

QUALITY IMPROVEMENT PLAN MARICOPA COUNTY DEPARTMENT OF PUBLIC HEALTH 2014-2017



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Questions or Comments: Contact the Office of Performance Improvement at opi@mail.maricopa.gov or (602)372-8424. This document can be found on the MCDPH Intranet.

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PURPOSE AND SCOPE

Quality improvement 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.

As defined by the MCDPH Quality Improvement Cloud, quality improvement is about:

- Intentionally and continually looking for ways to do our work better and adapt to change
- Empowering employees to identify and make improvements
- Meeting the needs of our customers
- Using data and information for decision making

PURPOSE OF THE PLAN

The purpose of this Quality Improvement (QI) Plan is to introduce staff to QI and provide a foundation on which to build a comprehensive Department-wide QI program. Each employee has a role in creating an ideal work environment and should actively engage in problem solving and improvement. As the Department continues to improve performance, those whose lives we impact have a better chance of being affected positively by our programs and services.

The structure provided in this plan does the following:

- Establishes a **3 year strategy** for implementing a comprehensive Department-wide QI program
- Describes **QI training** that will be available
- **Educates** staff on QI basics
- Identifies existing opportunities to help in **selecting and implementing QI projects**
- Shares methods for **documenting** quality work
- Establishes a Quality Improvement Cloud to provide **oversight** and **management** of quality improvement in the agency

MARICOPA COUNTY DEPARTMENT OF PUBLIC HEALTH

MISSION

“To protect and promote the health and well-being of Maricopa County residents and visitors”

STRATEGIC PRIORITY AREAS

- Promoting a safe, healthy, and prepared Maricopa County
- Creating a healthier Maricopa County through policy, system, and environmental approaches
- Increasing efficiency and effectiveness
- Maximizing resources

ACHIEVING THE MISSION AND PRIORITIES

To achieve this mission and impact strategic priority areas, MCDPH has the capacity for 614 full-time employee (FTE) positions, 420 of which are currently filled. The fiscal year 2013 operating budget was \$55,803,560, of which 72% is grant funded (\$40,041,018). The health department reports to a local Board of Health, but is governed by the Maricopa County Board of Supervisors.

MCDPH is composed of five main divisions: Community Health Action (the service-oriented division including the Women, Infants, and Children program [WIC], oral health, family health, and health promotion and education); Community Transformation (including policy, systems, and environmental strategies related to chronic disease prevention, nutrition [and SNAP-Ed], and community empowerment); Clinical Services (including HIV/Sexually Transmitted Diseases, TB, foreign travel, the public health laboratory, pharmacy, medical records, and HealthCare for the Homeless); Disease Control (including epidemiology, community health nursing [immunizations and child care health consultation], preparedness and response, and vital registration); and Administration (includes grants and contracts, procurement, human resources, and finance office). The offices of Community Engagement (including the Public Information Officer), Health Policy Consultant, and Performance Improvement report independently to the Director.

PERFORMANCE IMPROVEMENT AT MCDPH

In September of 2010, the Department was awarded a performance improvement grant from the U.S. Centers for Disease Control and Prevention (CDC) through the National Public Health Improvement Initiative (NPHII). The grant was titled, “Strengthening Public Health Infrastructure for Improved Health Outcomes.” Prior to participation in the NPHII program, the Department

did not have a formal Department- wide approach for monitoring or conducting quality improvement (QI) activities. A few of the programs had begun to participate in QI and several programs implemented quality assurance and customer satisfaction programs. With the grant award in 2010, the Department began to plan for successfully achieving accredited status with the Public Health Accreditation Board (PHAB), filling the gaps in its existing performance management system and becoming an organization focused on results.

In 2011, MCDPH partnered with the Arizona Department of Health Services (ADHS) to facilitate the County's first-ever Community Health Assessment (CHA) and determine the community's greatest public health needs. The 18-month process was a collaborative, community-driven effort that engaged more than 1,000 residents, health professionals, and community partners. Under a shared vision, MCDPH and ADHS coordinated the formation of different teams to oversee and advise the CHA process. The process relied on this multi-team infrastructure to carry out the various components of research and community engagement. The CHA was completed In May 2012.

In June 2012, MCDPH began a community-initiated plan to address the five public health priorities determined by the recent CHA. These public health priorities are: reducing obesity, diabetes, cardiovascular disease, lung cancer, and improving access to care. The purpose of the Community Health Improvement Plan (CHIP), completed in 2014, is to set priorities, coordinate and target resources, and define actions taken by members of the public health system to promote health. The CHIP identifies strategies that can have the largest impact on improving the quality of life for all Maricopa County residents, particularly the most vulnerable in our community, by reducing preventable illness and death.

Task forces representing four different sectors of the community—Where We Live (Community), Where We Learn (Education), Where We Work (Worksites), and Where We Receive Care (Healthcare)—were formed in 2012 to develop plans with emphasis on utilizing evidence based-strategies and policy, systems, and environmental approaches to impact health priorities. An additional task force was created in 2014 to guide the development of the Department-wide QI program. These workgroups, referred to as "clouds" increase collaboration between various health department programs, work synergistically to address shared concerns, coordinate partnerships and community outreach, and facilitate timely communication in a very large organization. Program representatives meet regularly to communicate program needs and provide input from their individual programs.

This cross-programmatic work began to realign departmental priorities to develop internal capacity and strengthen partnerships to have a broader impact on population health. The transformation aligned priorities with national state, and local health improvement efforts including the *National Prevention Strategy*,¹ *Healthy People 2020*,² the *Arizona Chronic Disease Strategic Plan 2012-2015*,³ and the *Maricopa County Community Health Improvement Plan*⁴ contributing to a department strategic plan.

Training and development of the workforce is one part of a comprehensive strategy toward agency quality improvement. Fundamental to this work is identifying gaps in knowledge, skills,

and abilities through the assessment of both organizational and individual needs, and addressing those gaps through targeted training and development opportunities. In 2014, MCDPH created a Workforce Develop Plan by identifying the training needs of the public health workforce in the organization. They used a common framework for continuing education to address public health based competencies that are based on the *Core Competencies for Public Health Professionals*⁵ from here on referred to as the core competencies. The core competencies represent a set of skills desirable for the broad practice of public health that professionals need to possess as they work to protect and improve the nation's health. The core competencies are designed to serve as a starting point for academic and practice organizations to understand, assess, and meet training and workforce needs.

The *Health Improvement Partnership of Maricopa County* (HIPMC)⁶ is a collaborative effort between Maricopa County Department of Public Health and more than 60 public and private organizations addressing the priority health areas identified in the 2012-2017 Community Health Improvement Plan. The HIPMC started in 2012, bringing together partner agencies and collaborative groups passionate about promoting health and wellness within their respective communities, providing stable infrastructure to share ideas and resources, identify gaps and barriers to existing services and engage in thoughtful planning to achieve a shared vision. HIPMC meetings and communications provide forums for information and data sharing, collaborative workgroup initiatives, networking, and shared reporting.

Now the Department moves forward, using the Department Strategic Plan, Community Health Improvement Plan, the MCDPH Performance Management Dashboard, Workforce Development Plan, and partnerships to build a solid Quality Improvement Plan. The QI Plan identifies training to support employees in implementing the Plan and dedicated leadership and staff to ensure success.

QUALITY IMPROVEMENT CONNECTION TO PERFORMANCE MANAGEMENT

Performance management is the practice of actively using performance data to improve the public's health. It includes the following four components:

1. Performance standards
2. Performance measures
3. Reporting of progress
4. Quality improvement

An established quality improvement process brings consistency to the Department's approach to managing performance, motivates change, and helps capture lessons learned. QI uses performance data for decisions to improve policies, programs, and outcomes. It is a valuable tool in managing change within the Department and helping to create a learning culture.

A fully functioning performance management system that is completely integrated into health department daily practice at all levels includes: 1) setting organizational objectives across all levels of the department, 2) identifying indicators to measure progress toward achieving objectives on a regular basis, 3) identifying responsibility for monitoring progress and reporting, and 4) identifying areas where achieving objectives requires focused quality improvement processes (see Appendix A. MCDPH Quality Improvement Definitions).

PERFORMANCE MANAGEMENT SYSTEM AT MCDPH

Performance management at MCDPH is the practice of using data for decision-making by establishing results and standards; using data for measurement; monitoring and communicating progress toward those results; and engaging in quality improvement activities when desired progress is not being made. Quality improvement is an essential component of this broader system.

In 2013, MCDPH implemented an online performance management system called *the MCDPH Dashboard*. This custom built database brings operational plans to life, offers a way to get all staff involved in strategic planning and organizational success, as well as supports community partnerships and collaborative efforts. MCDPH programs and certain partnering agencies, coalitions, or collaborative groups identify performance measures and the activities needed for achievement. These measures “roll up” into broader goals and services. Dashboard data are updated monthly by program staff and are accessible to MCDPH staff across the department providing a clear snapshot that displays the organization’s performance at a given point in time. Customized reports on progress of selected initiatives are also shared with stakeholders, community partners, and collaborative groups as appropriate.

The MCDPH Dashboard also serves as a partner tracking tool. Collaborating partners are linked to specific MCDPH program objectives highlighting existing partnerships and identifying opportunities for coordinating partnerships across public health programs. Customized reports can also be generated by Dashboard users to identify which MCDPH programs, community partners and/or collaborative groups are working in a specific area (e.g. all objectives impacting obesity, all objectives targeting children age 0-5 or all school-based objectives).

MCDPH will realize the following benefits of a performance management system as it matures:

- Organizational alignment and the ability to identify, examine, and address issues with department-wide implications
- Increased ability to use data to communicate
- Targeted improvement efforts resulting in increased effectiveness and efficiency
- Increased customer satisfaction
- Ultimately, improved health outcomes for the community

QUALITY IMPROVEMENT PRINCIPLES

The following principles have been adopted by the Department's QI governing body, known as the Quality Improvement Cloud, to guide quality improvement activities:

- Value the team and make a commitment to it.
- Attendance and participation in committee meetings are important, as is follow-up on actions identified for the QIC.
- Value respectful and open communications. Actively listen and contribute to the conversation.
- Ensure the confidentiality associated with discussions. Trust in each other is key to open and honest communication.
- Contribute ideas and evaluate new concepts that are presented. Think strategically.
- Put agency interests above individual program interests.
- Communicate QIC key messages to respective programs as appropriate. Understand we all share the problem; we all get to fix it. We have an opportunity to learn from each other. Job titles aren't relevant in problem-solving.
- Acknowledge that 80% of the time, the problem is the process. Only 20% of the time, is it the people who are the problem.
- Wait to engage in solutions until the problem is properly defined.
- Be helpful; it is easier to critique than to create.

