

2017 COLUMBUS PUBLIC HEALTH QUALITY IMPROVEMENT PLAN

Quality Improvement/Population Health
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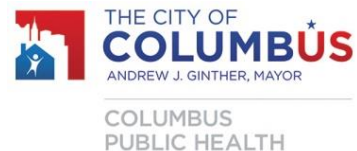
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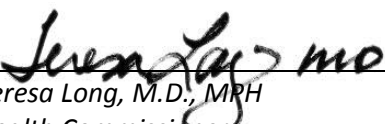
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We hereby endorse the 2017 Columbus Public Health Quality Improvement Plan.



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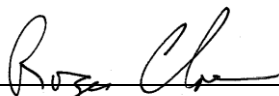
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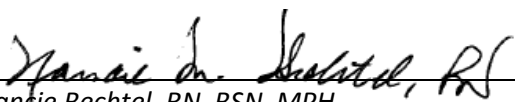
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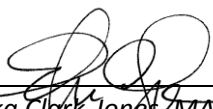
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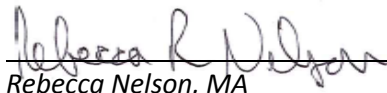
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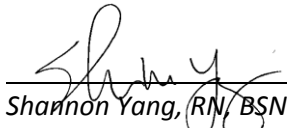


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PURPOSE & INTRODUCTION

I. Purpose

The purpose of the Quality Improvement (QI) Plan is to provide the framework and a guide for the agency toward achieving a culture of quality. The QI Plan reflects both Public Health Accreditation Board (PHAB) accreditation standards and the mission, vision, values, goals and strategic priorities of the agency. The QI Plan is the framework to guide processes using a standard QI approach throughout the agency.

The 2017 plan focuses on the central theme of advancing a culture of quality through leadership, QI structure and infrastructure, continuous process improvement, capacity building, customer satisfaction, QI communication and recognition of QI efforts. The plan adjusts annually and works in synergy with other agency plans to accomplish agency goals.

II. Mission, Vision, Values, Goals & Strategic Priorities

The QI Plan addresses culture and process improvement efforts required to support the following mission, vision, values, goals and strategic priorities of Columbus Public Health (CPH).

A. Mission

"The mission of Columbus Public Health is to protect health and improve lives in our community."

Tagline: Columbus Public Health...Protecting health, improving lives.

B. Vision

1. The Columbus community is protected from disease and other public health threats, and everyone is empowered to live healthier, safer lives.
2. CPH is the leader for identifying public health priorities and mobilizing resources and community partnerships to address them.

C. The **Values** that drive the culture of CPH are:

1. Customer focus;
2. Accountability;
3. Research/Science-based; and
4. Equity and Fairness.

D. The **Goals** that drive the culture of CPH are:

1. Identify and respond to public health threats and priorities.
2. Collaborate with residents, community stakeholders and policy-makers to address local gaps in public health.
3. Empower people and neighborhoods to improve their health.
4. Establish and maintain organizational capacity and resources to support continuous quality improvement.

E. Strategic Priorities:

QI activities at CPH also strive to systematically assess and improve care and service to meet the following 2015-2016 Strategic Priorities approved by the Board of Health in December of 2015:

1. Reduce infant mortality.
2. Reduce overweight and obesity.
3. Stop the spread of infectious diseases.
4. Improve access to public health care.

F. 10 Essential Public Health Services:

QI activities at CPH are conducted to strive for the highest quality of services while meeting the needs and expectations of customers. The goal is to continuously improve the execution and design of processes across the 10 Essential Public Health Services (Center for Disease Control and Prevention, 2010):

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

This section provides a description of the current state of quality as well as linkages to other agency plans. Further, this section discusses QI philosophy and QI process used to identify and implement best practices around building a culture of QI. Concepts in this plan are based primarily on the following evidence-based sources:

- Roadmap to a Culture of Quality Improvement - NACCHO Roadmap;
- IHI – Institute for Healthcare Improvement;
- Embracing Quality in Public Health: Michigan’s Quality Improvement Guidebook; and
- PHAB Standards and Measures.

I. Description of Current State of Quality

The creation and use of data sources, such as dashboards and customer satisfaction surveys, is currently a strength at CPH. The framework sets CPH up to be able to take another step towards a culture of quality.

Leadership implemented a QI Planning Session in early 2016 to begin the process of embedding CQI throughout the agency. An unofficial assessment suggested that CPH was at a Phase 4 on the Roadmap to a Culture of Quality Improvement. To better understand specific areas of strengths and weakness around a culture of quality, the Strategic Advisory Team and Quality Council will participate in the self- assessment tool provided by NACCHO in the first quarter of 2017. The intent of this tool is to gain a solid understanding of the barriers, drivers and nuances along the journey to a QI culture.

CPH QI Maturity

Further review suggests additional characteristics about CPH’s QI maturity:

- A.** QI efforts are practiced in isolated instances;
- B.** Data is used, but not consistently across programs, and data is not used routinely for decision making;
- C.** Staff views QI as extra work;
- D.** There is a general lack of knowledge of QI across the organization; and
- E.** There is more QI activity and capacity building occurring, but it is inconsistent and/or not reported.

II. Links to Other Agency Plans

The QI Plan is linked in a coordinated fashion with the Strategic Plan, the Health Equity Plan, the Workforce Development Plan and the Community Health Improvement Plan (CHIP).

A. QI Plan

The purpose of the QI Plan is to guide the development, implementation, monitoring and evaluation of Department wide efforts to build a culture of CQI throughout the organization. The utilization of operational Performance Measures is incorporated into this plan in order to measure how the department is functioning.

B. Strategic Plan

The Strategic Plan outlines the goals of the health department in the next 3-5 years and includes the vision, mission, values, goals and strategic priorities for the department.

C. Health Equity Plan

The Health Equity Plan encapsulates CPH's work in regards to improving health equity through the standard areas of

1. Health Equity related PHAB measures;
2. Healthcare Equality Index Criteria (HEI);
3. Community data requests;
4. National Culturally and Linguistically Appropriate Services (CLAS) Standards.

D. Workforce Development Plan

The Workforce Development Plan provides training vital to quality improvement and performance measure outcomes and targets along with building efficiency in the workforce.

E. Community Health Improvement Plan (CHIP)

Ultimately, portions of all these plans are embedded throughout the Community Health Improvement Plan (CHIP) so that the community needs are addressed as well.

III. QI Philosophy

A. Quality Improvement Defined

QI in public health is the use of a deliberate and defined improvement process 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 (PHAB, 2013).

B. Culture of Quality Defined

Health departments with a culture of quality will embody these characteristics (Gorenflo, 2010):

1. The customer is front and center.
2. Management expects staff to solve problems.
3. Problems themselves are not only freely aired but also embraced as opportunities for improvement.
4. QI is integrated with the strategic plan.
5. Improvement is continuous.

The culture of an organization reflects its core values, guiding principles, behaviors and attitudes that come together and contribute to its operations. Attaining a culture of quality is not an overnight phenomenon. The NACCHO Roadmap defines the culture of quality to reflect a work environment that requires the routine use of data to examine processes to enhance all aspects of operations. A mature culture of quality is exhibited by an agency when QI is fully embedded into the way business and operations are conducted across all levels, departments and programs. Leadership and staff are fully committed to quality and the results of QI efforts are communicated internally and externally. Even if leadership changes, the basics of QI are so ingrained in staff that root causes of problems are always identified and staff feel empowered to be able to work towards solutions (Roadmap to an Organizational Culture of Quality Improvement, 2012).

C. Transforming Culture

Transforming culture to embrace QI requires strong commitment and deliberate management of change over time and includes the following foundational elements (Roadmap to an Organizational Culture of Quality Improvement, 2012):

1. Leadership Commitment: Leadership's primary role is change management for both the process and human sides of change.
2. QI Infrastructure: To ensure QI efforts are aligned with the strategic direction of the department and linked to organizational performance (see Appendix B Culture of Quality Diagrams).
 - a. Performance Management System
 - b. PM/Quality Council
 - c. QI Plan
 - d. Employee Empowerment and Commitment
3. Customer Focus
4. Teamwork and Collaboration
5. Continuous Process Improvement

D. Accreditation

CPH achieved full accreditation status from PHAB in March of 2014. PHAB was, and continues to be, a strong driver supporting the role of quality improvement in public health. To maintain accreditation status, CPH must demonstrate how specific QI activities meet yearly requirements through an Accreditation Annual Report which documents:

1. Updates on improvements made to the QI Plan;
2. Changes made to the Performance Management System;
3. Assessment of the department's QI culture, utilizing the NACCHO Roadmap;
4. Steps taken to improve the following characteristics of a QI culture:
 - a. Leadership;
 - b. QI Champions;
 - c. QI Training;
 - d. Staff Engagement;
 - e. Resources; and
 - f. Data; and a
5. Detailed description of a recent QI project implemented by the health department.

IV. QI Process

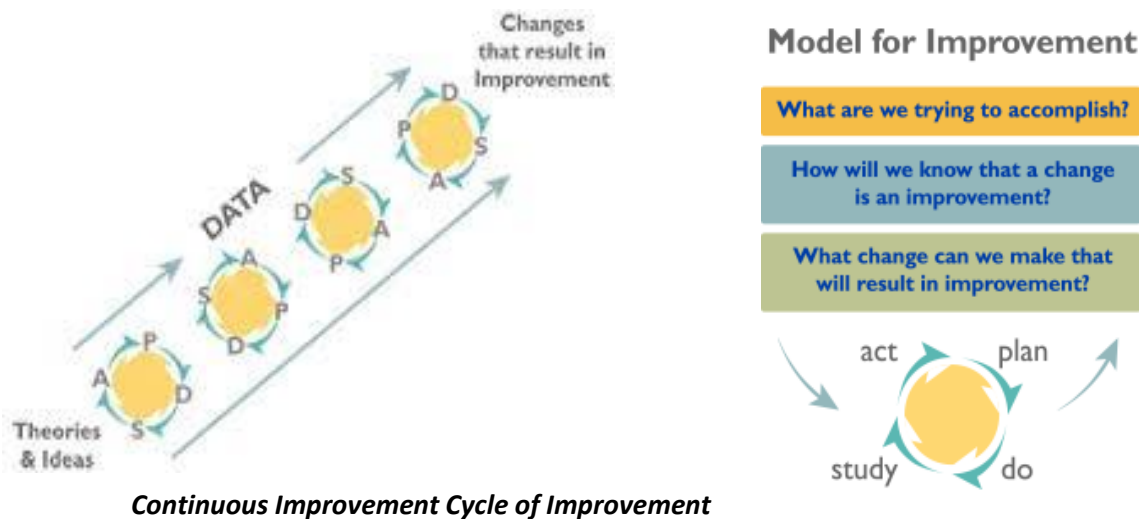
An organization with a QI culture supports continuous improvement at all levels. The use of QI tools (PDSA cycles, feedback loops, documentation to describe the monitoring and reporting of process and outcomes), occurs in daily work. There is routine use of data to examine processes to enhance all aspects of operations and searching for root causes of problems. QI tools are utilized to establish priorities and consider advantages and disadvantages of various activities and approaches to support continuous process improvement. There is an understanding of how to set clear measurable goals to document and test gradual improvements in everyday process to reduce variation and redundancies, improving quality of services (performance dashboards) and increasing customer satisfaction (customer satisfaction surveys).

