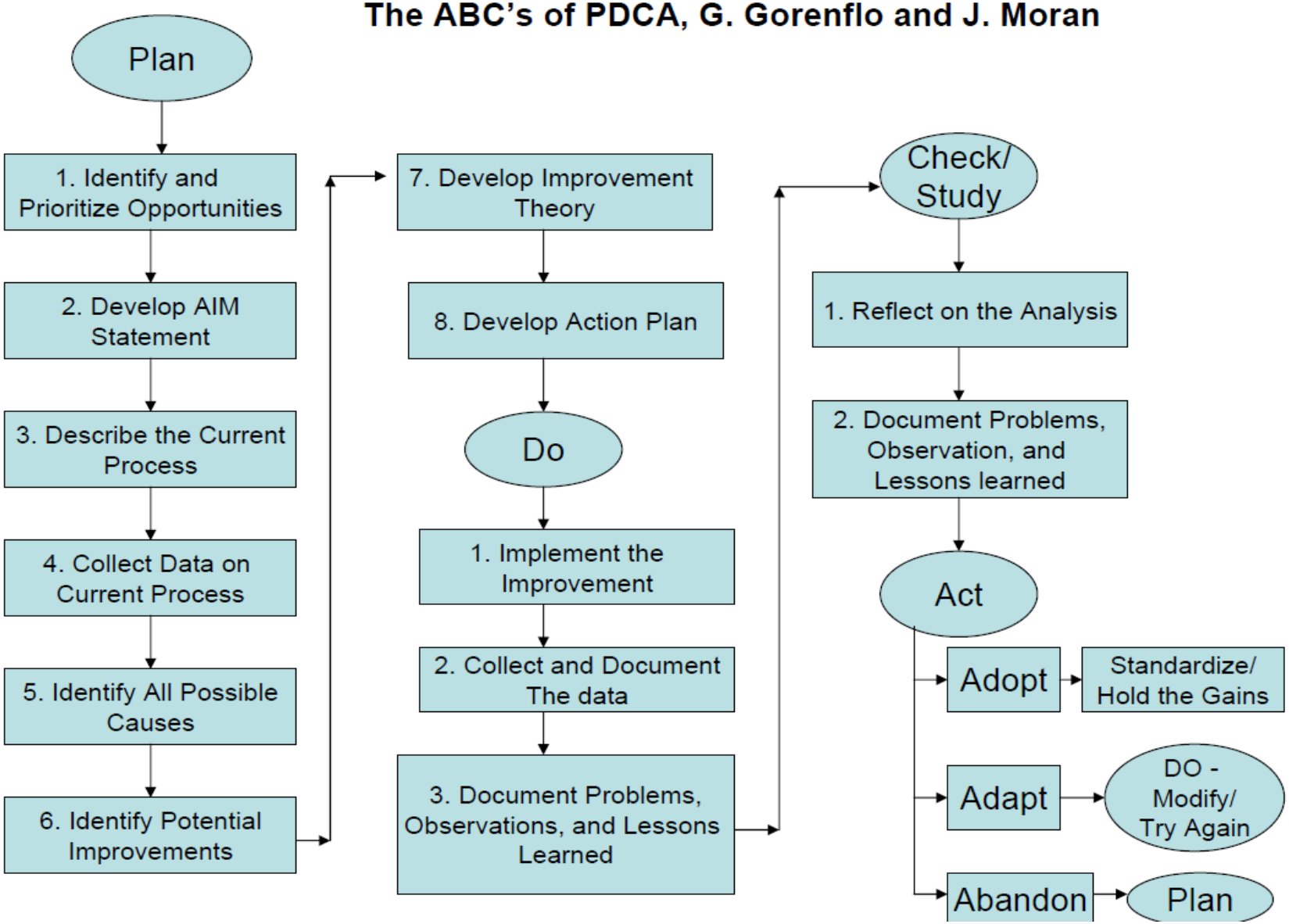
3. **Abandon**: If the changes made to the process did not result in an improvement, consider lessons learned from the initial test, and return to the "Plan" phase. At this point the team might revisit potential solutions that were not initially selected, or delve back into a root cause analysis to see if additional underlying causes can be uncovered, or even reconsider the aim statement to see if it's realistic. Whatever the starting point, the team will then need to engage in the Plan cycle to develop a new action plan, and move through the remaining phases.

PDCA offers a data-based framework based on the scientific method. This simple yet powerful format drives continuous and ongoing efforts 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.