CULTURE AND QUALITY IMPROVEMENT

Behind the everyday activities of an organization and the daily interactions of its employees is the organizations' culture. Culture is everywhere and influences everything. It directly impacts what happens or does not happen in organizations and is one of the most important determinants of whether an organization is successful or not. Organizational culture has been described as "...how people behave when no one is looking." These under the surface values and beliefs contribute to the brand image by which an organization becomes known and respected.

One of the most critical assets of an organization is knowledge. This knowledge can refer to creativity, ideas, expertise or experience. Employees are often the owners of this knowledge and organizational culture can promote or hinder knowledge sharing. This is where culture impacts quality improvement. The sharing of knowledge is critical to the success of QI work. Effective QI projects require that staff take an honest look at the existing processes and program activities and share their true reflections of the good and the bad. Staff must also contribute openly to recommending the needed change(s). To be successful, QI must be ingrained in the shared attitudes, values, goals and practices of all individuals in the organization.

ROADMAP TO A CULTURE OF QUALITY IMPROVEMENT

*Evidence suggests that organization members are more inclined to **embrace change** when the organization's culture is aligned with the mission and goals of the company. Although senior management may espouse a set of values that they assume defines the organizational culture, the reality is that the way members perceive **what is rewarded** and what they believe to be the underlying message will constitute the "real," in-use culture of how things are accomplished.*

*Mallinger, Goodwin & O'Hara, *Reorganizing Organizational Culture in Managing Change*⁷*

The National Association of County and City Health Officials (NACCHO) convened QI leaders from health departments across the country, as well as QI consultants who worked with local health departments to create the *Roadmap to a Culture of Quality Improvement*.⁸ Input collected by NACCHO helped to establish a spectrum regarding the uptake of QI and strategies to move health departments further along that spectrum to a department-wide culture of QI. This section is attributed to the work of NACCHO and its publications on QI culture and outlines the *Phases* of transition to achieve culture change.

PHASE 1. No Knowledge of QI

In this phase, local health department (LHD) staff and leadership are unaware of QI and its importance. QI is not considered as a way of doing business, evidence base is not used in decision-making, and a reactive rather than proactive approach is used to address problems.

PHASE 2. Not Involved with QI Activities

In this phase, leadership understands and discusses QI with staff but does not enforce the implementation of or dedicate sufficient staff time and resources for QI.

PHASE 3. Informal or Ad Hoc QI Activities

Discrete QI efforts are practiced in isolated instances throughout the LHD, often without consistent use of data or alignment with the steps in a formal QI process.

PHASE 4. Formal QI Activities implemented in Specific Areas

Following adoption of one or more formal QI models, QI is being implemented in specific program areas, but QI is not yet incorporated into a department-wide culture.

PHASE 5. Formal Agency-Wide QI

QI is integrated into the agency strategic and operational plans. The Performance Management/ Quality Improvement Council oversees the implementation of a detailed plan to ensure QI throughout the LHD. Policies and procedures are in place and data are commonly used for problem-solving and decision-making.

DESIRED QI CULTURE

PHASE 6: QI 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 continue as QI principles are so ingrained in staff that they routinely 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.

A mature culture of quality is exhibited by an agency when QI is fully embedded into the way business is done 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.⁹

According to the *Roadmap to a QI Culture*, **Phase 6** has the following characteristics:

"Human" Characteristics	"Process Characteristics
<ul style="list-style-type: none"> ■ People are highly valued in the organization. ■ Ongoing QI trainings and resources are provided. ■ QI knowledge and skills are strong across majority of staff. ■ Problems are viewed as "gold" by all staff. ■ "Top-down" and "bottom-up" approach to QI is prevalent. ■ All staff are completely committed to the use of QI to continuously improve daily work. ■ Solidarity among staff is strong, and staff turnover tends to be low. ■ The organization is viewed as a QI expert in the field. 	<ul style="list-style-type: none"> ■ A fully integrated performance-management system is in place. ■ Progress is routinely reported to internal and external customers. ■ QI competencies and action plans are incorporated in job descriptions and performance appraisals. ■ QI is integrated into all agency planning efforts, and all efforts align with strategic goals. ■ Data analysis and QI tools are used in everyday work. ■ Customer is the primary focus. ■ Innovation and creativity is the norm. ■ Agency operations are outcome-driven. ■ Return on investment is demonstrated. ■ Emerging issues are viewed as opportunities to use QI, rather than reason to avoid QI. ■ Agency shares successes and contributes to the evidence base of public health.

STRATEGIES TOWARDS THE DESIRED QI CULTURE STATE

The SAT tool provides that the following key principles of change are important to consider when seeking transformation change to a QI culture:

- Leadership must commit to and drive the process
- A top-down and bottom-up approach is necessary to achieve a culture shift
- Managing the human aspect of change is critical to success
- Communication is important throughout the change process

CULTURE OF QUALITY AT MCDPH

Establishing a Quality Improvement Program is a proven way to enhance performance and achieve desired results. Each employee has a role in creating an ideal work environment and should actively engage in problem solving and improvement. Improving departmental performance will increase our capacity to positively impact the lives of those whom we serve in our community.

A high-performing organization with a culture of quality improvement actively changes the way business is accomplished by the following: focusing on the needs of the customer, using data and tools to analyze problems and performance concerns, involving employees who know about and are impacted by the improvement opportunity, developing solutions and improvements based on analysis, engaging customers and stakeholders, monitoring and evaluating performance, and continually making improvements over time.

In order to determine the current status of QI culture in the agency, QIC members reviewed the results of three important assessments (the annual Maricopa County Employee Satisfaction Survey, 2013 Maricopa County Department of Public Health Training Preferences Survey and Core Competency Self-Assessment, and the 2014 Building and Sustaining a Culture of Quality Assessment). In the fall of 2014, the MCDPH Quality Improvement Cloud members reviewed findings from these three surveys. See Appendix B: QI Culture Assessment for a copy of this assessment and Appendix C. Results from Three Assessments for more details on survey findings. They concluded that while MCDPH's current culture of quality falls within *PHASE 2: Not Involved with QI Activities* with some characteristics of *PHASE 3: Informal or Ad Hoc QI Activities*, although some qualities of *PHASE 1: No Knowledge of QI* still need to be addressed.

This was determined by the following results:

- **Employee Empowerment & Commitment**

41% of survey respondents agree MCDPH employees have the opportunity to identify improvement activities and formal QI projects in the department.

Only 36% agree sufficient QI training & resources are available to meet staff needs at MCDPH.

■ **Teamwork & Collaboration**

69% agree lessons learned and best practices are routinely shared in their work units.

35% agree QI project teams are routinely formed in the department.

42% agree that opportunities to participate in learning communities to build QI skills and knowledge exist in the department.

■ **Leadership**

41% agree that department leaders allow employees to dedicate time to QI initiatives.

45% agree leaders across the department routinely engage with employees to understand issues, concerns, and improvement ideas.

43% agree organizational leaders across the department encourage QI participation, involvement and creativity of their employees.

31% agree leaders and the QI Cloud ensure that QI strategies are included in strategic and operational plans across the department.

42% agree leaders across MCDPH set the expectation that QI is a part of everyone's job.

■ **Customer Focus**

49% agree that MCDPH identifies, defines, tracks and uses measures of customer satisfaction.

43% agree customer satisfaction data is used to prioritize and drive improvement efforts.

■ **Continual Process Improvement**

18% agree that one or more formal improvement models (e.g. Plan-Do-Study-Act, LEAN) are routinely used throughout the department to make process improvements.

31% agree processes are in place in the department to monitor and sustain measurable improvements achieved through QI projects.

32% agree MCDPH staff use QI tools & techniques to improve processes in which they are involved.

■ **QI infrastructure**

45% agree a strategic planning process results in an updated MCDPH strategic plan every 3-5 years.

32% agree the QI plan's goals and strategies are cascaded throughout the organization and into operational plans and employee work plans.

27% agree the department QI plan and progress against the plan is available to all employees.

26% agree a formal, cross- programmatic governance structure oversees all QI related activities and initiatives at the department.

EVERY EMPLOYEE SHOULD KNOW:

- A definition of quality
- Their responsibility for quality improvement
- How to start an improvement
- Where to receive support for a project
- How to report progress
- That they will be recognized for success

GOALS AND OBJECTIVES

Responding to the results from the assessments, the Quality Improvement Cloud has outlined a number of goals and objectives for implementation in moving the department towards the desired QI culture. These goals, objectives, and detailed work plan (see Appendix D. QI Cloud Work Plan) are based on recommended transition strategies from the *NACCHO Roadmap to a Culture of Quality*. While the QIC members are responsible for the strategy and tactics for advancing the culture of quality at MCDPH, support staff from the Office of Performance is responsible for monitoring progress in achieving the activities and objectives of the plan. This staff will provide reports on progress to the QIC Leader who will then communicate progress, challenges, and next steps to the QIC members and the Department's Senior Leadership Team.

QI TRANSITION STRATEGIES TO INCORPORATE IN THE PLAN

2014-2015 from PHASE 2 to PHASE 3

Transition Strategies: Leaders incorporate QI into the organization's value statement and guiding principles • QIC ensures basic performance management and QI trainings and resources for every level of staff • QIC members engage in training opportunities to enhance their knowledge and ability to lead QI efforts and offer technical assistance to staff • QIC drafts a QI plan with time-framed and measurable goals and objectives

2015-2016 from PHASE 3 to PHASE 4

Transition Strategies: Share success stories throughout the organization • Introduce all staff to performance management • Routinely report results of QI efforts to leadership • Communicate to staff that QI is not about placing blame or punishment • Offer organized training in QI • Establish a customer focus for processes

2016-2017 from PHASE 4 to PHASE 5

Transition Strategies: Routinely hold team project presentations to share learning • Report results to outside entities and local governance • Increase agency-wide access to data • Find creative ways to work across silos

2017-2019 from PHASE 5 to PHASE 6

Transition Strategies: Integrate QI at leadership meetings in a standardized way • Encourage frontline staff to produce QI ideas that are aligned with the agency strategic plan • Incorporate competencies in job descriptions • Ensure that leadership champions agency-wide QI • Evaluate processes and outcomes • Demonstrate return on investment through cost and time • Incorporate QI into performance evaluations

QUALITY IMPROVEMENT CLOUD GOALS AND OBJECTIVES

Goal 1 Leadership at all levels communicates the importance and value of quality improvement.
By September 2014, departmental senior leadership understands the QI key principles.
By December 2014, leaders will assess the current organization culture of QI.
Goal 2 Quality improvement is institutionalized into MCDPH’s structure.
By July 2014, identify members of the QIC with all divisions represented.
By August 2014, QIC will develop team guidelines, mission, roles, and responsibilities.
By October 2014, the QI work plan will be entered into the performance management system with activity leads and timeframes.
Goal 3 All staff have an understanding of QI concepts and practical applications at MCDPH
By December 2014, Public Health New Employee Orientation will include a presentation on Quality Improvement and the value of quality within MCDPH.
By March 2015, implement basic QI training for all staff.
By June 2015, implement advanced QI training for QIC members.
By June 2015, create a SharePoint QI Toolbox for resources and materials
Goal 5 MCDPH seeks and uses feedback from customers for continuous quality improvement.
By June 2015, Identify existing customer satisfaction data in the department and identify gaps and needs.