A. Institute for Healthcare Improvement (IHI)

IHI promotes the following model for improvement, asking the questions:

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What changes can we make that will result in improvement?

The IHI model promotes an understanding of what changes can be made that result in improvement and focuses on using measures to evaluate the impact of a change.



PDSA/PDCA cycles have been widely used in public health and are good models for those relatively new to QI. Other models such as Lean or Six Sigma are generally used by organizations with more experience when addressing more complex issues.

QI STRUCTURE

CPH is committed to improving quality in all of its services, processes and programs and to maintain accreditation through PHAB. A formal structure and engaging in continuous quality improvement is expected at all levels across the department.

I. Quality Improvement Management Roles and Responsibilities

A. The Board of Health (BOH)

The BOH provides leadership, support and resources for Quality Improvement (QI) initiatives by recognizing and establishing QI as a priority; approval of the annual QI plan; and recognizing improvements at the Department.

B. The Strategic Advisory Team (SAT)

The SAT demonstrates knowledge and leadership support for CQI for the Department. SAT provides oversight and guidance for operational performance management; recognizes improvements; and incorporates QI concepts into daily work. The SAT group also reviews and provides oversight of resources and feedback to the Quality Council on priorities and QI initiatives. The SAT is represented on the Quality Council.

C. Staffing and Administrative Support

The Office of Planning and Quality Improvement is within the Division of Population Health (see Appendix C CPH Organizational Chart). The office contains 5 positions to support quality improvement, customer satisfaction surveys, performance measures and PHAB accreditation requirements across the department.

D. The Quality Council

The Quality Council (See Appendix D QI Objectives) is the source for leadership and direction of quality improvement projects within the department. The QC provides support for building a culture of continuous

quality improvement. The Council focus is on building QI capacity on all levels; communicating and sharing QI activities and resources; and recognizing QI work and successes across the department.

The Quality Council will review the 2017 QI Objectives quarterly to:

- Develop and implement the QI Plan and QI Objectives (see Appendix D QI Objectives);
- Monitor plan performance, analyze performance gaps and make recommendations for closing gaps;
- Review the QI Plan and adjust as required to reflect current and emerging priorities;
- Set 2017 Yearly QI Goals and Objectives (see Appendix D QI Objectives);
- Update SAT and Board of Health on QI activities;
- Communicate to all staff about QI efforts; and
- Submit to SAT an annual update of QI initiatives.

1. Membership

The Quality Council members consist of the QI Improvement Coordinator, Accreditation Coordinator, Epidemiologist, Workforce Development Manager, Safety Officer and representation from all departmental Divisions and Centers. SAT members are also invited to participate in all QC meetings. Rotation of additional staff at quality meetings provides an opportunity to do the following:

- a. Provide educational opportunities for staff to attend sessions with the intent that they become quality ambassadors in their area and
- b. Provide project support (see Appendix E QC Membership).

2. Quality Council Guiding Principles

The QC will operate using the following principles:

- a. All work is grounded in CQI methodology, including the use of CQI tools to increase understanding and facilitate the improvement of outcomes (see Appendix F QI Tools);
- b. Decisions are data-driven and evidence-based in addition to using and respecting peoples' knowledge and experience;
- c. The customer perspective is central to decision-making striving to consistently meet or exceed customer expectations;
- d. Processes are transparent, collaborative and inclusive;
- e. Engagement and accountability are fostered with all persons involved in CQI efforts; and
- f. The focus is on learning and improvement over judgment and blame, and values prevention over correction.

3. Decision Making Process

The QC strives for consensus on all decisions and agrees to abide by vote in absence of consensus. Distribution of meeting agendas, summaries, and arrangements for meeting needs is supported, as needed, through administrative support staff from either the Division of Population Health or the Health Commissioner's Office. QI Teams are accountable to the QC. The decision making tool algorithm assists in deciding if a project is warranted and provides a graphic of the types of processes that can be utilized to complete the project (see Appendix G Decision Making Algorithm).

4. Budget Alignment

The first annual QI Planning session occurred in 2016. The purpose was to assign project teams around the priorities listed in the strategic plan. Future planning sessions will align with the budget cycle in order to better allocate and monitor resources required for quality support.

E. Program Managers

Program managers provide leadership, support and resources for QI initiatives as follows.

1. Utilize performance dashboard measures, customer satisfaction survey results, accreditation requirements and grant deliverables to monitor operational performance of their program/programs.
2. Meet regularly with all staff to have conversations about performance dashboard measures, customer satisfaction survey results, accreditation requirements and grant deliverables to identify gaps in measures and/or processes.
3. Document, track and trend gaps and identified action items to report to the QC quarterly.
4. Facilitate the implementation of QI activities and an environment of CQI at the program level and front line staff level.
5. Identify and initiate problem solving processes and/or QI projects.
6. Incorporate QI concepts into daily work.

F. All CPH Staff

All staff is responsible for identifying areas for improvement and suggesting improvement projects to address these areas through:

1. Participation in QI projects;
2. Collection and reporting of data for QI projects;
3. Developing an understanding of basic QI principles and tools by participating in QI training; and
4. Incorporating QI concepts into daily work.

PROJECTS

The goal in 2017 is to shift the QI culture to one of CQI by incorporating QI tools into everyday work activities. By using at least, but not limited to, performance dashboards, customer satisfaction survey results, reaccreditation standards and grant deliverables as guides. All staff is expected to use data to drive improvement initiatives and to share this information transparently and regularly across the department.

At a minimum, staff is expected to utilize SMART goals and utilize the questions: “*What are we trying to accomplish?*” “*How will we know that a change is an improvement?*” and “*What changes can we make that will result in improvement?*” to guide their activities. QI teams will include individuals from all levels: frontline staff, supervisors, program managers, division directors, leadership and other stakeholders.

Project length and/or duration will vary according to identified needs. QI projects can be within a program or interdivisional. Frontline staff is encouraged to utilize QI tools and may contact the chair of the QC for support as needed. The PDSA Rapid Cycle Improvement Tool is an example of what can be used by a program or frontline staff person to quickly identify if a change is an improvement. Projects that have an anticipated longer duration and/or broader team membership can utilize methods such as Lean or Six-Sigma (Kaizen) to address improvement activities.

I. Project Reporting

QI project teams are asked to report their activity to the Quality Council for general awareness of QI activities and to track, trend and celebrate accomplishments by frontline staff. For projects with longer duration and/or broad team membership, regular reporting is required to ensure alignment with strategic priorities, and to assist in providing resources where necessary. Reporting requirements are established by the QI Council.

The Quality Council asks for quarterly updates. Projects will be monitored and tracked with a (new) communication framework template (see Appendix H Communication Framework Template) to be implemented by January 2017 across the department. The purpose of the template is to provide a method to capture and document conversations

about QI initiatives and to create a feedback loop that includes follow up and action plans by supervisors and/or front line staff.

II. **Project Summation**

Once the project is complete, each team needs to complete either a brief write-up about the project (i.e. a one page snapshot or a simple narrative) or create a Storyboard to celebrate lessons learned (see Appendix I Storyboard Template). The intent is to share with staff, leadership, the BOH and other public health professionals to demonstrate the projects completed in the health department and to share success stories.

III. **Prioritization of Projects:**

The decision to undertake an initiative is based upon agency priorities and project limitations (see Appendix G Decision Making Algorithm). Factors taken into consideration are:

- A. Alignment with agency's mission or strategic plan;
- B. Number of people affected;
- C. Financial consequence;
- D. Timeliness;
- E. Capacity; and
- F. Availability of baseline data or present data collection efforts.

PERFORMANCE MANAGEMENT

I. **Program Performance Measures**

A. **System**

CPH uses performance data and displays it in a visual format or "performance dashboard". The dashboard presents operational performance measures (chosen by individual leaders/department managers) to monitor, track and trend the information.

B. **Alignment**

Each performance dashboard measure is aligned with one or more of the following (see Appendix J 2017 Performance Management Measurement Form):

- 1. Strategic Plan goals;
- 2. Strategic Plan priority areas; and
- 3. CPH Health Equity Plan standard areas.

C. **Reporting**

The QC follows a formal process for routinely reporting progress against performance standards/targets to stakeholders (e.g., governing entity, managers and leaders) including methods and frequency of analysis and reporting (see Appendix H Communication Framework Template).

D. **Annual Updates and Revisions**

All program measures and indicators are reviewed and revised annually prior to the New Year by the managers specific to their program. Final approval is completed by, in order, the program managers, the SAT and CPH Quality Council. Measures or targets are adjusted throughout the year based on discussions that occur among staff (see Appendix J 2017 Performance Management Measurement Form).

E. **Data Entry**

Throughout the year, CPH program managers, or their designees, are responsible for updating their data into the performance dashboards. The expectation is this will be done within 30 days of the close of each quarter, depending on when results are due. Program managers are also asked to enter "Quarterly Notes" and "Action

Steps” on each measure to document their discussions with staff. This is regardless of the measure’s status of “red”, “yellow” or “green”.

II. Program performance measure data results are reviewed based on the following:

- A.** The QC reviews all program performance measure data results on a quarterly basis (see Appendix K 2017 Reporting Calendar).
- B.** The Strategic Advisory Team (SAT) reviews all program performance measure data results on a quarterly basis and use the communication framework template to indicate what specific information should be communicated to the front line staff (see Appendix H Communication Framework Template).
- C.** Program managers, or their designees, must include a narrative note and a plan of action in the “Quarterly Notes and Action Steps” section to meet this requirement. For specific measures that fall > 10% below the designated target (i.e. are red or yellow on the dashboard), a quarterly note, action step, and timeframe for completion is required. This information is to be shared with frontline staff to develop an improvement plan.
- D.** Monthly division reports to SAT include documentation regarding program dashboard measures with front line staff, creating a feedback loop (see Appendix H Communication Framework Template).
- E.** At a minimum, the QC and SAT will review all program performance measures that exceed > 10% of the designated target to assist in analyzing variances and make recommendations for further assessing gaps in performance.
- F.** Staff will present an annual summary of the Performance Dashboards to the Board of Health on an annual basis.