Please direct any comments on this article to Grace Gorenflo at ggorenflo@naccho.org or John Moran at jmoran@phf.org.

Flow Chart of PDCA Cycle




The ABC's of PDCA, G. Gorenflo and J. Moran
Plan
1. Identify and Prioritize Opportunities
2. Develop AIM Statement
3. Describe the Current Process
4. Collect Data on Current Process
5. Identify All Possible Causes
6. Identify Potential Improvements
7. Develop Improvement Theory
8. Develop Action Plan
Do
1. Implement the Improvement
2. Collect and Document The data
3. Document Problems, Observations, and Lessons Learned
Check/ Study
1. Reflect on the Analysis
2. Document Problems, Observation, and Lessons learned
Act
Adopt
Standardize/ Hold the Gains
Adapt
DO - Modify/ Try Again
Abandon
Plan

Appendix B: Summary of QI Projects

Currently Active Projects

Project Name (focus)	Project Mission	Status/Outcome
Improving response time for Public Health Nuisance Investigations	To reduce the number of days from initial complaint until the first on-site visit by an EH technician or registered sanitarian to improve response to public health nuisance complaints	As of 12/31/2014: Team members have been selected; a facilitator from the Ohio State University was hired; several meetings held; Initial data about current time has been collected.

Projects Completed in Previous Years

Project Name (focus)	Project Mission	Outcome
April 2008 – Nov 2008 NACCHO Demonstration Grant Project	QI self-assessment, QI training, QI project: Develop links with our Franklin County legislative leaders to inform, communicate with, and serve as a primary resource for public health priorities in our community.	Implemented e-mail communications with Franklin County Commissioners
6/2009 – 6/2011 Robert Wood Johnson Foundation (RWJF) funded Franklin, Summit and Hocking County health departments to conduct a collaborative QI project Public Health Foundation (PHF)	To improve immunization rates for children ages 0-24 months using a multi-county collaborative	The collaborative provided increased opportunities for networking and learning Each health department identified different needs and implementation activities to achieve increased rates

Phone Customer Referral QI Project 2011	To document the number of calls about seniors the immunization nurse receives on a daily basis, and to arrange a system that would re-direct those calls to another line/person.	Staff implemented various aspects of the proposed ideas
Water Quality Partnership 2012	To improve customer service for those residents required to connect in designated sanitary sewer projects	Sanitary sewer projects were not completed; improvement could not be implemented

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Appendix C: Team Charter Template

Team Charter

(Division or Program)

Project mission	(may be later revised by team) To improve the (ABC) process by (increasing, decreasing, maintaining) (measure/quality indicator #1) and (increasing, decreasing, maintaining) (measure/quality indicator #2).
Team sponsor	(Individual(s) who own the existing process and have authority to approve changes)
Background	(Strategic importance, what has been happening, importance to customer)
Boundaries	(limit on scope of process – change allowable as defined by sponsor, legal restrictions, budget, etc.)
Team authority	(e.g., pilot improvement, just recommend)
Completion date	(estimate)
Meeting frequency & duration	(how often will team meet)
Ground rules	(edit as needed) Listen for understanding – stay curious Be candid, courageous and considerate; keep confidences when needed Fully engage – be open, suspend judgment, and take risks! Start and end on time Be prepared No phones or e-mails unless required for this project or in an emergency Learn together Decisions are made by consensus

*…improving **how** we do **what** we do to meet the needs and expectations of the customer*

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Team Charter

(Division or Program)

Team roles (edit as needed)

Title	Role
Team Leader	Leader among equals; full-fledged team member; calls meetings; arranges logistics; spokesperson; facilitates meetings; does *not* make decisions independently
Team Members	Works toward team mission; adheres to rules; contributes knowledge, ideas, skills; strives for consensus; completes assignments
Timekeeper	Assures that team sticks to agenda
Scribe	Takes notes & records work
Sponsor	Individual(s) who own(s) the existing process and have/has authority to approve changes

Team members and roles (edit as needed)

Member	Role	Contact

Other (additional information, if needed, such as explicit 'as is' and 'desired' states, reporting expectations, added responsibilities, etc.)

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Appendix D: Project Submission Form

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Quality Improvement Project Submission Form

Program Name Here

To initiate a quality improvement idea or project, complete this submission form. Submission forms can be emailed to any quality improvement council member and will be reviewed and either approved or declined within thirty (30) days.