Goal 6 MCDPH engages in continuous process improvement.
By January 2015, explore the different models for QI projects (e.g., Lean, Six Sigma, and Rapid Cycle Improvement) and provide resources for staff.
By March 2015, QIC will prioritize a list of options for “winnable” QI project(s) and lead the planning and implementation of these projects.
By June 2015, review the success of the QI plan and prepare modifications for 2016.

QUALITY IMPROVEMENT STRUCTURE

Engaging in continuous quality improvement is expected at all levels across the department. While there is no permanent budget for QI work, it is expected that the following staff contribute to the infrastructure and operation of QI work. Key roles and responsibilities for QI include:

Health Director is responsible for identifying public health priorities, creating effective policy, establishing goals and objectives, and embodying the mission of the Department of Public Health.

Division Administrators support the daily operations of their respective Divisions. The Divisions are Community Health Action, Disease Control, Community Transformation, Clinical Services, and Administration. They are expected to have a basic understanding of quality improvement (definition, purpose, basic concepts), to lead by example, and to foster a culture of quality within their respective divisions/offices. This may include; assessing and addressing QI training needs; referring potential cross-divisional QI opportunities to the Quality Improvement Cloud; encouraging managers/supervisors to integrate QI into their daily work; supporting a division Quality Improvement Team; and recognizing those who contribute to quality, efficiencies and cost savings. Division Management is responsible for using performance measures to manage the work of their division/office. Identified opportunities for improvement should be acted upon or referred to the MCDPH Quality Improvement Cloud or other appropriate MCDPH group or committee.

The *Performance Improvement Manager (PIM)* and *Performance Improvement Coordinator* oversee all aspects of implementing the agency-wide performance management system which includes adopting evidence based approaches, overseeing the Quality Improvement Cloud, creating an agency workforce development plan, managing implementation of the agency strategic plan, developing cross programmatic partnerships, and sharing results from the performance management system for program planning and improvement.

MCDPH’s *Quality Improvement Cloud* is a 14 member workgroup established in July of 2014. This group advises the Department on all aspects of QI including culture development, coordination of all QI project activities evaluation of training available and establishing a

program for recognizing successful work. Members have received extensive training in QI. The QIC supports the PIM in creating the agency-wide QI program. Members are available to provide “classroom” training or as QI project Facilitators (see Appendix E. MCDPH Quality Improvement Cloud Guidelines).

Managers/supervisors are expected to have a basic understanding of quality improvement (definition, purpose, basic concepts). They lead by example and foster a culture of continuous quality improvement within their sections, units and program areas. This includes addressing QI training needs; referring any potential cross-section/unit/program QI opportunities to Division Representatives; encouraging staff to use QI tools and integrate QI into their daily work; and recognizing those who contribute to efficiencies and cost savings. Program managers and supervisors should use performance measures to make data driven decisions. They are expected to identify and put forward opportunities for improvement.

All employees are expected to continually look for ways to do their work better, share those ideas with their colleagues and supervisors, and to contribute and adapt to change. Employees are expected to participate in quality improvement initiatives, as needed.

QI GOVERNANCE STRUCTURE

The vision of the Quality Improvement Cloud (QIC) is to aid in creating, implementing, maintaining, and evaluating the Quality Improvement (QI) efforts at MCDPH with the intent to improve the level of performance. By providing a shared vision that can serve as an effective guide to set the stage for quality management, we hope to encourage an organizational culture that emphasizes learning, teamwork, and customer focus; strives for institutional excellence and staff empowerment; and engages the department in continuous quality improvement. As we raise the bar for program performance, we hope to ingrain and reinforce an enduring culture of quality improvement and excellence, which will be demonstrated by improvements in quality of services and health outcomes.

The key roles of the QIC are to:

- Identify and prioritize opportunities for agency-wide quality improvement (QI) initiatives
- Monitor the progress of agency-wide QI initiatives, support these efforts and address identified barriers
- Track QI efforts and successes at all levels across the agency and periodically report to the Senior Management Team on the scope of the agency’s QI efforts
- Identify and support trainings and/or resources which will help to advance QI efforts across the agency
- Provide guidance to communicate and support successful QI efforts and key learnings
- Review and make suggested revisions to the MCDPH Quality Improvement Plan annually, aligning the plan with the department’s strategic plan and performance management programs, Public Health Accreditation Board (PHAB) Standards, and national quality improvement efforts

QIC Member Roles

Cloud Leader. The QI Cloud Leader will be responsible for maintaining the integrity of the group's purpose, conducting meetings, and acting as the liaison with the department and other stakeholders. The cloud leader works closely with cloud support staff and members of the MCDPH Cloud Strategic Coordination Team to guide cloud discussions, oversee workgroup initiatives, and connect cloud representatives with appropriate resources and potential partners. The leader will develop the agenda, facilitate the QIC meetings, and oversee implementation of the QI work plan.

Cloud Representatives. Each division will have two representatives on the Quality Improvement Cloud. They represent their division at cloud meetings and are responsible for regularly communicating cloud updates back to their respective divisions as well as communicating division, office, or program needs and opportunities to the cloud team. Cloud representatives may also serve as Quality Improvement Project Team Leaders, Trainers, Facilitators, or workgroup members with appropriate supervisor approval. Cloud representatives may contribute in many ways including but not limited to:

- Information sharing and seeking input or feedback on QI activities;
- Identifying QI needs, projects, resources, and training;
- Collaborating, mentoring, and/or providing technical assistance and/or training on QI workgroup initiatives;
- Providing accountability on progress of projects to the QIC; and
- Collecting QI stories and creating storyboards of projects and successes.

Rotating Members. These members review all provided materials prior to attending their first QIC meeting to gain an overall understanding of the cloud, including the MCDPH QI Plan, previous meeting minutes, and other relevant documents. Members should:

- Become familiar with the QI SharePoint site materials;
- Attend all QIC meetings during their scheduled rotation;
- Actively participate in discussions at QIC meetings;
- Participate in subcommittee meetings to provide input; and
- Take information from QIC meetings back to appropriate division meetings.

Cloud Support Staff. QI support staff provides expertise in areas including data analysis, communications, evaluation, and quality improvement. Support staff maintains the QI SharePoint site with meeting documentation, project storyboards, and the QI toolkits.

Cloud Strategic Coordination Team Members. This cross-programmatic team is made up of Cloud Leaders to provide communication, coordination, and alignment between clouds and with the department's goals and needs. This team has representation from the management team to communicate cloud work to the senior management and relate recommendations appropriately. In addition to the currently serving cloud leaders, this team is staffed by leadership of the Office of Community Engagement and the Office of Community Empowerment.

QI CLOUD PROJECT ASSISTANCE

Quality Improvement Cloud members can initiate QI project workgroups or provide assistance to staff considering or conducting quality improvement projects. QIC members will receive advanced training in the use of quality improvement techniques.

Quality Improvement Cloud members may:

- Liaise between projects, the QIC, and staff regarding QI project challenges and successes
- Assist project team leaders with applicable paperwork, including completion of initial QI action plan, summary reports and storyboards
- Assist with project selection and development. They may also direct the project team leader toward available resources and provide technical assistance.
- Act as a trainer, project team leader, facilitator, or team member.

QUALITY IMPROVEMENT PROJECTS

IDENTIFICATION AND PRIORITIZATION OF QI OPPORTUNITIES

Throughout the next year, the QI Cloud will identify and/or approve QI opportunities through one or more of the following avenues:

- Senior Leadership Team requests
- The Accreditation Improvement Plan (following Public Health Accreditation)
- Agency-wide assessments and/or surveys, such as the annual employee survey
- MCDPH Dashboard program performance measure data
- Monitoring of Division or Office-level projects for those that have the potential to impact other program areas

The MCDPH Quality Improvement Cloud members have agreed upon project guidelines to aid staff in project selection and implementation (see Appendix F. QI Project Packet).

Project proposals, requests and ideas will be reviewed at regularly scheduled Cloud meetings. The Cloud will encourage and provide support to those projects which align with the agency mission and goals and which are able to be completed with available resources (see Appendix E. QI Cloud Guidelines).

TYPES OF QI PROJECTS

This section covers three levels of QI activities: Big QI, little QI, and individual QI. Leadership addresses the quality of the Department-wide system at a macro level (Big "QI".) In the middle, program managers and staff address problems in their divisions, offices, programs or service

areas by improving particular processes (Little “QI”). At the individual level, staff members work to improve their own behaviors and environments (Individual “QI”).

The Quality Improvement Cloud will encourage and provide support for the identification and implementation of cross-programmatic QI initiatives. Priority will be placed on projects that align with the agency’s strategic priorities, existing goals, and/or identified gaps based on performance data. Additional projects will be identified and/or initiated, as resources allow. Project selection is also divided into these three levels. Selecting which QI opportunity to pursue will be guided by existing Department priorities.

Big QI – Organization Wide	Little QI – Program/Unit	Individual QI
<ul style="list-style-type: none"> • System focus • Tied to the CHIP • Aligned with the Strategic Plan • Responsive to a community need • Cuts across all programmatic areas 	<ul style="list-style-type: none"> • Specific project focus • Program/unit level • Performance of a process over time • Delivery of a service 	<ul style="list-style-type: none"> • Daily work level focus • Tied to yearly individual performance • Performance of daily work

Table 1. Adapted from *The Continuum of Quality Improvement in Public Health* by Grace Duffy, Kim McCoy, John Moran, and William Riley

Big QI – Organization (Department) Wide

There are a number of current Department-wide priorities that can be considered when selecting “Big QI” projects. These include: public health accreditation, the Community Health Improvement Plan (CHIP), Department Strategic Plan, and management of operations.

Accreditation – Once accredited status is received, the Department will be required to provide annual updates to the Public Health Accreditation Board (PHAB) on its continuous quality improvement activities. Accreditation impacts the infrastructure of the Department and its ability to fulfill the ten essential public health services.

Community Health Improvement Plan— The CHIP is a community-initiated plan to address the five public health priorities determined by the recent Community Health Assessment (CHA) in 2012. These public health priorities are: reducing obesity, diabetes, cardiovascular disease, lung cancer, and improving access to care.

Department Strategic Plan – The Department’s strategic plan has a three-year scope and focuses on four core areas with cross-cutting impact. The areas include: promote a safe, healthy, and prepared Maricopa County, creating a healthier Maricopa County through policy, system, and environmental approaches, increasing efficiency and effectiveness, and maximizing resources.

Operations— Processes governing department operations including various administrative services are implemented across the department and are an important area to consider when selecting “Big QI” projects.