COMMUNICATION

QI teams begin to break down silos by sharing results achieved and lessons-learned with staff from other programs or divisions.

In order to support the spread of continuous quality improvement throughout the department, a regular communication plan is followed. Quality initiatives are shared in the following fashion.

I. BOH

Annual updates are provided to the BOH regarding quality improvement, including performance management and how it relates to the strategic plan priorities.

II. Leadership Meetings

The QC Chairperson/designee is responsible to share the updates with SAT on a quarterly basis. This includes updates on customer satisfaction results as well as programmatic performance measures. The QC Chairperson reports significant issues, findings, and actions to SAT.

Items discussed in SAT which are not resolved and require resolution with additional input from staff are clearly documented and distributed to the appropriate staff using the Communications Framework Template (see Appendix H Communication Framework Template).

III. Quality Council (QC)

The QC meets monthly, or more often as needed. At a minimum, quarterly updates are provided to the QC by the operational managers and supervisors describing use of performance dashboards, customer satisfaction survey results, reaccreditation requirements and pertinent grant deliverables.

IV. Management

Significant issues, findings and actions are reported, as necessary, to appropriate leaders/individuals and/or other committees, particularly those that support aspects of the QI program utilizing performance dashboards,

satisfaction survey results, reaccreditation requirements and pertinent grant deliverables. As appropriate, updates are shared at the Information Sharing Forum.

V. Other Meetings

To help spread a culture of quality at all levels of the organization, QI updates will be regular agenda items at SAT meetings as well as divisional and programmatic staff meetings. QI updates will be included in the annual all staff meeting as well as but not limited to management meetings such as the Information Sharing Group (ISG). The intent is to keep current on the quality project progress and to engage front line staff in process improvement efforts. Documentation of discussions and outcomes of change processes will go to the QC regularly.

VI. Word of Mouth

Staff involved in projects share success and struggles with each other.

VII. Current and Past Projects

A copy of the storyboards or write-ups of projects completed at CPH is maintained by the Quality Council Chair.

MONITORING & EVALUATION

This section describes the monitoring and evaluation for the QI Plan and associated goals.

I. Monitoring/Tracking

A. Annual QI Plan Projects

The Annual QI Plan will document measures and targets in a worksheet in the performance dashboard excel workbook. The status will be shared with leadership on at least a quarterly basis. Discussions of these projects may also be a standing agenda item for SAT meetings.

B. Quality Council Progress Reports

The Quality Council will review and request action plans as needed for the following items on a quarterly basis:

1. QI Planning Updates;
2. QI Project Team Updates;
3. Customer Satisfaction Data;
4. Performance Dashboard Data;
5. Incident Report Data;
6. PHAB Updates; and
7. Workforce Development Updates.

C. SAT Progress Reports

The Leadership Team will review and request action plans as needed for the following items on a quarterly basis:

1. QI Planning Updates;
2. Customer Satisfaction Data;
3. Performance Dashboard Data; and
4. Reaccreditation requirements.

II. Evaluation

A written evaluation of the Annual QI Initiatives is completed at the end of each calendar year.

- A. The evaluation summarizes the goals and objectives of the CPH Quality Improvement Plan and includes the following:
 - 1. QI activities conducted during the past year, including the targeted process, systems and outcomes;
 - 2. Performance indicators utilized;
 - 3. Findings of the measurement, data aggregation, assessment and analysis processes; and
 - 4. QI initiatives taken in response to the findings.
- B. The QC Chairperson is responsible to complete the evaluation with the input and approval of the members of the QC.
- C. Once the evaluation is approved by the QC, it is submitted to SAT for review.

TRAINING

The QC identifies and defines general goals and specific objectives to increase QI capacity to be accomplished each year. These goals include training of clinical, environmental and administrative staff regarding both continuous quality improvement principles and specific quality improvement initiative(s). Progress in meeting these goals and objectives is an important part of the annual evaluation of quality improvement activities.

CPH has incorporated QI training goals and objectives within the agency Workforce Development Plan (WFD). A copy of this plan is found on the CPH Workforce Development intranet section at:

<http://intranet/Health2/hr/workforce-development/Plans%20Policies%20and%20Procedures/Forms/AllItems.aspx>

The WFD Plan includes training topics and descriptions, mandatory training and competencies, target audience (who will receive training) and resources/sources of training.

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APPENDIX A: DEFINITIONS & ACRONYMS

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.

CHA (Community Health Assessment) – The CHA is a collaborative process conducted in partnership with other organizations and describes the health status of the population, identifies areas for health improvement, determines factors that contribute to health issues, and identifies assets and resources that can be mobilized to address population health improvement (Public Health Accreditation Board, 2011).

CHIP (Community Health Improvement Plan) – The purpose of the CHIP is to describe how a health department and the community it serves will work together to improve the health of the population of the jurisdiction that the health department serves (Public Health Accreditation Board, 2011).

Continuous Quality Improvement – An integrative process that links knowledge, structures, processes, and outcomes to enhance quality throughout an organization. The intent is to improve the level of performance of key processes and outcomes (Scamarcia-Tews, Heany, Jones, VanDerMoere, & Madamala, 2012).

Evidence-based practice (EBP) – Entails making decisions about how to promote health or provide care by integrating the best available evidence with practitioner expertise and other resources, and with the characteristics, state, needs, values and preferences of those who will be affected.

Goal – A statement of a desired future state, condition, or purpose. (*Agency for Healthcare Research & Quality, 1999*).

Kaizen – Japanese meaning “change for the better”. This is an intense rapid quality improvement cycle process.

IHI (Institute for Healthcare Improvement) - IHI is part of the National Demonstration Project on Quality Improvement in Health Care and is committed to redesigning health care into a system without errors, waste, delay, and unsustainable costs. Today, IHI is an influential force in health and health care improvement in the US as well as throughout the world.

PHAB (Public Health Accreditation Board) – A nonprofit organization dedicated to improving and protecting the health of the public by advancing the quality and performance of Tribal, state, local, and territorial public health departments (Public Health Accreditation Board, 2012).

Performance Management – The practice of actively using performance data to improve the public’s health. This practice involves strategic use of performance measures and standards to establish performance targets and goals. (*Turning Point, 2003*).

Plan, Do, Check, Act (PDCA) - 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*)

Objective – A measurable condition or level of achievement at each stage of progression toward a goal; objectives carry with them a relevant time frame within which the objectives should be met (*Agency for Healthcare Research & Quality, 1999*).

Qualitative Data – Data composed of words, providing in-depth, contextualized, and meaning-driven descriptions of anything from an individual’s experience to a community’s history (Scamarcia-Tews, Heany, Jones, VanDerMoere, & Madamala, 2012).

Quality Assurance – Guaranteeing that the quality of a product/service meets some predetermined standard.

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)

Quality Improvement – 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 Planning – A process where leadership identifies the specific areas that the health department will focus efforts in the upcoming year, typically involving the strategic priorities. The areas are assigned teams and baseline and targets are assigned in order to measure impact.

Quantitative Data – Data that is measured or identified numerically and can be analyzed using statistical methods.

S.M.A.R.T. – Acronym used to ensure evaluation and research objectives are S=Specific, M=Measurable, A=Attainable, R=Realistic, T=Timely (Scamarcia-Tews, Heany, Jones, VanDerMoere, & Madamala, 2012).

SP (Strategic Plan) – A plan that sets forth what an organization plans to achieve, how well it will achieve it, and how it will know if it has achieved it. The SP provides a guide for making decisions on allocating resources and on taking action to pursue strategies and priorities (Public Health Accreditation Board, 2011).

Storyboard – Graphic representation of a QI team’s quality improvement journey (Scamarcia-Tews, Heany, Jones, VanDerMoere, & Madamala, 2012).

Team Charter – Used to document a team’s purpose and clearly define individual roles, responsibilities, and operating rules.

Team Facilitator – Not a member or leader of the Team; serves as an internal consultant/coach; keeps the Team focused on the meeting, process, & purpose; seeks opinions of all Team members; coordinates ideas; assists the Team in applying QI tools; summarizes key points; provides feedback to the Team.

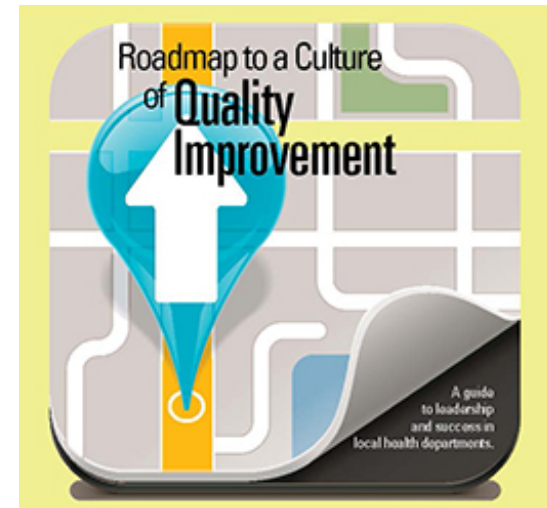
Team Leader – Active member of the Team, provides direction & support; not responsible for all decision making or for the Team’s success or failure; responsible to prepare for and conduct meetings, assign activities to Team members, assess progress, represent the Team to management, manage paperwork, and facilitate communication with the Team and the Sponsor.