Employee Name:	**Date:** Click here to enter a date.
Program:	
Idea/Project:	
What would you like to improve?	
Do you have data available to describe the process you are trying to improve? ☐Yes ☐No ☐Not Sure	
If yes, please describe here:	
What is the desired result? (Example: Reduced Turn Around Time)	
Who will benefit? (Check all that apply) ☐Program ☐Staff ☐Public ☐Other:	

With which of the following FCPH strategic plan goals or priorities does this QI project align? (Check all that apply)	
☐	Goal 1: Promote Health and Prevent Disease
☐	Goal 2: Build Relationships
☐	Goal 3: Emphasize a Culture of Continuous Quality Improvement and Customer Service
☐	Goal 4: Achieve and Maintain Public Health Accreditation and a Competent Workforce
☐	Other:
☐	Other:

QI Proposal Approval	Approved (Date)	Declined (Date)
FCPH QI Council		

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QI Project Progress Reporting Form

Program Name Here

Team leader should complete this form and report to QI Council monthly.

PLAN	**Program/Area:**			
	Problem:			
	Aim:			
	Impact:			
	Measures: (Include both process and outcome measures.)	**Outcome Measure:** **Process Measures:**		
	Team Members:			
	Month/Year:		**Reported By:**	

		Please summarize the key action steps you have taken in the past month.	Describe the results of your action steps and what you learned from the process.	
DO	1.			CHECK
	2.			
	3.			
	4.			
	5.			

	Was desired outcome achieved? Did you adopt, adapt or abandon?
ACT	

What were the resources used this past month?	
Meeting time (hours)	
Staff hours	
Travel	
Equipment	
Supplies	
Printing	
Other:	

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Agenda and Notes

Program or Project Name

QI Project Meeting

Location
Date
Time

Meeting purpose

Discussion topics

The table below identifies the topics to be discussed, discussion leaders, and allotted time.

Time	Topic	Discussion Leader	Expected Outcome

Notes

Topic	Discussion	Decision/Action/Assignment

Next meeting

Date
Time
Location

---

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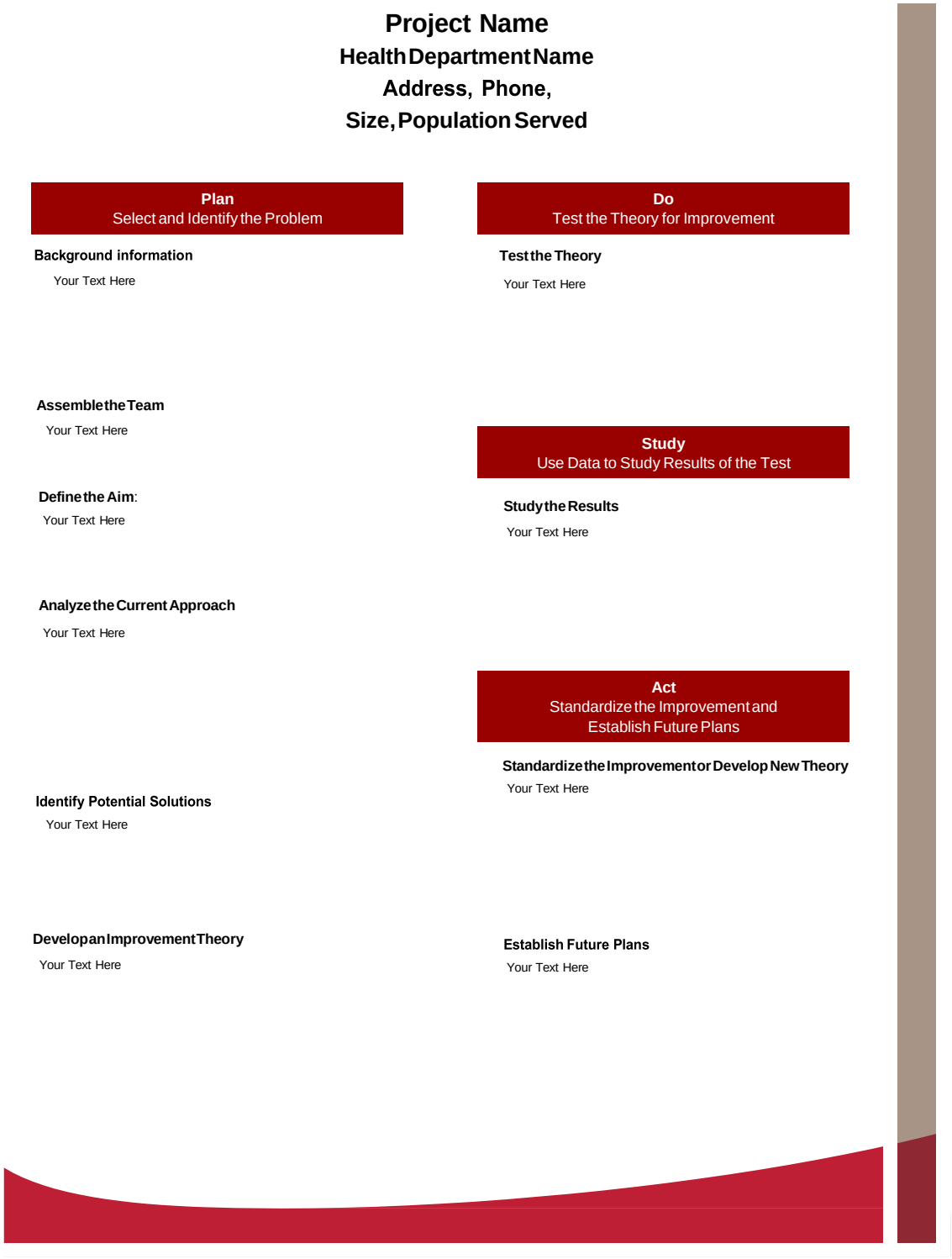
Appendix G: QI Project Storyboard Template