Little QI – Program/Unit

In addition to “Big QI” activities which result in agency-wide involvement, there are also a number of considerations when selecting “Little QI” projects to improve a process at the micro system level. These include, but are not limited to: program logic models, customer needs, current performance, as well as program monitoring and evaluation.

Program Logic Models – Logic models are a program management tool that helps planners prioritize the most effective activities for directing resources. The four primary areas of a logic model include: inputs, activities, outputs, and outcomes. Little QI focus areas can be found under the “activities” section of a logic model.

Customer Needs —Customer relationships begin with identifying who our customers are and what they need. Evaluation and customer feedback tells us if we are providing what they need. Finding specific areas in which to improve by identifying which aspects of services may need improvement and getting specific ideas from customers about what could be better can be gathered through a survey process.

Current Performance—The agency dashboard is an online performance management system and custom built database which brings operational plans to life, provides great opportunity for identifying improvement projects. Yearly goals are established for MCDPH’s programs and each quarter, data is collected to monitor progress. Those programs and services that are not on schedule to meet the annual goal within the fiscal year may be considered for “Little qi” work. Additionally, at the end of the year, the Office of Performance Improvement creates a report for Senior Leaders identifying where goals were not met. This also identifies potential quality improvement opportunities for the next year.

Monitoring & Evaluation– Staff responsible for monitoring and evaluation work within the Department and those participating on the MCDPH’s Clouds are in positions to identify which programs and services are not resulting in the expected changes in health outcomes. Using their evaluation findings is a great tool for identifying opportunities for QI work.

Individual QI – Daily Work

The opportunity to identify “individual QI” work is through the Professional Development Action Plan (PDAP) component of the employee’s annual performance plan. Maricopa County encourages employees to follow a five step framework for career management that includes self-assessment, goal setting, and identifying areas for professional development based on competencies. A career development guide entitled *Managing Your Career at Maricopa County* (found at <http://ebc.maricopa.gov/careerdev/FullGuide.pdf>) includes information about the Maricopa County Competencies and contains a Competencies Assessment Tool and PDAP template.

The Maricopa County Competencies Assessment Tool allows supervisors and staff to identify areas of competency and need. The survey results should be created in collaboration with the employee and may include the following three objectives:

- Specific objectives designed to improve the knowledge, skills, and abilities of the employee
- Specific objective for areas of ongoing professional development
- Objectives that address areas in which the employee received a review of “Marginal Performer” or below during the preceding review year

The PDAP shall include a timeframe for the accomplishment of each action step, the accompanying competency, and results. To support employee success and assist employees in identifying “individual qi” opportunities, training opportunities will be promoted through the training portal on the MCDPH intranet. .

PROJECT MANAGEMENT

MCDPH’s formal process for establishing a QI project and reporting progress to the QIC is outlined in detail in the Quality Improvement Project Packet (see Appendix F.). This guidance is based on best-practice guidance from national leading organizations in this area^{10,11,12} and establishes the steps for identifying QI projects, initiating then implementing the process(es), and reporting success. It is designed to be referred to and filled in as the QI team progresses through each step in the quality improvement process. This packet includes:

- A 9-Step Checklist to complete a Plan-Do-Study-Act process
- The detailed project guide to assist teams in implementing a successful project as well as documenting decisions, techniques used, and team information
- Storyboard template to ease the recording of the project for sharing

QI TEAM RESPONSIBILITIES AND ROLES

The success of QI projects is based on the selection and membership of a team of staff and customers committed to process improvement. Project teams are expected to:

- Document the answers to the questions:
What are we trying to accomplish?
How will we know that a change is an improvement?
What changes can we make that will result in an improvement?
- Complete the Project Packet that outlines how the team will operate and what it will accomplish and document key steps of the process
- Use the Plan-Do-Study-Act methodology
- Report results to the QI Cloud
- Share documents, tools, lessons learned, etc. with others throughout the department
- Develop a project summary (see Appendix D. QI Project Packet)

Effective teams usually have an Executive Sponsor, and five to seven members, including the team leader. The team may be larger, but the time commitment usually increases and the speed with which the team begins to perform is slower. A successful team will include:

Executive Sponsor. The Sponsor is a high-level leader who is able to easily access senior leadership and promote the QI project. The Sponsor is also able to advise the Project Leader if the QI project work is in alignment with the strategic direction and priorities of the Department. It is also important for the Sponsor to use their authority to remove obstacles that the Project Leader cannot and to push the implementation of the QI project recommendations. The day-to-day project management is not the role of the Sponsor.

Project Leader. The Project Leader of a team is a permanent role for the life of the team. The Project Leader should develop a preliminary plan for each team meeting and is responsible for facilitating the team discussion. It is also the Project Leader who requests assistance from a Facilitator when the team is struggling with its ability to work together and use effective team meeting skills. The Project Leader is responsible for input to the agency Dashboard regarding the project's progress.

Recorder. The recorder is a rotated position selected at the beginning of each team meeting. The primary role of the recorder is to record content from brainstorming, consensus building, and other tools and processes on a flip-chart, sticky wall, or white board that is visible to the team. It is important that the recorder write down what each team member says rather than their interpretation of what was said. Sometimes it is helpful to select two recorders when a lot of information needs to be logged. At the end of the meeting, the recorder should be responsible for capturing the meeting discussion in the QI Project Guide.

Timekeeper. The timekeeper is also a rotated position selected at the beginning of each team meeting. The primary role of the timekeeper is to call out the time remaining on each agenda item at intervals the team determines is appropriate. In this way, the timekeeper assists the team in staying on task and managing its time effectively.

Member. Team members are normally selected because they represent a part of the cross-functional process that is being improved. Sometimes, a staff member from outside of the process is included in team meetings to bring outside expertise and knowledge. All members have a responsibility to participate and share their knowledge with mutual respect for other team members. Team members will also rotate to fulfill the roles of recorder or timekeeper at each meeting.

Facilitator. The most effective teams also have a trained Facilitator in a permanent role to meet with them and guide their use of meeting skills and tools. The Facilitator functions as a team advisor with expertise in the processes and tools that help QI teams be effective as well as providing impartial feedback to the members to improve their

communication and meeting process. If a team has identified a Facilitator, the Facilitator should be present at most meetings, especially in the early stages of development when the team is learning how to work together. If a team has decided not to work with a permanent Facilitator, the opportunity to engage with a Facilitator could still be used if the team begins to struggle with team processes or when they need advice or skill training to effectively use problem-solving tools.

The Facilitator must exercise personal discipline to not contribute ideas or participate in decisions regarding the process being studied and the need for the involvement of the Facilitator normally diminishes as the team members and team leader gain more knowledge and skills about team processes and tools.

DOCUMENTATION AND REPORTING

There are multiple methods in which a QI team can report their project successes. Throughout the project, the *Recorder(s)* should ensure that the *Project Leader* and all members of the team have access to the QI Project Guide containing written documentation on meeting discussions, the results of using QI tools and the findings from these tools, as well as recording action plans and project recommendations. Additionally, frequent reports should be shared with the *Executive Sponsor* throughout the life of the project. Three methods for storing final project results are:

- Development of a visual storyboard
- Submission to PHQIX and/or
- QI Project Guide documentation on SharePoint

Storyboards

Quality Improvement (QI) Storyboarding is an organized way of documenting and showcasing the quality improvement process conducted by a team that is working systematically to resolve a specific problem and/or improve a given process. Storyboards use simple, clear statements as well as pictures and graphs to describe a problem, summarize the analysis process while it is under way, describe the solution and its implementation, and display the results and next steps.

PHQIX

The Public Health Quality Improvement Exchange (PHQIX) is an online community designed to be a communication hub for public health professionals interested in learning and sharing information about QI in public health. PHQIX, created by RTI International and funded by The Robert Wood Johnson Foundation, launched in September of 2012. The purpose of PHQIX is to disseminate information learned through QI initiatives and facilitate increased use of QI in public health practice. The PHQIX website includes:

- An online database of QI efforts conducted by governmental public health departments across the country;

- Search and query functions to enable users to find interventions and tools relevant to their own health department and community needs; and
- A forum for dialogue and learning among the site's users.

QI Project Guide Documentation on SharePoint

A repository of completed QI Project Guides documenting QI project successes has been created to encourage project sharing and lessons learned with others. Collecting findings and improvements will allow easy communication of the teams' successes throughout the Department and to both public health and county leadership. As the development of cloud workgroups and learning communities emerge to take on departmental problems and/or challenges, this repository will become a valued resource.

PERFORMANCE MONITORING AND REPORTING

The QI Cloud will review the QI Plan and all related processes annually to ensure they remain adaptive to change and meet the needs of all who are impacted by QI efforts. The evaluation will include comparison of actual results to objectives outlined in the work plan. Analysis of gaps in performance will inform the annual plan updating process.

The Cloud Chair will present an annual report to the Senior Management Team which summarizes:

- BIG QI projects, including reporting of project data, a summary of barriers to achieving aims, plans for addressing barriers, successes, key learnings and sustainability plans
- Achievement on the comprehensive QI Culture Assessment Score
- A work plan for the next year
- Any recommended changes to the QI Plan
- Any recommended changes to the QI Cloud's Guidelines

TRAINING PLAN

Developing staff capacity and competency to engage in continuous quality improvement is an essential component to building a culture of quality. The QI Cloud has approved QI training topics (see Appendix G. QI Training Plan). The Quality Improvement Cloud membership will work with the Workforce Development Coordinator to support the following activities:

- Create and present a 10-15 minute overview of Quality Improvement and Performance Management at MCDPH new employee orientation.
- The QIC has approved a three tiered approach to training. Tier 1 training includes "just in time" training, brown bag type workshops, and Q-Tip training on QI tools. Tier 2 includes basic but comprehensive QI topics for all employees. Tier 3 training events provide advanced training for QIC members and those facilitating QI projects.

- Encourage and promote QI trainings to MCDPH staff and managers/supervisors which are offered by external partners, such as through the Arizona Department of Health Services and the National Association of City and County Health Officers Improvement.
- Encourage networking and learning from others through MCDPH QI Learning Communities and Brown Bag events.

QI Training is included in both the MCDPH Strategic Plan and the MCDPH Workforce Development Plan. Training evaluation will be conducted by the Workforce Development Coordinator in the Office of Performance Improvement.

COMMUNICATION PLAN

Clear and consistent communication is also critical to building a culture of continuous quality improvement throughout MCDPH. The Communication Plan serves to outline the strategies and activities the Quality Improvement Cloud will engage in to regularly to communicate QI within MCDPH. They include:

Making QI Visible

- Physically display project summaries/storyboards.
- Promote the MCDPH Quality Improvement Cloud SharePoint site.

Recognizing Quality Improvement Efforts

- Acknowledge QI project accomplishments through write-ups on the MCDPH Intranet homepage.
- Publicize and archive completed QI projects on the Cloud SharePoint site.