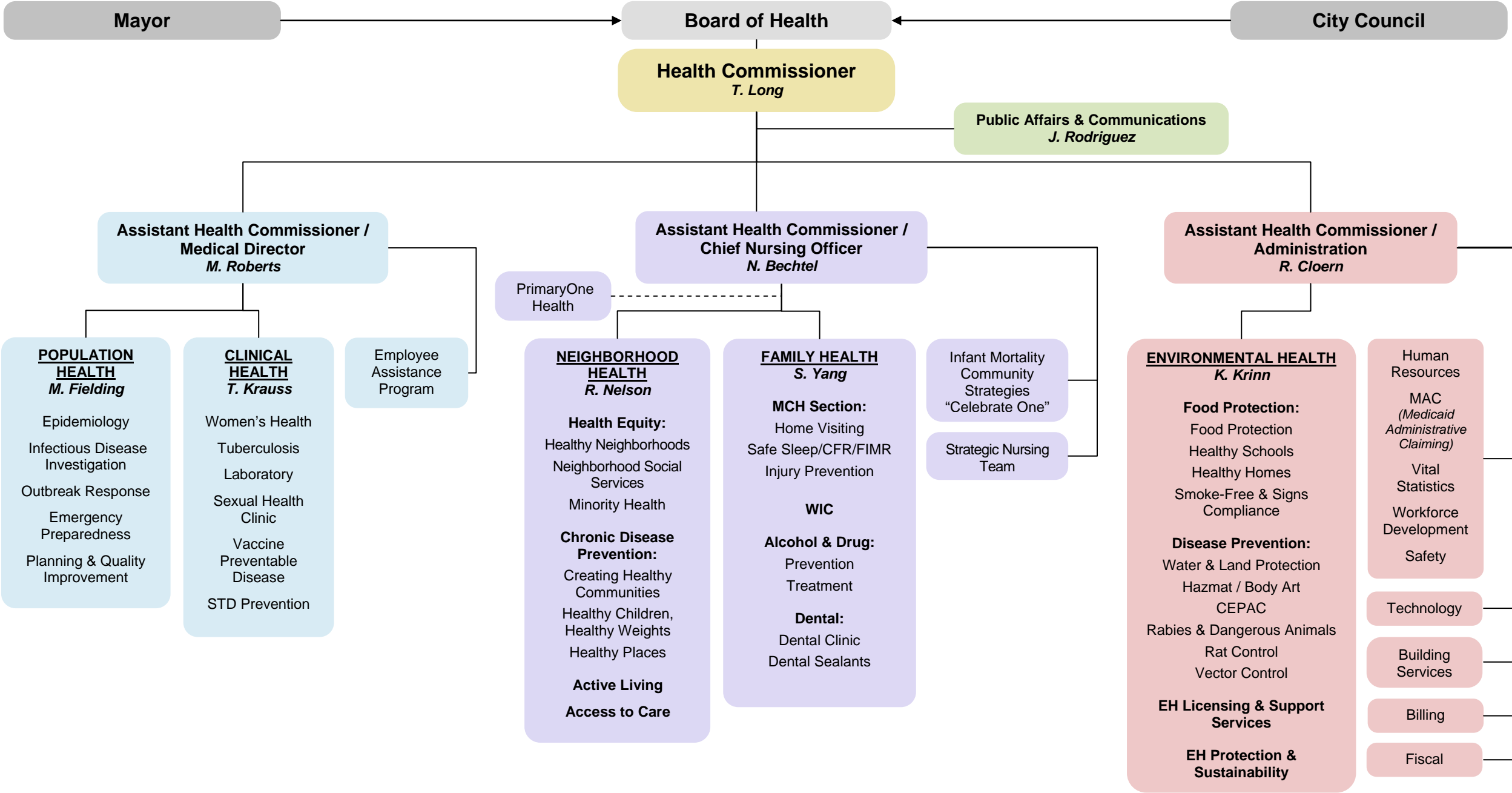
Team Sponsor – A key leader in the organization; maintains overall responsibility, authority and accountability for the Team’s efforts; monitors decisions and planned changes to assure they are aligned with the strategic goals of the organization; implements changes the Team is not authorized to make.

Appendix B Culture of Quality Diagram

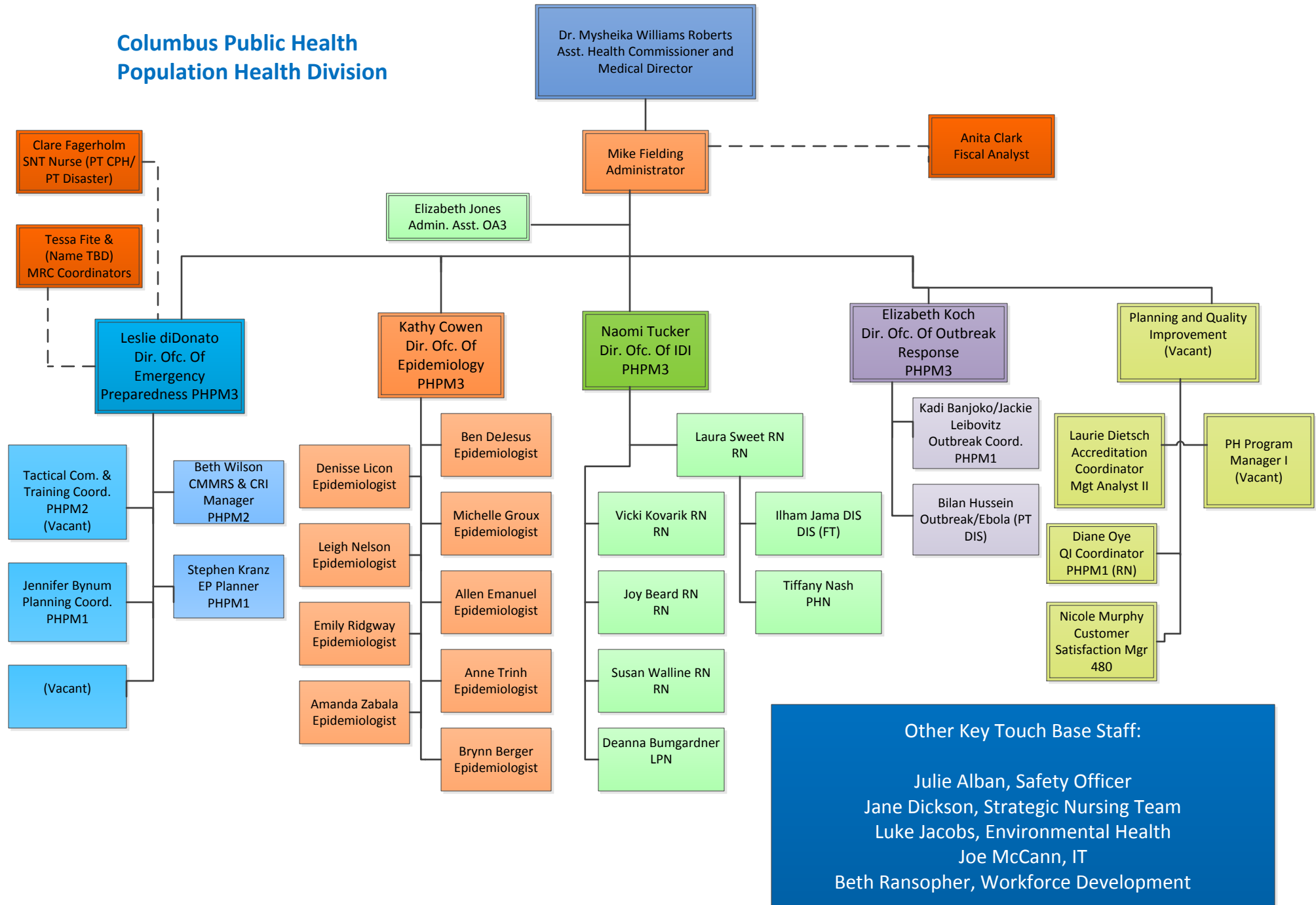


- =
- CPH Vision, Vision & Values
 - Continuous Process Improvement
 - QI Plan
 - QI Council
 - Customer Satisfaction Surveys
 - Performance Management System*





Columbus Public Health Population Health Division



Updated September 1, 2016

APPENDIX D

2017 CPH QUALITY IMPROVEMENT OBJECTIVES

CPH Strategic Goal #4: Establish and maintain organizational capacity and resources to support continuous quality improvement.		
OBJECTIVES	TIMEFRAME	RESPONSIBILITY
1. By 3/31/17, complete the NACCHO Roadmap assessment with SAT and Quality Council (QC) members.	By 3/31/17	Quality Chair
2. By 7/31/17, the QC will select two action items identified from the NACCHO Roadmap Assessment to begin working on in 2017.	By 7/31/17	Quality Council
3. By 12/31/17, the 2018 Quality Improvement Plan will be approved by the QC and submitted to SAT for approval.	By 12/31/17	Quality Chair
Human Characteristics (from NACCHO Roadmap)		
4. By 3/31/2017, identify training needs that will empower front line staff.	By 3/31/2017	Quality Council
5. By 1/1/2017, complete a charter determining the purpose of the QC.	By 1/1/2017	Quality Council
6. By 1/1/2017, select membership for the QC.	By 1/1/2017	SAT
Process Characteristics (from NACCHO Roadmap)		
7. By 1/1/17, implement the customer satisfaction survey and dashboard display templates and make improvements as necessary.	By 1/1/17	Quality Chair
8. By 6/30/17, review or assess the effectiveness of the customer satisfaction survey and dashboard display templates and make improvements as necessary.	By 6/30/17	Quality Chair
9. By 1/1/17, CPH will implement the feedback loop communication framework templates (monthly division report to SAT and communication report from SAT to staff)	By 1/1/17	Quality Chair
10. By 6/30/17, review or assess the completion rate of the feedback loop communication framework templates by staff at CPH	By 6/30/17	Quality Chair
Planning Session Key Drivers		
11. See Planning Session Key Driver Diagram (next page)		

DRIVERS

CPH 2016 QUALITY IMPROVEMENT PLAN:

OUTCOMES

Project: (SP1) Decrease Sleep Related Deaths
TO: Reduce rate of sleep related deaths in Franklin County
BY: <ul style="list-style-type: none">• Increase accessibility to cribs• Developing community awareness in infant safe sleep education• Developing staff awareness in infant safe sleep education
Measures/Targets: <ol style="list-style-type: none">1. % increase in number of cribs distributed/252. # Participants at safe sleep education events of any kind/14003. % CPH staff completing safe sleep education and training/95%
Project Leader, Team Members: Shannon Yang – lead Karen, (FH), Anne (EPI), Erika (C1), Deb (AOD), Jamie (NH), Renee/Julie/Sharla (FH), Karissa (FH), Steve Snyder-Hill (WIC)