Appendix H: QI Training Plan

The FCPH QI Training Plan lists the goals for staff training and development in quality improvement. This plan is consistent with the FCPH Strategic Plan (Goal 3: Emphasize a Culture of Continuous Quality Improvement and Customer Service); and the FCPH Workforce Development Plan (Goals and Objectives; Appendix A: Training and Curriculum Schedule).

Goal	Objectives	Target Audience	Resources	Responsible
Establish a culture of quality within the agency	By June 2016, each senior staff member will sponsor an internal quality improvement team	Senior Staff	QI Council; External Facilitator or subject matter expert	Health Commissioner
All staff will have an introductory understanding about quality improvement in public health	Within the first year of employment, all staff will have completed online modules: CQI-the fundamentals and CQI-tool time	All staff	Online course offered by OSU (http://cph.osu.edu/practice/cqi-public-health-fundamentals) Online course offered by OSU (http://cph.osu.edu/practice/cqi-public-health-tool-time)	Managers and Supervisors; QI Council; Workforce Development Team (See also: Appendix A: Training and Curriculum Schedule, FCPH Workforce Development Plan)
Provide continuing education for quality improvement	Include CQI training updates at the Annual Education Retreat annually	All Staff	Internal and external subject matter experts	QI Council; Workforce Development Team
Develop a pool of trained CQI facilitators	Identify appropriate training by December 2015	Interested Staff	Ohio Accreditation Learning Community; Universities; subject matter experts	Health Commissioner, QI Council

Appendix I: QI Activity Timeline

Listed below are the major activities of the FCPH Quality Improvement (QI) Council including timeline and designated FCPH staff responsible for completion.

Activity	Timeline/frequency	Person responsible
Quality Improvement (QI) Council meetings	At least every-other-month: January, March, May, July, September, November	QI Council Chair (Health Commissioner) QI Council
Review, evaluate, revise, approve QI plan	Annually in January: survey QI Council members Annually in March: Evaluation discussion Annually in April: revisions made to the QI plan as needed	Workforce Development Coordinator QI Council
Select new QI Council representatives	Annually; no more than half of members/year	QI Council
Select QI projects and teams	Ongoing	Il Council
QI Project reports to Quality Council	Every-other-month: February, April, June, August, October, December	QI Team leaders
Storyboards to QI Council	Within one month of project conclusion	QI Team leaders
Evaluation to QI Team members	Within one month of project conclusion	Workforce Development Coordinator
Report to Board of Health • Projects • Plan updates • Evaluation	Twice a year: April and October	QI Council Chair (Health Commissioner)
Include Quality Improvement feature on the Public Health Connection Call	Twice a year	Communication Director
Reports at all-staff education retreat: • Project reports • Team recognition	Annually in May	QI Council; QI teams

Activity	Timeline/frequency	Person responsible
• QI Council report (plan updates, evaluations)		
Post storyboards by employee mailboxes or in lobby as appropriate	Within one month of project conclusion	Workforce Development Coordinator
Reports to public: • Project feature on website • Annual report	 Ongoing Annually in February	 Communication Director & Webmaster Communication Director
Maintenance of QI Council and team records on shared drive	Ongoing	QI Team Leaders; Workforce Development Coordinator