Documenting QI Project Activity

- Collect QI project teams' storyboards upon project completion.

Reporting Regularly on QI Efforts and Achievements

- Present QI updates and messages from the Cloud Chair at Division meetings.
- Provide regular Cloud updates and annual reports to the Senior Management Team.
- Present at division/office and/or program-level meetings, as requested.
- QI project leaders present project summaries/storyboards to the Quality Improvement Cloud upon project completion, as requested.
- Present results of QI efforts at Brown Bag and/or QI Learning Community events.

Enhancing, maintaining and promoting QI resources and tools

- Promote QI tools, resources, and trainings through links from the MCDPH Intranet home page to the MCDPH external webpage for QI: [**MCDPH: Quality Improvement & Performance Management**](#).

Organizing and Sharing QI Documents on SharePoint (Internally) and PHQIX (Externally)

- Use the Quality Improvement SharePoint site to store documents from the Quality Improvement Cloud.
- Complete PHQIX reports for national sharing.

EVALUATION

In order to maintain the integrity of this Quality Improvement Plan and its strategic objectives, a detailed work plan has been developed. Each objective and corresponding activity designates a lead staff, team members, start and end dates, and performance metrics. These detailed plans are entered in the department's performance management system, "The Dashboard," to operationalize and monitor the progress of each objective.

As mentioned previously, the Dashboard is a custom database that brings the strategic and operational plans to life, offers a way for all staff involved in strategic planning and organizational success, and supports and documents community partnerships and collaborative efforts. These activities and objectives are organized into broader goals and services. Dashboard information is updated on a monthly basis by program staff and is visible to MCDPH staff across the department providing a simple and clear snapshot that displays the organization's performance at a given point in time. Customized reports on progress of selected objectives are also shared with community partners and collaborative groups as appropriate.

In order to integrate the work plans into the functions of the Health Department, each program's annual operating plan has been aligned with the departmental objectives for which they contribute. This creates alignment from both top-down and bottom-up approaches for work in the department.

The Performance Improvement Manager (PIM) is responsible for the evaluating and reporting progress on the QI Plan and corresponding work plan. The PIM reports to the Director, is a full-time, County-funded position and presents the progress report to the Senior Management Team. The Senior Management Team will review progress on the departmental performance measures bi-annually.

This plan is part of the department's capacity building efforts to incorporate quality improvement methods to improve both efficiency and effectiveness in meeting the ten essential services of a public health department. The department leadership is committed to the ongoing integration of all quality improvement initiatives, including the department's Communication Plan, Accreditation Reports, Quality Improvement Plan, Performance Management System, Workforce Development Plan, and Community Health Improvement Plan. The systematic review and subsequent updating of the MCDPH Strategic Plan will include reviewing these materials to identify gaps and solutions.

The effectiveness of the QI Plan will be measured by the following methods:

- Monitoring the annual MCDPH QI Culture Assessment Score
- Assessing the achievement of QI Plan goals and objectives
- Assessing the completion of the annual Quality Improvement Cloud Work Plan

Progress in meeting the department's performance measures will be communicated to staff, Maricopa County stakeholders, and community partners through the above mentioned methods via the Quality Improvement Cloud members.

APPENDICES

Appendix A: Quality Improvement Definitions

Appendix B: Quality Improvement Culture Assessment

Appendix C: Results from Three Assessments

Appendix D: Quality Improvement Cloud Workplan

Appendix E: Quality Improvement Cloud Guidelines

Appendix F: Quality Improvement Project Packet

Appendix G: Quality Improvement Training Plan

APPENDIX A. QI DEFINITIONS

Updated August 2014

Accreditation: According to the Public Health Accreditation Board (PHAB), Accreditation is defined as:

- The development of a set of standards, a process to measure health department performance against those standards, and some form of reward or recognition for those agencies meeting the standards.
- The periodic issuance of credentials or endorsements to organizations that meet a specified set of performance standards.
- A voluntary conformity assessment process where an organization or agency uses experts in a particular field of interest or discipline to define standards of acceptable operation/performance for organizations and measure compliance with them. This recognition is time-limited and usually granted by nongovernmental organizations.

Alignment: Alignment is the consistency of plans, processes, information, resource decisions, actions, results and analysis to support key organization-wide goals.

Baldrige National Quality Program. (2005).

Competencies: Core competencies are fundamental knowledge, abilities, or expertise associated in a specific subject area or skill set.

Nash DB, Reifsnyder J, Fabius RJ, and Pracilio VP. (2011). *Population Health: Creating a Culture of Wellness*. Sudbury, MA: Jones and Bartlett.

Continuous Quality Improvement (CQI): Continuous Quality Improvement (CQI) is an ongoing effort to increase an agency's approach to manage performance, motivate improvement, and capture lessons learned in areas that may or may not be measured as part of accreditation. The primary goals are to improve the efficiency, effective-ness, quality, or performance of services, processes, capacities, and outcomes.

Centers for Disease Control and Prevention, National Public Health Performance Standards Program and Public Health Foundation. (2007). *Acronyms, Glossary, and Reference Terms*.

Customer Satisfaction: Customer satisfaction is a measure of how products and services supplied by an organization meet or surpass customer expectations. Customer satisfaction is the number of customers, or percentage of total customers, whose reported experience with an entity, its products, or its services (ratings) exceeds specified satisfaction goals.

Farris PW, Bendle NT, Pfeiffer PE, ReibsteinDJ. (2010). *Marketing Metrics: The Definitive Guide to Measuring Marketing Performance*. Upper Saddle River, NJ: Pearson Education, Inc.

Data: Data are factual information (as measurements or statistics) used as a basis for reasoning, discussion, or calculation. Data are information in numerical form that can be digitally transmitted or processed.

Merriam-Webster Online. *Data – Definition and More*. Online: <http://www.merriam-webster.com/dictionary/data>.

Goals: The term “goals” refers to a future condition or performance level that one intends to attain. Goals can be both short- and longer-term. Goals are ends that guide actions. Quantitative goals, frequently referred to as “targets,” include a numerical point or range.

Baldrige Performance Excellence Program. (2002). *Goals*. Baldrige Business, Public Sector, and other Nonprofit Glossary. Online: http://www.baldrige21.com/BALDRIGE_GLOSSARY/BN/Goals.html.

Lean: Lean refers to a collection of principles and methods that focus on the identification and elimination of non-value added activity (waste) involved in producing a product or delivering a service to customers.

James Womack, Daniel Jones, and Daniel Roos coined the term “lean” in their 1990 book, *The Machine that Changed the World*, to describe the manufacturing paradigm (often referred to as the Toyota Production System)

Mission: A mission statement is a description of the unique purpose of an organization. The mission statement serves as a guide for activities and outcomes and inspires the organization to make decisions that will facilitate the achievement of goals.

Centers for Disease Control and Prevention, National Public Health Performance Standards Program and Public Health Foundation. (2007). *Acronyms, Glossary, and Reference Terms*.

Objectives: Objectives are targets for achievement through interventions. Objectives are time limited and measurable in all cases. Various levels of objectives for an intervention include outcome, impact, and process objectives.

Turnock, BJ. (2009). *Public Health: What It Is and How It Works*. 4th ed. Sudbury, MA: Jones and Bartlett.

Performance Management: Performance Management uses data for decision-making, by setting objectives, measuring and reporting progress toward those objectives, and engaging in quality improvement activities when desired progress toward those objectives is not being made.

Performance Management System: A fully functioning performance management system that is completely integrated into health department daily practice at all levels includes: 1) setting organizational objectives across all levels of the department, 2) identifying indicators to measure progress toward achieving objectives on a regular basis, 3) identifying responsibility for monitoring progress and reporting, and 4) identifying areas where achieving objectives requires focused quality improvement processes.

Public Health Accreditation Board. (2011). *Standards and Measures Version 1.0*. PHAB: Alexandria, VA. Online: <http://www.phaboard.org/wp-content/uploads/PHAB-Standards-and-Measures-Version-1.0.pdf>

Plan-Do-Study-Act (PDSA): PDSA refers to the process of continual improvement and learning proposed by Walter Shewhart and espoused by W. Edwards Deming. The letters stand for Plan, Do,

Study, and Act. The four stages of the PDSA cycle: Plan – the change to be tested or implemented; Do – carry out the test or change; Study – data before and after the change and reflect on what was learned; Act – plan the next change cycle or full implementation. Also sometimes called Plan-Do-Check-Act (PDCA).

Program Evaluation: Program evaluation is defined as the systematic application of social [or scientific] research procedures for assessing the conceptualization, design, implementation, and utility of social [community] intervention programs.

Rossi PH, Freeman HE, Lipsey MW. (1999). *Evaluation: A Systematic Approach* (6th ed.). Sage: Thousand Oaks, CA.

Quality Assurance: Quality Assurance consists of planned and systematic activities implemented in a quality system so that quality requirements for a product or service will be fulfilled.

American Society for Quality.

Quality Improvement (QI): 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.

Riley WJ, Moran JW, Corso LC, Beitsch LM, Bialek R, and Cofsky A. (2010). Defining Quality Improvement in Public Health. *Journal of Public Health Management and Practice* 16(1), 5-7.

Quality Improvement Plan: The Quality Improvement Plan is a basic guidance document indicating how the department will manage, deploy, and review quality throughout the organization. The main focus is on how we deliver our products and services to our customers and how we ensure that we are aligned to their needs. The Quality Improvement Plan describes the processes and activities that will be put into place to ensure that quality deliverables are produced consistently. Over time, the Quality Improvement Planning, business planning, and strategic planning will integrate themselves into one aligned document. Initially, however, the Quality Improvement Plan needs to be separate to give it the proper focus and attention throughout the organization.

Kane T, Moran JW, and Armbruster S. (2010). *Developing a Health Department Quality Improvement Plan*. Public Health Foundation. Online:

http://www.pfh.org/resourcestools/documents/developing_a_quality_improvement_plan.pdf.

Strategic Plan: A strategic plan results from a deliberate decision-making process and defines where an organization is going. The plan sets the direction for the organization and, through a common understanding of the mission, vision, goals, and objectives, provides a template for all employees and stakeholders to make decisions that move the organization forward.

Swayne LE, Duncan WJ, and Ginter PM. (2008). *Strategic Management of Health Care Organizations*. Jossey-Bass: New Jersey.

Training: Training for the public health workforce includes the provision of information through a variety of formal, regular, planned means for the purpose of supporting the public health workforce in maintaining the skills, competencies, and knowledge needed to successfully perform their duties.

Institute of Medicine. (2003). *Who Will Keep the Public Healthy?* National Academies Press: Washington, DC.

Values: Values (and principles) describe how the work is done, what beliefs are held in common as the basis for the work.

Public Health Accreditation Board.

Vision: Vision is a compelling and inspiring image of a desired and possible future that a community seeks to achieve. A vision statement expresses goals that are worth striving for and appeals to ideals and values that are shared among stakeholders.