Project: (SP3) Reduce Syphilis Incidence
TO: Reduce incidence of Syphilis
BY: <ul style="list-style-type: none">• Screening for syphilis within targeted communities• Assuring treatment for persons with syphilis• Assuring treatment for persons exposed to syphilis• Increasing safer sex practices within targeted communities
Measures/Targets: <ul style="list-style-type: none">• P & S Syphilis incidence rate in Franklin county by target population/ 19.3• Number of syphilis tests performed by CPH by target population/ ??• % of persons treated within 14 days of diagnoses/ 98%• % of partners treated prophylactically/ 98%
Project Leader, Team Members: Audrey R. – lead Makeda P, EPI, Communications, Karen F, Julie A, Jenessa (AOD), Bob (SNT), Melissa, Transgendered Agency Rep

Project: (SP2) Reduce BMI
TO: Reduce BMI of 25.0 or higher
BY: <ul style="list-style-type: none">• Increase CPH staff knowledge of obesity drivers and available resources for referrals• Increase referrals from CPH direct service staff to community-based healthy lifestyle resources• Increase awareness and utilization of healthy food options and physical activities for clients outside of CPH
Measures/Targets: <ul style="list-style-type: none">• Inquire about what data is collected on youth obesity in CCS & WIC/ Y or N• # of information exchange meetings for programs within CPH that deal with obesity/ 3 meetings in 2016• # of clients in the Healthy Weight program in Women’s Health/ 24• # of clients receiving Produce Prescription vouchers/ 25• Create and finalize information sheets for available nutrition and physical activity resources in priority neighborhoods/ Y or N• % of CPH-issued vouchers redeemed by WIC clients at Farmer’s Markets/ 85%• # of retail establishments opened in Linden and the South Side that are selling nutritious foods, in order to promote access to healthy food options for residents/ 4 retail locations• # of childcare centers in the HCHW program that will adopt policies in the areas of Healthy Eating and Active Living (HEAL)/ 19 centers• # of new Safe Routes to School strategies that were implemented in Linden and the South Side that improve school-neighborhood infrastructure and student physical activity/ 2
Project Leader, Team Members: Autumn (CHC) - lead Emily (EPI), Barb (AL), Jamie (HCHW), Scott (HP), Dawn (WIC), Lori (MCH), Karen (SH), Erika (C1), Alisha (C1), Rosann (SW), Derrick (SH-P), Jenny (SNT), Stacey (WH)

Project: Reduce smoking
TO: Reduce number of current smokers
BY: <ul style="list-style-type: none">• Increase CPH clients receiving information about smoking cessation and programs• Increase CPH staff knowledge of tobacco and nicotine products and available resources for cessation• Reduce secondhand smoke exposure outside of CPH• Reduce uptake of tobacco use among youth
Measures/Targets: <ul style="list-style-type: none">• # of clients currently enrolled in My Baby & Me Tobacco Free/ 60• # of women reached with 5As in WIC clinics/ Establish baseline• Develop a Train-the-Trainer (TTT) module on Tobacco and Beyond to be presented to CPH staff who work directly with clients/ Y or N• # of information exchange meetings for programs within CPH that deal with tobacco control/ 3 meetings• Present federal legislation to require HUD (and other publicly funded) housing to offer smoke-free housing/ Y or N• # of multi-unit housing properties that implemented a 100% smoke-free policy as evidence by written policy/ 3 multi-unit props• Present [local and/or state] legislation to raise the legal age to sell or purchase tobacco products to 21/ Y or N• Present state legislation to raise the state tobacco tax/ Y or N• # of youth educated about the dangers of tobacco use through school- and community-based programs that are sponsored by CPH/ 1,800 youth• Develop a TTT module on Tobacco and Beyond to be used to train the facilitators of the Teen Outreach Program (TOP)/ Y or N
Project Leader, Team Members: Autumn (CHC) & Kelli (HCO) – co-leads Nikki (MCH), Jessica (WIC), Katie (CHC), Chelsea (SH), Emily (EPI), Michael (SNT), Amber (CHC), Ryan (MH), Phillip (EH), Lori (MCH), Kristie (WH), Melissa (WH), Katie (AOD), Virginia (NSW), Karisa (MCH), Julie (HCO), Gail

Project: (SP 4) Improve Efficiency/Effectiveness
TO: Increase LARC insertions, within CPH/WFHPC from 189 in 2015 by 40% by the end of June 2017
BY: <ul style="list-style-type: none">• Increase Patient Visits• Increase capacity• Create a systematic inventory supply process with measureable outcomes• Utilize knowledge and expertise to participate in medical education• Develop referral process with community providers• Develop and implement unique nurse call back process• Develop LARC & RLP specific education materials
Measures/Targets: <ul style="list-style-type: none">• Increase in # of LARCS administered/ 40%
Project Leader, Team Members: Tiffany - Lead Gretchen(WFHPC), Laurie (Pop Hlth),
Project: (SP 4) Improve Insured Rates
TO: Increase insured rates at CPH
BY: <ul style="list-style-type: none">• Improve existing data sources• Increase staff education & awareness• Increase resources for clients needing insurance
Measures/Targets: <ul style="list-style-type: none">• # of data sources and reports./ Created Y or N• Increase staff education/training/ 4 trainings• Create resources for staff to enroll consumers/ created Y or N• Create campaign for customers to apply/ created Y or N• Improve use of technology/ 2 methods implemented
Project Leader, Team Members: Marian – lead Jesus, EPI, MCH/HV (Deb Hall), Lily (AOD), Ryan Sheffield, EH

Reduce Infant Mortality		
Measure	Baseline	Target
Rate of sleep related deaths	1.2 deaths/1000 live births	1.1 deaths/1000 live births
Reduce Overweight and Obesity		
Measure	Baseline	Target
BMI 25 or higher	64% (2014)	1.5% decrease
Reduce spread of Infections Diseases		
Measure	Baseline	Target
Syphilis Incidence	19.2 cases/ 100,000 (2014)	No rate increase in 2016
Improve Access to Public Health Care		
Measure	Baseline	Target
# of clients served (Women’s Health, Home Visiting, Alcohol & Drug	189	40% Increase
# of insured CPH clients	TBD	Decrease by 10%
Reduce Tobacco Use		
Measure	Baseline	Target
Current number of adult smokers	22.4%	2% reduction
Leadership Team Members:		
Columbus Public Health SAT Quality Team Members		
Leadership Team Conditions:		
• ??		

MEMBER NAME	POSITION	DIVISION/CENTER
Diane Oye (QC Chairperson)	QI Coordinator	Population Health
Julie Alban	Safety Manager	Human Resources
Nancie Bechtel	Chief Nursing Officer Assistant Health Commissioner	Health Commissioner's Office
Jennifer Bynum	OEP PM1	Population Health
Kathy Cowen	Epidemiologist	Population Health
Jane Dickson	SNT Director	Administration
Laurie Dietsch	Accreditation Coordinator	Population Health
Melissa Ervin	Clinical Operations Manager	Clinical Health
Michael Fielding	Division Administrator	Population Health
Deb Helldoerfer	Alcohol & Drug Abuse Program Clinical Manager	Family Health
Rick Hicks	EHPM	Environmental Health
Luke Jacobs	Disease Prevention Section Chief	Environmental Health
Ryan Johnson	Minority Health Director	Neighborhood Health
Caitlyn Kapper	PH QA Coordinator – Ryan White Program	Clinical Health
Tiffany Krauss	Division Administrator	Clinical Health
Linda Laroche	TB Program Director	Clinical Health
Nicole Murphy	Customer Satisfaction Coordinator	Population Health
Makeda Porter	Health Equity Section Chief	Neighborhood Health
Beth Ransopher	Workforce Development Manager	Human Resources
Lori Ruffin	Program Manager	Family Health
Renee Shalosky	MCH Nursing Program Manager	Family Health
Jamie Shumaker	AFSCME Union Vice President Rep	-----
TBD	Dental Sealant Program Manager	Family Health
Shannon Yang	Division Administrator	Family Health

Appendix F PDSA Worksheet for Testing Change

Aim: (overall goal you wish to achieve)

Every goal will require multiple smaller tests of change

Describe your first (or next) test of change:	Person responsible	When to be done	Where to be done

Plan

List the tasks needed to set up this test of change	Person responsible	When to be done	Where to be done

Predict what will happen when the test is carried out	Measures to determine if prediction succeeds

Do

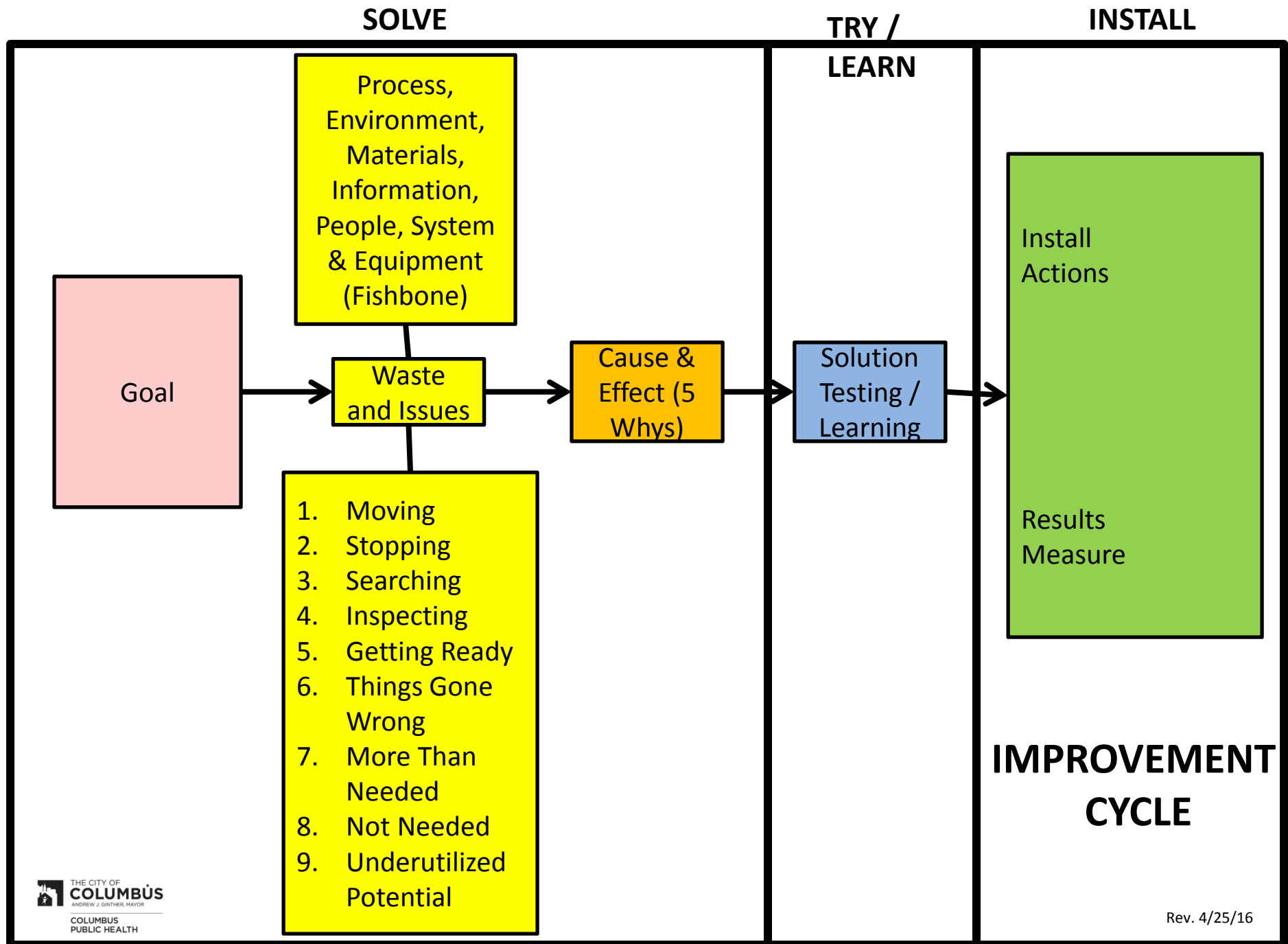
Describe what actually happened when you ran the test

Study

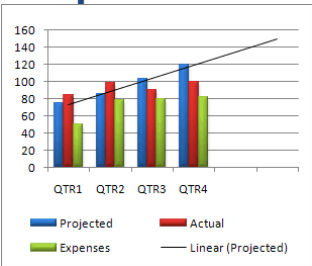
Describe the measured results and how they compared to the predictions

Act

Describe what modifications to the plan will be made for the next cycle from what you learned



IMPROVEMENT CYCLE

SOLVE				
Set the Goal		Collect Data and Information Identify the Value and Waste (use process data, process map, gemba walk)		Analyze and Identify Potential Solutions
To For By So that Standards / Targets Conditions		1. Moving 2. Stopping 3. Searching 4. Inspecting 5. Getting Ready	6. Things Gone Wrong 7. More Than Needed 8. Not Needed 9. Underutilized Potential	<ul style="list-style-type: none"> Prioritize Issue Root Cause (5 Whys) Proposed Solutions & Action
TRY and LEARN			INSTALL	
Try Solutions			Install the Solutions	Measure Success and On-going Improvement
Test	How	Who	<ul style="list-style-type: none"> Complete Actions Create standardized work Teach others Communicate 	
What did you learn? <ul style="list-style-type: none"> Analyze results Extract learning Resulting actions 				

APPENDIX F

Quality Improvement Processes & Tools

Following are some of the processes available to assist in Quality Improvement. This is NOT an exhaustive list, but simply meant to display types that have been used recently at CPH.

I. Plan-Do-Check-Act (PDCA) Cycle

The model for long term projects (typically 6-8 months) utilized at CPH is called Plan-Do-Check-Act (PDCA) Cycle (Gorenflo, 2010). Not all process improvement is specifically a PDCA QI project.

- A. **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.
- B. **Do** - This step involves implementing the action plan.
- C. **Check** - At this stage, data is again collected to compare the results of the new process with those of the previous one.
- D. **Act** - This stage involves two actions. The first is to decide, based upon the data collected in the Check phase whether to adopt the change theory, make slight changes to the theory, or to abandon the improvement theory and start over. The second action in this phase is to decide future plans. So if the team decided to adopt or adapt the improvement theory, it must indicate how it will monitor the gains going forward. If the improvement theory was abandoned, the team must decide on how it will continue.

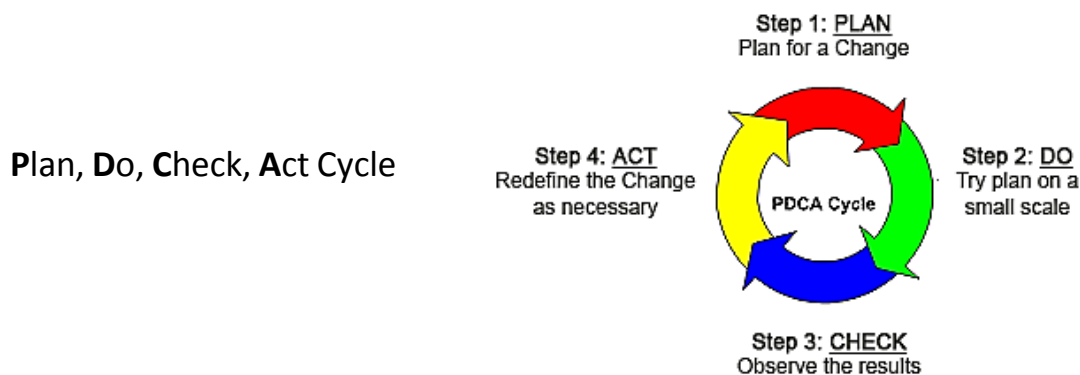
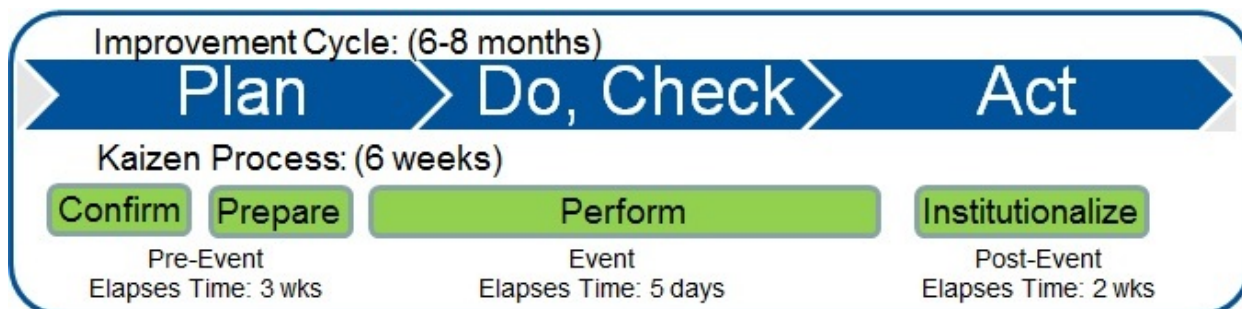


Figure 2: Diagram to illustrate the continuous process of quality improvement (Davenport, 2013)

II. Confirm, Prepare, Perform & Institutionalize (used for a Kaizen event)

These are the terms used when conducting a Kaizen event. This is a rapid cycle process that typically takes five intense days of staff time to implement the majority of the cycle. There are also pre and post event components that add to the success of the event. As seen below, the steps still follow the same path as PDCA but just in a different timing.



- A. **Confirm** - Form the problem and confirm the need to use Kaizen.
- B. **Prepare** – Establish the goal, select team members, gather initial data collection, coordinate logistics and communicate to team members.
- C. **Perform** – Basically this is the five day portion of the event and includes the following:
 - 1. Day 1: Focus the team and understand the current state;
 - 2. Day 2: Continue to understand the current state and evaluate and solve the problem;
 - 3. Day 3: Develop solutions (job aids), test the solutions, learn from testing and develop training material;
 - 4. Day 4: Continue to develop solutions, test, learn & train; and
 - 5. Day 5: Pilot the new process, learn, measure results and communicate results.
- D. **Institutionalize** – Complete any identified follow up items and implement ongoing performance measures and improvement.

III.Improvement Cycle (Solve, Try/Learn, Install)

This process is wonderful for individual or small team problem solving.

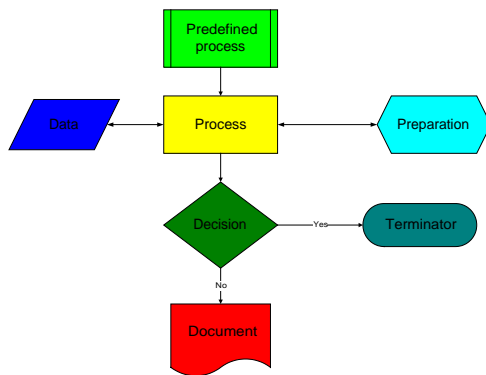
- A. **Solve** – This is similar to the Plan portion of PDCA and contains three steps:
 - 1. Set the goal
 - 2. Collect data and information – (Identify current state and areas of waste)
 - 3. Analyze and identify potential solutions - (Prioritization, root cause/ 5 whys and proposed solutions).
- B. **Try/Learn** –
 - 1. Try the solutions
 - 2. Analyze results
 - 3. Extract learning
- C. **Install**
 - 1. Install the solutions
 - 2. Measure success and ongoing improvement

Following are some of the tools available to assist in the Quality Improvement process.

1) **Flow Charting:** Use of a diagram in which graphic symbols depict the nature and flow of the steps in a process. This tool is particularly useful in the early stages of a project to help the team understand how the process currently works. The “as-is” flow chart may be compared to how the process is intended to work. At the end of the project, the team may want to then re-plot the modified process to show how the redefined process should occur. The benefits of a flow chart are that it:

- a) Is a pictorial representation that promotes understanding of the process
- b) Is a potential training tool for employees
- c) Clearly shows where problem areas and processes for improvement are

FLOW CHART SYMBOLS



Flow charting allows the team to identify the actual flow-of-event sequence in a process.

2) **Brainstorming:** A tool used by teams to bring out the ideas of each individual and present them in an orderly fashion to the rest of the team. Essential to brainstorming is to provide an environment free of criticism. Team members generate issues and agree to “defer judgment” on the relative value of each idea. Brainstorming is used when one wants to generate a large number of ideas about issues to tackle, possible causes, approaches to use, or actions to take. The advantages of brainstorming are that it:

- a) Encourages creativity
- b) Rapidly produces a large number of ideas
- c) Equalizes involvement by all team members
- d) Fosters a sense of ownership in the final decision as all members actively participate
- e) Provides input to other tools: “brain stormed” ideas can be put into an affinity diagram or they can be reduced by multi-voting

3) **Decision-making Tools:** While not all decisions are made by teams, two tools can be helpful when teams need to make decisions.

- a) Multi-voting is a group decision-making technique used to reduce a long list of items to a manageable number by means of a structured series of votes. The result is a short list identifying what is important to the team. Multi-voting is used to reduce a long list of ideas and assign priorities quickly with a high degree of team agreement.
- b) Nominal Group technique-used to identify and rank issues.