Bezold, C. (1995). *On Futures Thinking for Health and Health Care: Trends, Scenarios, Visions, and Strategies*. Institute for Alternative Futures and the National Civic League: Alexandria, VA.

APPENDIX B. QI CULTURE ASSESSMENT

Building and Sustaining a Culture of Quality

All health organizations are being asked to continuously improve the quality of their programs and services. Beyond discrete process improvements, achieving and sustaining an organization-wide culture of quality is necessary to:

- continually develop and sustain improvements,
- demonstrate return on investment, and
- ultimately impact health outcomes

The culture of an organization is the embodiment of the core values, guiding principles, behaviors, and attitudes that collectively contribute to its daily operations. Organizational culture is the very essence of how work is accomplished; it matures over time, during which norms are passed on from one “generation” of staff to the next. Because culture is ingrained in an organization, transforming culture to embrace quality improvement (QI) requires strong commitment and deliberate management of change over time. This self-assessment tool will help MCDPH assess the degree to which QI has been integrated into our organizational systems, help us identify concrete steps to advance a culture of quality, and track our progress in the transformation. We hope to use this survey every 3-5 years to track our progress in implementing quality improvement practices.

Quality Improvement (QI) is using a deliberate and defined improvement process, such as Plan-Do-Study-Act, that is focused on activities that are responsive to community needs and improving population health. QI is continuous and ongoing.

<i>Please rate your opinion of the degree to which you agree with the following statements about organizational culture as they pertain to your work unit as well as the department as a whole. Your answers are confidential and will be combined for your office or division similarly to the MC Employee Satisfaction Survey.</i>		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	I Don't Know
1	Employees have the opportunity to identify improvement activities and formal QI projects.						
	• Within my work unit						
	• Within the department as a whole						
2	Sufficient QI training and resources are available to meet staff needs.						
	• Within my work unit						
	• Within the department as a whole						
3	Lessons learned and best practices are routinely shared.						
	• Within my work unit						
	• Within the department as a whole						
4	QI project teams are routinely formed to make improvements as needed.						
	• Within my work unit						
	• Within the department as a whole						
5	Opportunities to participate in learning communities to build QI knowledge and skills exist.						
	• Within my work unit						
	• Within the department as a whole						
6	Leaders allow for employees to dedicate time to support QI initiatives.						
	• Within my work unit						
	• Within the department as a whole						

7	Leaders routinely engage with their employees in their work area to understand issues, concerns, and improvement ideas.						
	• Within my work unit						
	• Within the department as a whole						
8	Organizational leaders encourage QI participation, involvement and creativity of their employees.						
	• Within my work unit						
	• Within the department as a whole						
9	Leaders and QI leadership team (QI Cloud) ensure that QI strategies are included in strategic and operational plans.						
	• Within my work unit						
	• Within the department as a whole						
10	Leaders set the expectation that QI is a part of everyone's job.						
	• Within my work unit						
	• Within the department as a whole						
11	We identify, define, track and use measures of customer satisfaction.						
	• Within my work unit						
	• Within the department as a whole						
12	Customer satisfaction data is used to prioritize and drive improvement efforts.						
	• Within my work unit						
	• Within the department as a whole						
13	One or more formal improvement models (e.g. Plan-Do-Study-Act, LEAN) are routinely used to make process improvements.						
	• Within my work unit						
	• Within the department as a whole						
14	Processes are in place to monitor and sustain measurable improvements achieved through QI projects.						
	• Within my work unit						
	• Within the department as a whole						
15	Staff uses QI tools and techniques in to improve processes in which they are involved.						
	• Within my work unit						
	• Within the department as a whole						

Please rate your opinion of the degree to which you agree with the following statements about organizational culture as they pertain to MCDPH. Your answer is confidential and will be combined for your division.

16	A strategic planning process results in an updated strategic plan every 3-5 years.						
17	The QI plan's goals and strategies are cascaded throughout the organization and into operational plans and employee work plans.						
18	The QI plan and progress against the plan is available to all employees.						
19	A formal, cross- programmatic governance structure oversees all QI related activities and initiatives.						

Your Quality Improvement Division Representative(s) will be sharing the results of this survey. Thank-you!

APPENDIX C. RESULTS FROM THREE ASSESSMENTS

MCDPH has reviewed the results of several departmental surveys to evaluate employee perceptions of performance management and quality improvement.

Workforce Development: Core Competency Self-Assessment and Training Preferences

The *Core Competency Self-assessment and Training Preferences* survey was developed by the Arizona Public Health Training Center (AzPHTC) of the Mel and Enid Zuckerman College of Public Health, the University of Arizona and implemented with MCDPH staff in 2013. The Core Competency Self-assessment survey contains eight domain areas where responses ranged from 1= Novice to 5= Expert. For additional information on results of the Core Competency Self -assessment contact the Office of Performance Improvement. The Training Preferences survey assessed preferences in training topic, format and delivery from 47 potential training topics any that 1) were of personal interest to them, and 2) were important to their job.

Respondents: All MCDPH staff was asked to respond including administration staff, public health professionals, managers, supervisors, and senior leadership. Data for the Director and Senior Leadership are not presented because there were fewer than five respondents in that category.

Number/Percent responded: Two-hundred and seventy-one staff of MCDPH responded to the survey or 64.5 percent. The majority of respondents worked in the Community Health Action (n=80), Disease Control (n=77), followed by Clinical Services (n=45), Community Transformation (n=44) and Administration (n=25) divisions.

Purpose: Identifies staff training needs and format preferences per staff and their supervisors

Results: For support staff, the training topics most frequently indicated as important to their job were, "Customer service" (n=22, 58%), "Quality improvement" (n=18, 47%), "Public health 101", and "Improving program outcomes and measures" (n=16, 42% each). For public health professionals, the top training topics important to their job were, "Improving program outcomes and measures" (n=98, 61% each), "Using evidence based programs, policies and practices" (n=93, 58%), "Public health 101" (n=90, 56%), and "Quality improvement" (n=85, 53%). For managers and supervisors, "Leadership skills" was the top pick (n=47, 68%), followed by "Coaching and discipline" (n=45, 65%), "Improving program outcomes and measures" (n=43, 62%), and "Quality improvement" (n=42, 61%).

MCDPH QI Culture Assessment: Building and Sustaining a Culture of Quality

The assessment tool is based on the NACCHO's Roadmap which provides high level guidance on progressing through six phases toward a quality culture, presenting common organizational characteristics and strategies for transitioning to the next phase. Each phase is built around six foundational elements critical to building a culture of quality: Leadership, QI Culture, QI Training, QI Planning, Implementation and Evaluation, and Customer Focus. NACCHO's *Self-Assessment Tool (SAT)* is organized by these six foundational elements and then further sub-divided into 20 sub-elements.

These elements are foundational to developing a culture that values, models, and promotes continuous quality improvement.

When creating an instrument for MCDPH staff to assess the culture of Quality Improvement, staff from the Office of Performance Improvement reviewed both the NACCHO *Self-Assessment Tool (SAT)* for Local Health Departments (LHDs) as well as surveys used at other LHDs including the *QI Maturity Tool*.¹³ Both the Quality Improvement Cloud members and the Departmental Senior Leadership Team reviewed the QI surveys and provided feedback on the optimal kinds of questions to use for distribution. One important consideration was the perspective of staff answering the questions for their unit or for the department. It was determined that both types of information would be important for optimal functioning. A unique survey was constructed using questions directly from the SAT incorporating all of the SAT Foundational Elements (employee empowerment, teamwork and collaboration, leadership, customer focus, quality improvement infrastructure, and continual process improvement). Of the 19 questions about QI, 15 ask the respondents about their perspective of the item from both their work unit and the department. The remaining four questions regard Department QI infrastructure. This survey was approved and distributed to staff via a Survey Monkey online assessment distributed by the Quality Improvement Cloud members.

Respondents: Quality Improvement Cloud, Senior Leadership Team, All Staff

Number: 288 staff members responded to the survey representing every division and 19 offices. This represents approximately 46.5% of staff.

Purpose: Assess the current organizational culture of quality and identify priority gaps.

Limitation: The number of respondents for this survey was very low. There are several reasons why this may have incurred. Staff have completed many assessments in the past year and there is a feeling of “survey burnout” prevalent in the department. The other predominant limitation is the lack of knowledge and recognition of quality improvement terminology in the department. QIC members reported that staff were unfamiliar with the terms and resisted completing the assessment.

Results: Following is a list of highlights for this survey.

■ **Employee Empowerment & Commitment**

41% of survey respondents agree MCDPH employees have the opportunity to identify improvement activities and formal QI projects in the department.

Only 36% agree sufficient QI training & resources are available to meet staff needs at MCDPH.

■ **Teamwork & Collaboration**

69% agree lessons learned and best practices are routinely shared in their work units.

35% agree QI project teams are routinely formed in the department.

42% agree that opportunities to participate in learning communities to build QI skills and knowledge exist in the department.

■ **Leadership**

41% agree that department leaders allow employees to dedicate time to QI initiatives.

45% agree leaders across the department routinely engage with employees to understand issues, concerns, and improvement ideas.

43% agree organizational leaders across the department encourage QI participation, involvement and creativity of their employees.

31% agree leaders and the QI Cloud ensure that QI strategies are included in strategic and operational plans across the department.

42% agree leaders across the department set the expectation that QI is a part of everyone's job.

■ **Customer Focus**

49% agree that MCDPH identifies, defines, tracks and uses measures of customer satisfaction.

43% agree customer satisfaction data is used to prioritize and drive MCDPH improvement efforts.

■ **Continual Process Improvement**

18% agree that one or more formal improvement models (e.g. Plan-Do-Study-Act, LEAN) are routinely used throughout the department to make process improvements.

31% agree processes are in place in the department to monitor and sustain measurable improvements achieved through QI projects.

32% agree MCDPH staff use QI tools & techniques to improve processes in which they are involved.

■ **QI infrastructure**

45% agree a strategic planning process results in an updated MCDPH strategic plan every 3-5 years.

32% agree the QI plan's goals and strategies are cascaded throughout the organization and into operational plans and employee work plans.

27% agree the department QI plan and progress against the plan is available to all employees.

26% agree a formal, cross- programmatic governance structure oversees all QI related activities and initiatives at the department.

Where areas of low performance intersect areas of high priority of the employees, quality improvement planning initiatives are warranted. After evaluation of survey results, members identified 5 key goals based on a combination of low performance scores and high priority. A detailed plan for addressing these goals is presented in the full workplan. (See Appendix D: QI Cloud Workplan)

Maricopa County Employee Satisfaction Survey

The 2013-2014 Employee Satisfaction Survey (ESS) for the Maricopa County Department of Public Health (MCDPH) employees was conducted during the month of March, 2014, via a series of unit meetings. The ESS contained 99 satisfaction or agreement questions (including 4 new questions related to health and wellness) and a page for comments. Any score above 50% can be interpreted as an indication of positive satisfaction. Although we are striving for continuous improvement in all areas, scores below 50% require attention and action. In the new reporting format, statistical significance cannot be readily ascertained.