4) **Affinity Diagram:** The Affinity Diagram is often used to group ideas generated by brainstorming. It is a tool

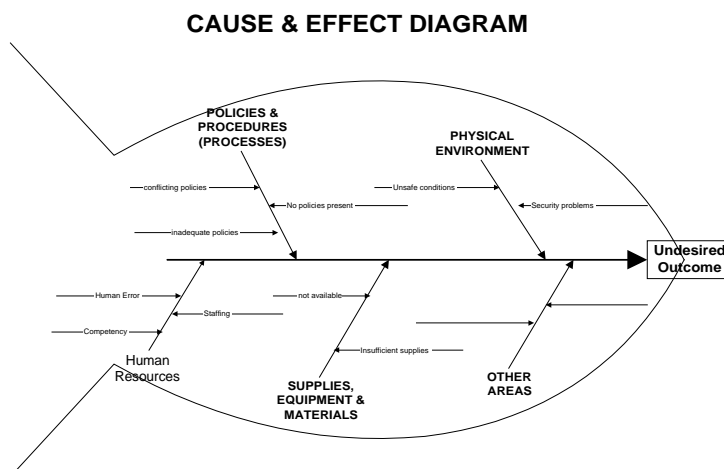
that gathers large amounts of language data (ideas, issues, opinions) and organizes them into groupings based on their natural relationship. The affinity process is a good way to get people who work on a creative level to address difficult, confusing, unknown or disorganized issues. The affinity process is formalized in a graphic representation called an affinity diagram. This process is useful to:

- a) Sift through large volumes of data.
- b) Encourage new patterns of thinking.

As a rule of thumb, if less than 15 items of information have been identified the affinity process is not needed.

5) **Cause and Effect Diagram (also called a fishbone or Ishikawa diagram):** This is a tool that helps identify, sort, and display. It is a graphic representation of the relationship between a given outcome and all the factors that influence the outcome. This tool helps to identify the basic root causes of a problem. The structure of the diagram helps team members think in a very systematic way. The benefits of a cause-and-effect diagram are that it:

- a) Helps the team to determine the root causes of a problem or quality characteristic using a structured approach
- b) Encourages group participation and utilizes group knowledge of the process
- c) Uses an orderly, easy-to-read format to diagram cause-and-effect relationships
- d) Indicates possible causes of variation in a process
- e) Increases knowledge of the process
- f) Identifies areas where data should be collected for additional study.



Cause and effect diagrams allow the team to identify and graphically display all possible causes related to a process, procedure or system failure.

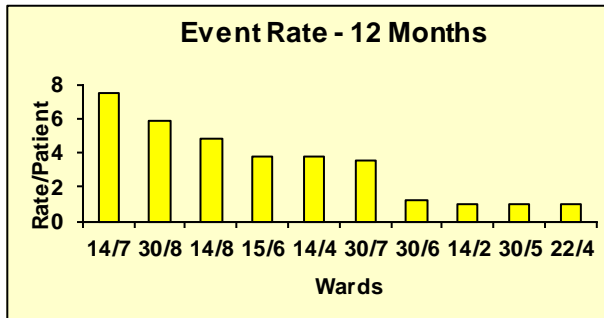
6) **Histogram:** This is a vertical bar chart which depicts the distribution of a data set at a single point in time. A histogram facilitates the display of a large set of measurements presented in a table, showing where the majority of values fall in a measurement scale and the amount of variation. The histogram is used in the following situations:

- a) To graphically represent a large data set by adding specification limits one can compare;
- b) To process results and readily determine if a current process was able to produce positive results assist with decision-making.

7) **Pareto Chart:** Named after the Pareto Principle which indicates that 80% of the trouble comes from 20% of the

problems. It is a series of bars on a graph, arranged in descending order of frequency. The height of each bar reflects the frequency of an item. Pareto charts are useful throughout the performance improvement process - helping to identify which problems need further study, which causes to address first, and which are the “biggest problems.” Benefits and advantages include:

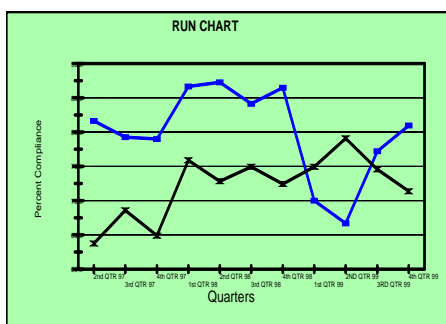
- a) Focus on most important factors and help to build consensus
- b) Allows for allocation of limited resources



The “Pareto Principle” says 20% of the source causes 80% of the problem. Pareto charts allow the team to graphically focus on the areas and issues where the greatest opportunities to improve performance exist.

8) **Run Chart:** Most basic tool to show how a process performs over time. Data points are plotted in temporal order on a line graph. Run charts are most effectively used to assess and achieve process stability by graphically depicting signals of variation. A run chart can help to determine whether or not a process is stable, consistent and predictable. Simple statistics such as median and range may also be displayed. The run chart is most helpful in:

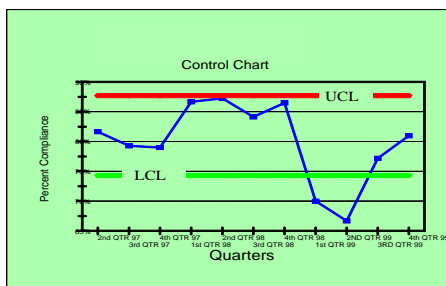
- a) Understanding variation in process performance
- b) Monitoring process performance over time to detect signals of change
- c) Depicting how a process performed over time, including variation



This allows the team to see changes in performance over time. The diagram can include a trend line to identify possible changes in performance.

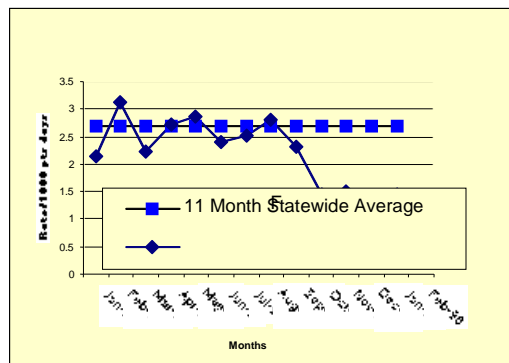
9) **Control Chart:** A control chart is a statistical tool used to distinguish between variation in a process resulting from common causes and variation resulting from special causes. It is noted that there is variation in every process, some the result of causes not normally present in the process (special cause variation). Common cause variation is variation that results simply from the numerous, ever-present differences in the process. Control charts can help to maintain stability in a process by depicting when a process may be affected by special causes. The consistency of a process is usually characterized by showing if data fall within control limits based on plus or minus specific standard deviations from the center line. Control charts are used to:

- a) Monitor process variation over time
- b) Help to differentiate between special and common cause variation
- c) Assess the effectiveness of change on a process
- d) Illustrate how a process performed during a specific period



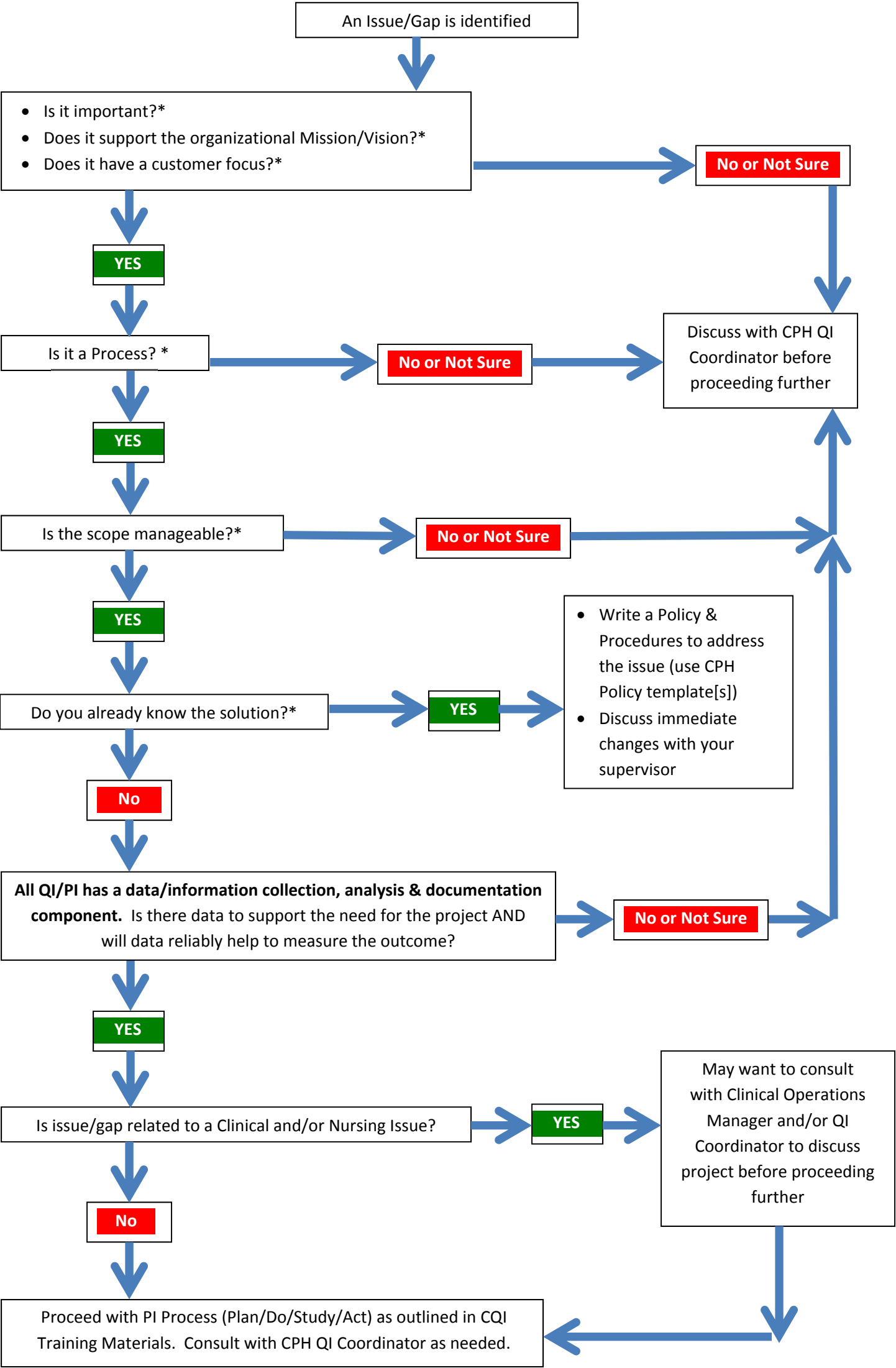
Using upper control limits (UCLs) and lower control limits (LCLs) that are statistically computed, the team can identify statistically significant changes in performance. This information can be used to identify opportunities to improve performance or measure the effectiveness of a change in a process, procedure, or system.