Respondents: All Staff

Number/Percent responded: 555 Public Health employees (100%) participated in this year's survey.

Purpose: Assess the current organizational culture of quality and identify priority gaps.

Results: Following is a list of highlights from this year's survey:

Areas of Dissatisfaction Related to QI

- Reporting and use of employee satisfaction survey results
- The way promotions are earned in the Department

Areas Where We Continue to do Well Related to QI

- Management rankings, at all levels
- Kind of work done and people worked with
- Feeling of accomplishment at work
- Feeling that division/unit and County provides good customer service and focus
- Job makes good use of skills and abilities
- Understanding of jobs related to mission, vision, values
- Performance management process
- Training and development
- Customer service

Results from Indicators Related to Quality Improvement:

- Customer Service Is Unit Priority (95%)
- Understand Job Relative to Department Mission, Vision (95%)
- Annual Evaluation of Work (95%)
- Unit Provides Good Value for Tax Dollars (91%)
- Unit Focuses On Customer Satisfaction/Needs (90%)
- Supervisor Supports Employee Effort toward Customer Satisfaction (91%)
- Understand Job Relative to Department Strategic Plan (90%)
- Supervisor Talks to Me about My Performance (89%)
- Dept Produces Results with Minimum Expense & Waste (87%)

- Encouraged To Attend Job Related Training (85%)
- Individual Performance Plan Includes Training Needs (83%)
- Unit Measures Customer Satisfaction Regularly (82%)
- Participated In Development of Performance Plan (81%)
- Opportunities for Personal Improvement (77%)
- Results Used To Better Department Workplace (68%)
- Department Action Plans Address Identified Issues (66%)

APPENDIX D. QI CLOUD WORKPLAN

	QIC Action Plan	Lead Staff	Team Members	End Date	Performance Metric
Goal 1	Leadership at all levels communicates the importance and value of quality improvement.				
	By September 2014, departmental senior leadership understands the QI key principles.	Siman Qassim	Eileen Eisen-Cohen	9/30/14	Minutes
	Present an overview of QI and Performance Management to the Management team.	Siman Qassim	Eileen Eisen-Cohen, Becky Henry	7/31/14	Meeting Minutes
	By December 2014, leaders will assess the current organization culture of QI.				
	Senior mgt will approve of QI Assessment	Eileen Eisen-Cohen	Becky Henry	8/31/14	Assessment
	Administer QI Assessment through online survey	Eileen Eisen-Cohen	Becky Henry	9/15/14	Assessment
	Present findings to QIC and Mgt Team	Eileen Eisen-Cohen	Siman Qassim	12/31/14	Report
Goal 2	Quality improvement is institutionalized into MCDPH's structure.				
	By July 2014, identify members of the QIC with all divisions represented.	Eileen Eisen-Cohen	Becky Henry	7/31/14	Membership List
	Contact each division administrator for desired membership	Eileen Eisen-Cohen	Becky Henry	7/31/14	List Complete
	By August 2014, QIC will develop team guidelines, mission, roles, and responsibilities.	Eileen Eisen-Cohen	Becky Henry	8/31/14	List Complete
	Work with consultant and review NACCHO and other resources.	Eileen Eisen-Cohen	Becky Henry	8/31/14	List Complete
	Draft guidelines, distribute for input, and finalize	Eileen Eisen-Cohen	Becky Henry	8/31/14	List Complete

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	By October 2014, the QI work plan will be entered into the performance management system with activity leads and timeframes.	Eileen Eisen-Cohen	Becky Henry	10/31/14	Action Plan
	Create 2015-2016 Action Plan with QIC	Siman Qassim	Eileen Eisen-Cohen, Becky Henry	10/31/15	Action Plan
Goal 3	All staff will have an understanding of QI concepts and practical applications at MCDPH				
	By December 2014, Public Health New Employee Orientation will include a presentation on Quality Improvement and the value of quality within MCDPH.	Becky Henry	QIC Training workgroup	12/31/14	Training implemented
	QIC members will create QI training piece	Becky Henry	QIC members	12/15/14	Training complete
	PHNEO committee will incorporate QI training	Becky Henry	HR	12/31/14	Sign in sheets
	By March 2015, implement basic QI training for all staff.	Siman Qassim	QIC members	3/31/15	NEO checklists
	Review QI training resources and identify best source	WFD coordinator	QIC members	1/31/15	Training
	Determine online training venue and upload	WFD coordinator	QIC members	3/31/15	Training Docs
	By June 2015, implement advanced QI training for QIC members.				
	Work with consultant on training agenda	WFD coordinator	QIC members	3/31/15	Agenda
	Set up logistics and conduct training	WFD coordinator	Consultant	6/30/15	Training Docs
	By June 2015, create a SharePoint QI Toolbox for resources and materials				
	Submit SharePoint request to OET	WFD coordinator		3/31/15	Site complete
Goal 4	MCDPH seeks and uses feedback from customers for continuous quality improvement.				
	By June 2015, Identify existing customer satisfaction data in the department and identify gaps and needs.	Siman Qassim	QIC members	6/31/15	CS List
	Collect customer satisfaction tools from all divisions	QIC members	Becky Henry	5/1/15	List

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Goal 5	MCDPH engages in continuous process improvement.				
	By January 2015, explore the different models for QI projects (e.g., Lean, Six Sigma, and Rapid Cycle Improvement) and provide resources for staff.	Siman Qassim	Becky Henry	1/31/15	Resources on SharePoint
	Research resources on QI models	Becky Henry	QIC members	11/31/14	List
	Present research to QIC for discussion	Siman Qassim	Becky Henry, Eileen Eisen-Cohen	12/31/14	Minutes
	Upload resources to SharePoint	WFD Coordinator		1/31/15	SharePoint
	By March 2015, QIC will prioritize a list of options for "winnable" QI project(s) and lead the planning and implementation of these projects.	Siman Qassim	Becky Henry, Eileen Eisen-Cohen	3/31/15	Minutes
	Facilitate discussion on QI projects	Siman Qassim	Becky Henry, Eileen Eisen-Cohen	1/31/15	Minutes
	Prioritize and determine action plan for projects	Siman Qassim	Becky Henry, Eileen Eisen-Cohen	3/31/15	Minutes
	By June 2015, review the success of the QI plan and prepare modifications for 2016.	Siman Qassim	QIC members	6/30/15	Minutes
	Review QI Plan successes and challenges with QIC and Senior management	Siman Qassim	Becky Henry, Eileen Eisen-Cohen	12/31/14	Minutes
	Revise plan for 2015-2016	Siman Qassim	Becky Henry, Eileen Eisen-Cohen	12/31/14	New plan

APPENDIX E. QI CLOUD GUIDELINES

Quality Improvement Cloud Guidelines

Purpose and Scope

- A. Establishing a **Quality Improvement Program** is a proven way to enhance Maricopa County Department of Public Health's (MCDPH) performance and achieve desired results. Each employee has a role in creating an ideal work environment and should actively engage in problem solving and improvement. Improving departmental performance will increase our capacity to positively impact the lives of those whom we serve in our community.

A high-performing organization with a culture of quality improvement actively changes the way business is done by the following: focusing on the needs of the customer, using data and tools to analyze problems and performance concerns, involving employees who know about and are impacted by the improvement opportunity, developing solutions and improvements based on analysis, engaging customers and stakeholders, monitoring and evaluating performance, and continually making improvements over time.

- B. The vision of the Quality Improvement Cloud (QIC) is to aid in creating, implementing, maintaining, and evaluating the Quality Improvement (QI) efforts at Maricopa County Department of Public Health with the intent to improve the level of performance.

By providing a shared vision that can serve as an effective guide to set the stage for quality management, we hope to encourage an organizational culture that emphasizes learning, teamwork, and customer focus; strives for institutional excellence and staff empowerment; and engages the department in continuous quality improvement. As we raise the bar for program performance, we hope to ingrain and reinforce an enduring culture of quality improvement and excellence, which will be demonstrated by improvements in quality of services and health outcomes.

The key roles of the QIC are to:

- Identify and prioritize opportunities for agency-wide quality improvement (QI) initiatives;
- Monitor the progress of agency-wide QI initiatives and support these efforts and address identified barriers;
- Track QI efforts and successes at all levels across the agency and periodically report to the Senior Management Team on the scope of the agency's QI efforts;
- Identify and support trainings and/or resources which will help to advance QI efforts across the agency;
- Provide guidance to communicate and support successful QI efforts and key learnings.

Core Principles

QIC members shall:

- Value the team and make a commitment to it. Attendance and participation in committee meetings are important, as is follow-up on actions identified for the QIC.
- Value respectful and open communications. Actively listen and contribute to the conversation.
- Ensure the confidentiality associated with discussions. Trust in each other is key to open and honest communication.
- Contribute ideas and evaluate new concepts that are presented. Think strategically.
- Put agency interests above individual program interests.
- Communicate QIC key messages to respective programs as appropriate. Understand we all share the problem; we all get to fix it. We have an opportunity to learn from each other. Job titles aren't relevant in problem-solving.
- Acknowledge that 80% of the time, the problem is the process. Only 20% of the time, is it the people who are the problem.
- Wait to engage in solutions until the problem is properly defined.
- Be helpful; it is easier to critique than to create.

Membership and Meeting Organization

The MCDPH Director, through the Office of Performance Improvement, has charged the QIC with carrying out the purpose and scope of quality management, including improvement efforts at the Maricopa County Department of Public Health. The QIC functions under the departmental cloud infrastructure.

It is intended that membership in the QIC consists of management and non-management positions with representation from each division, and human resources. The QIC consists of cross-sectional representatives from senior management, program managers, and line staff; targeting two members from each division. Assignments to the QIC are for a minimum two-year period of time with only one member from each division rotating out each year. Longer term participation from at least one divisional representative is encouraged in order to build and disseminate expertise throughout the agency. This will help sustain expertise over time, despite potential changes in funding or staffing. Less than half of the QIC membership should rotate out each year to maintain continuity.

Every year up to four ad hoc members may rotate onto the QIC as interest and space allows. When new members rotate on to the cloud, individuals who have participated as ad-hoc members will be given primary consideration to participate as a regular member from their division for the next time period. A Cloud Leader will be selected by the QIC for a two year term with direct support from the Performance Improvement

Manager. The Cloud Leader will participate in the department's Cloud Strategic Coordination Team to ensure cross-cloud and department communication. The QIC meets quarterly and maintains records of all meetings on the department QI SharePoint site for access by staff. Subcommittees can be formed for initiatives and meet more frequently. The QIC will ensure ongoing membership renewal and replacement by reviewing membership composition annually. The current list of QIC members will be maintained and posted. It is expected that the cost of time for each member to participate will be covered by their respective divisions and/or administration. No other resources will be solicited by or spent by the QIC.