10) **Benchmarking:** A benchmark is a point of reference by which something can be measured, compared, or judged. It can be an industry standard against which a program indicator is monitored and found to be above, below or comparable to the benchmark.



11) **Root Cause Analysis:** A root cause analysis is a systematic process for identifying the most basic factors/causes that underlie variation in performance.

APPENDIX G
CPH DECISION-MAKING TOOL (ALGORITHM) FOR DETERMINING
WHETHER A FORMAL QI/PI PROJECT IS WARRANTED AND POSSIBLE



**Technical & Strategic Issues Questions from CQI Participant Materials, The OSU Center for Public Health Practice, College of Public Health, as distributed at CPH training on March 7, 2012.*

APPROVED BY SAT ON 04/11/2012

CPH Monthly Division Report to SAT

Division: _____

Date: _____

This form is used to submit division reports to the SAT. Each program manager/section leader should include high level items that leadership should know and give to your supervisor. Unless specified, this is not a replacement for your regular report to your supervisor.

1. Highlights & Key Accomplishments (5 Max)

2. Key Issues (need to knows, upcoming events, challenges, progress on goals/milestones) (8 Max)

3. Ongoing Monthly or Seasonal updates (3 Max)

Quality Section

The Dashboard and Customer Satisfaction sections should be completed at least once a quarter by each program area.

Dashboard Conversations					
Agenda Item	Discussion	Follow Up Y/N	Action Steps*	Responsible Person	Completed Date
		Y / N			
		Y / N			

Customer Satisfaction Conversations					
Agenda Item	Discussion	Follow Up Y/N	Action Steps*	Responsible Person	Completed Date
		Y / N			
		Y / N			

List of Policies in the Review Process		
Name of Policy	Date Sent to SAT for Review	Author's Name

ACTION PLAN

Customer Satisfaction Survey

Program	Other
Survey Quarter for 2017	<i>Click Here</i>

Mission: To improve customer satisfaction, as demonstrated in a percentage increase of "Strongly Agree" responses to survey questionnaire.

<u>Action Step</u> Survey Question needing to improve/ increase percentage:	<u>Action Reasoning</u> Explain why Survey Question was chosen.	<u>"Strongly Agree" Percentage%</u>		<u>Activities/ Resources</u> Steps to be taken to accomplish Mission.	<u>Timeframe</u> Anticipated Survey Quarter of accomplishment.	<u>"Strongly Agree" Percentage%</u> Complete at end of Timeframe
		Current %	Goal %			Outcome %
					<i>Click Here</i>	

SAT Communications & Action Step Form

Date: _____

This is used to track the communications and action steps set forth during the SAT meetings.

Quality Items

The Dashboard and Customer Satisfaction sections will be completed at least once a quarter.

Dashboard Conversations					
Agenda Item	Discussion	Follow Up Y/N	Action Steps*	Responsible Person	Completed Date
		Y / N			
		Y / N			

Customer Satisfaction Conversations					
Agenda Item	Discussion	Follow Up Y/N	Action Steps*	Responsible Person	Completed Date
		Y / N			
		Y / N			

Communication Items

The communications section provides clear direction regarding messages that SAT wants staff to know and the method to be used.

Communication to Front Line Staff				
Agenda Item	Message to Staff	Action Steps*	Responsible Person	Completed Date

Do	Do	Check	Act
<div><div><u>Step Six: Test the Theory</u></div><div>Type here</div></div>		<div><div><u>Step Seven: Study the Results</u></div><div>Type here</div></div>	<div><div><u>Step Eight: Standardize the Improvement or Develop New Theory</u></div><div>1. Type here</div><div><u>Step Nine: Establish Future Plans</u></div><div>Type here</div></div>

PROGRAM:**DIVISION:**

Dept. Mission: Protect Health, Improve Lives Vision: Columbus community is protected from disease	Goals <ol style="list-style-type: none"> 1. Identify & respond to health threats 2. Collaborate with residents, community stakeholders and policy makers 3. Empower people and neighborhoods 4. Support continuous quality improvement 	Health Equity <ol style="list-style-type: none"> I. PHAB Related Domains II. Healthcare Equality Index (HEI) Criteria III. Population Data Requests from City Council IV. National CLAS Standards
Values: <ul style="list-style-type: none"> • Customer Focus • Accountability • Research/Science-Based • Equity and Fairness 	Strategic Priorities: Areas of department emphasis <ol style="list-style-type: none"> A. Reduce infant mortality B. Reduce overweight & obesity C. Reduce spread of infectious diseases D. Improve access to public health care 	

DEFINITIONS**PROGRAM PURPOSE**

A short, general phrase or sentence that answers: ***"Why does your program exist?"***

PROGRAM GOAL(S)

Goals come from the program purpose. They are slightly more specific, and should answer the question: ***"What do you want to do?"***

BENCHMARKING

A measurement of the quality of an organization's policies, products, programs, strategies, etc., and their comparison with standard measurements, or similar measurements of its peers. The objectives of benchmarking are (1) to determine what and where improvements are called for, (2) to analyze how other organizations achieve their high performance levels, and (3) to use this information to improve performance. These can link to HP 2020, Statewide Health Improvement Plan or to another health department.

PROGRAM OBJECTIVE(S)

Objectives relate to each goal. They should be specific and measureable. Objectives should answer the question: ***"How well do you want to do it?"***

Objectives should be **SMART**: Specific, Measurable, Achievable, Realistic, and Time-based

DASHBOARD INFORMATION

- | | |
|---------------------------------|--|
| A. Data collection method | : How are you collecting the data? (e.g., Chart audit, Database query, staff monthly/weekly updates?) |
| B. Frequency of data collection | : How often are you collecting this data? |
| C. Frequency of data reporting | : How often are you entering the data into the dashboard? (Monthly, quarterly, 2x/year, etc) |
| D. Sample size | : How big is your sample size? (e.g., all the records? 25 charts?) |
| E. Sources of data | : Where are you getting the data? (e.g., EHR, NextGen, ODRS, Staff updates, Client charts) |
| F. Numerator/Denominator | : If there is only one number to be entered, place it in the numerator spot. |
| G. Identified target | : What is the target the measure is aiming to reach? Is the measure the same or different for each quarter? |
| H. Notes | : Is there anything unusual about the measure? (e.g., Target is opposite of normal? Quarters shouldn't accrue) |

CPH Program Performance Management Measure Form

PROGRAM: _____ **DIVISION:** _____

PROGRAM PURPOSE:

GOAL 1: _____

BENCHMARKING: HP 2020 SHIP OTHER HD: _____

Objective 1: _____

Strategic Goal: 1 2 3 4 **Strategic Priority:** A B C D **Health Equity:** I II III IV

A. Data collection method	:	_____
B. Frequency of data collection	:	_____
C. Frequency of data reporting	:	_____
D. Sample size	:	_____
E. Sources of data	:	_____
F. Numerator/Denominator	:	N= _____ D= _____
G. Identified target	:	Q1= _____ Q2= _____ Q3= _____ Q4= _____
H. Notes	:	_____

Objective 2: _____

Strategic Goal: 1 2 3 4 **Strategic Priority:** A B C D **Health Equity:** I II III IV

A. Data collection method	:	_____
B. Frequency of data collection	:	_____
C. Frequency of data reporting	:	_____
D. Sample size	:	_____
E. Sources of data	:	_____
F. Numerator/Denominator	:	N= _____ D= _____
G. Identified target	:	Q1= _____ Q2= _____ Q3= _____ Q4= _____
H. Notes	:	_____

CPH Program Performance Management Measure Form

PROGRAM: _____

DIVISION: _____

GOAL 2: _____

BENCHMARKING:

HP 2020

SHIP

OTHER HD: _____

Objective 1: _____

Strategic Goal: 1 2 3 4

Strategic Priority: A B C D

Health Equity: I II III IV

- A. Data collection method : _____
- B. Frequency of data collection : _____
- C. Frequency of data reporting : _____
- D. Sample size : _____
- E. Sources of data : _____
- F. Numerator/Denominator : N= _____ D= _____
- G. Identified target : Q1= _____ Q2= _____ Q3= _____ Q4= _____
- H. Notes : _____

Objective 2: _____

Strategic Goal: 1 2 3 4

Strategic Priority: A B C D

Health Equity: I II III IV

- A. Data collection method : _____
- B. Frequency of data collection : _____
- C. Frequency of data reporting : _____
- D. Sample size : _____
- E. Sources of data : _____
- F. Numerator/Denominator : N= _____ D= _____
- G. Identified target : Q1= _____ Q2= _____ Q3= _____ Q4= _____
- H. Notes : _____

Program Manager Name: _____

Quality Team Member Name: _____

Date: _____

APPENDIX K

REPORTING CALENDAR

REPORTING	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Alcohol & Drug QIRMC Report (Debbie Helldoerfer)	X			X			X			X		
Communication Framework Templates (Feedback Loops) (Diane Oye)		X (PM)	X (CSS)		X (PM)	X (CSS)		X (PM)	X (CSS)		X (PM)	X (CSS)
CQI Teams Updates (Current CQI Team Leaders or Team Facilitators)	X			X			X			X		
Customer Satisfaction Survey Results (Nicole Murphy)			2016 Annual Report			1 st Quarter 2017			2 nd Quarter 2017			3 rd Quarter 2017
Incident Reports – Clinical, Lab, & Safety (Diane Oye, Melissa Ervin & Julie Alban)		2016 Annual Report						1 st & 2 nd quarters 2017				
Maternal & Child Health Quality Report (Renee Shalosky)	X			X			X			X		
PHAB Updates (Laurie Dietsch)			X			X			X			X
Program Performance Measures (Laurie Dietsch)		2016 Annual Report			1 st Quarter 2017			2 nd Quarter 2017			3 rd Quarter 2017	
Workforce Development Updates (Beth Ransopher)			X			X			X			X