Approval of Quality Improvement Plan and Annual Evaluation

The QIC will review and make suggested revisions to the MCDPH Quality Improvement Plan annually. The QIC will work to maintain alignment of the plan with the department's strategic plan and performance management programs, Public Health Accreditation Board (PHAB) Standards, and national quality improvement efforts. A report summarizing the review process, findings, and suggested modifications will be submitted to the Senior Management Team for approval within the first quarter of each fiscal year.

Quality Improvement Cloud Member Roles

Cloud Leader: The QI Cloud Leader will be responsible for maintaining the integrity of the group's purpose, conducting meetings, and acting as the liaison with the department and other stakeholders. The cloud leader works closely with cloud support staff and members of the MCDPH Cloud Strategic Coordination Team to guide cloud discussions, oversee workgroup initiatives, and connect cloud representatives with appropriate resources and potential partners. The leader will develop the agenda, facilitate the QIC meetings, and oversee implementation of the QI work plan.

Cloud Representatives: Each division will have two representatives on the Quality Improvement Cloud. They represent their division at cloud meetings and are responsible for regularly communicating cloud updates back to their respective divisions as well as communicating division, office, or program needs and opportunities to the cloud team. Cloud representatives may also serve as Quality Improvement Project Team Leaders, Trainers, Facilitators, or workgroup members with appropriate supervisor approval. Cloud representatives may contribute in many ways including but not limited to:

- Information sharing and seeking input or feedback on QI activities;
- Identifying QI needs, projects, resources, and training;
- Collaborating, mentoring, and/or providing technical assistance and/or training on QI workgroup initiatives;
- Providing accountability on progress of projects to the QIC; and
- Collecting QI stories and creating storyboards of projects and successes.

Rotating Members: These members review all provided materials prior to attending their first QIC meeting to gain an overall understanding of the cloud, which includes the MCDPH Quality Improvement Plan, previous meeting minutes, and other documents that are provided. Members should:

- Become familiar with the QI SharePoint site materials;
- Attend all QIC meetings during their scheduled rotation;
- Actively participate in discussions at QIC meetings;
- Participate in subcommittee meetings to provide input; and
- Take information from QIC meetings back to appropriate division meetings.

Cloud Support Staff: The QI support staff provides expertise in areas including data analysis, communications, evaluation, and quality improvement. Support staff maintains the QI SharePoint site with meeting documentation, project storyboards, and the QI toolkits.

Cloud Strategic Coordination Team Members: This cross-programmatic team is made up of Cloud Leaders to provide communication, coordination, and alignment between clouds and with the department's goals and needs. This team has representation from the management team to communicate cloud work to the senior management and relate recommendations appropriately. In addition to the currently serving cloud leaders, this team is staffed by leadership of the Office of Community Engagement and the Office of Community Empowerment.

QUALITY IMPROVEMENT CLOUD PROJECT ASSISTANCE

Quality Improvement Cloud members can initiate QI project workgroups or provide assistance to staff considering or conducting quality improvement projects. QIC members will receive advanced training in the use of quality improvement techniques.

Quality Improvement Cloud members may:

- Liaise between projects, the QIC, and staff regarding QI project challenges and successes
- Assist project team leaders with applicable paperwork, including completion of initial QI action plan, summary reports and storyboards
- Assist with project selection and development. They may also direct the project team leader toward available resources and provide technical assistance.
- Act as a trainer, project team leader, coach/facilitator, or team member.

Quality Improvement Cloud		
Membership Roster		
Cloud Leader		
Name	Division	Term
Siman Qaasim	Community Health Action, Office of Health Promotion & Education	2014 - 2016
Cloud Representatives		
Name	Division	Term
Siman Qaasim	Community Health Action, Office of Health Promotion & Education	2014-2017
Donna Beedle	Community Health Action, Office of Women, Infants, & Children	2014-2016
Mark Gallegos	Community Transformation, Office of Tobacco & Chronic Disease	2014-2017
Sergio Perez	Community Transformation, Office of Tobacco & Chronic Disease	2014-2016
Aurimar Ayala	Disease Control Division, Office of Epidemiology	2014-2017
Lia Koski	Disease Control Division, Office of Epidemiology	2014-2016
Chad Chase	Disease Control Division, Office of Vital Registration	2014-2017
Rebecca Lustfield	Clinical Services, Medical Records	2014-2016
Heather Callies	Clinical Services, Healthcare for the Homeless	2014-2017
Cheryl Rentschler	Administration, Procurement	2014-2017
Lonna Minardi	Administration, Human Resources	2014-2016
Rotational Representatives		
Name	Division	Term
Sara Horner	Community Transformation Division, Office of Nutrition and Physical Activity	2014-2015

Cloud Support Staff		
Name	Division	Term
Eileen Eisen-Cohen	Office of Performance Improvement (Support to Leader and Representatives, Evaluation, QI)	2014-Ongoing
Jeanene Fowler	Office of Community Engagement (Communication and Strategic Alignment)	2014-Ongoing
Becky Henry	Office of Performance Improvement (Workforce Development, Dashboard)	2014-Ongoing
Brian Stormer	Public Health IT (IT support)	2014-Ongoing
Representative EPI (See Representative list above)	Department of Epidemiology (Data support)	2014-Ongoing

APPENDIX F. QI PROJECT PACKET



Quality Improvement Project Packet

How to Initiate a Quality Improvement Project

Quality Improvement (QI) Projects at MCDPH are completed using the Plan, Do, Study, Act (PDSA) Framework. This QI project packet will guide you through the nine steps in the PDSA framework. Use the checklist below to get started and guide efforts as you go along. Then fill in the details on the remaining pages as your QI project progresses to document the process.

	Steps of PDSA Approach	Key Elements	Who Does It?
PLAN	Step 1 Getting Started	<input type="checkbox"/> Identify area, problem, or opportunity for improvement <input type="checkbox"/> Complete page 1 of the QI Project Guide <input type="checkbox"/> Review idea and gain supervisor support <input type="checkbox"/> Identify Executive Sponsor and obtain approvals (if needed) for the project <input type="checkbox"/> Notify Division QI Cloud Representative	Any MCDPH employee
	Step 2 Assemble the QI Team	<input type="checkbox"/> Identify and assemble team members (including a project leader, facilitator, and customers or stakeholders as appropriate) <input type="checkbox"/> Identify member roles & responsibilities <input type="checkbox"/> Establish initial timeline for improvement activity and schedule regular team meetings <input type="checkbox"/> Establish team guidelines for conduct and participation <input type="checkbox"/> Discuss problem or opportunity for improvement including scope and boundaries <input type="checkbox"/> Develop Aim Statement (ask for a facilitator to help with this) <ul style="list-style-type: none"> - <i>What are we trying to accomplish?</i> - <i>How will we know that a change is an improvement?</i> - <i>What change can we make that will result in improvement?</i> 	The QI Team & Project Leader with help from the Facilitator
	Step 3 Examine the Current Approach	<input type="checkbox"/> Examine the current approach or process flow <input type="checkbox"/> Obtain existing baseline data, or create and execute a data collection plan to understand the current approach <input type="checkbox"/> Obtain input from customers and/or stakeholders <input type="checkbox"/> Analyze and display baseline data <input type="checkbox"/> Determine root cause(s) of problem <input type="checkbox"/> Revise Aim Statement based on baseline data as needed	QI Team
	Step 4 Identify Potential Solutions	<input type="checkbox"/> Identify all potential solutions to the problem based on the root cause(s) <input type="checkbox"/> Review model or best practices to identify potential improvements <input type="checkbox"/> Pick the best solution (the one most likely to accomplish your Aim Statement)	QI Team
	Step 5 Develop an Improvement Theory	<input type="checkbox"/> Develop a theory for improvement <ul style="list-style-type: none"> - <i>What is your prediction? Use an "If . . . Then" approach</i> <input type="checkbox"/> Develop a strategy to test the theory <ul style="list-style-type: none"> - <i>What will be tested? How? When? Who needs to know about the test?</i> 	QI Team
DO	Step 6 Test the Theory	<input type="checkbox"/> Carry out the test on a small scale (use the Dashboard to track activities) <input type="checkbox"/> Collect, chart, and display data to determine effectiveness of the test <input type="checkbox"/> Document problems, unexpected observations, and unintended side effects	QI Team
STUDY	Step 7 Study the Results	<input type="checkbox"/> Determine if your test was successful: <ul style="list-style-type: none"> - <i>Compare results against baseline data and the measures of success stated in the Aim Statement.</i> - <i>Did the results match the theory/prediction? Did you have unintended side effects?</i> - <i>Is there an improvement? Do you need to test the improvement under other conditions?</i> <input type="checkbox"/> Report what you learned	QI Team
ACT	Step 8 Standardize the Improvement or Develop a New Theory	<input type="checkbox"/> If your improvement was successful on a small scale test it on a wider scale <ul style="list-style-type: none"> - <i>Continue testing until an acceptable level of improvement is achieved</i> - <i>Make plans to standardize the improvement</i> <input type="checkbox"/> If your change was not an improvement, develop a new theory and test it; often several cycles are needed to produce the desired improvement	QI Team
	Step 9 Establish Future Plans	<input type="checkbox"/> Update the Dashboard <input type="checkbox"/> Communicate your accomplishments to your QIC representative <input type="checkbox"/> Finalize the QI Project Guide and create a storyboard for SharePoint <input type="checkbox"/> Make long term plans for additional improvements <input type="checkbox"/> Celebrate your success	QI Team

PLAN: Identify an Opportunity and Plan for Improvement

Step One: Getting Started

Background of the situation requiring improvement:

Problem statement and impact of the problem:

Risks of not completing this project: *(What will be the negative impacts of this QI project not being completed?)*

Benefits of successful completion: *(What will be the benefits to the customers of completing this QI project? How does this issue impact our agency mission? Public perception, compliance with laws, regulations, or standards, public health, use of public resources)*

Estimate the results of the improvement as efficiency or effectiveness *(Will the improvement lead to dollar savings, staff time savings, or revenue generated? Be as specific as possible)*

Describe constraints to completion: *(Political, Social, Technology, etc. What are we looking at that may stop us from completing this QI project? List all possibilities)*

Plans to address constraints: *(How will you overcome whatever possibilities that may prevent completion of this QI project?)*

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Approvals to conduct the QI project:		
Executive Sponsor: <i>(this should be a manager or division administrator who has some responsibility over the area being addressed for improvement and can help advocate for the improvement at a high level if needed):</i>		
Division QI Cloud representative:	Additional role(s) of Division QI Cloud representative – if any <i>(could include project leader, facilitator, trainer, or team member):</i>	
Step Two: Assemble the Workgroup		
Project title:		
Team members:	Role:	Supervisor approval: <i>(name and date)</i>
	Project Leader	
	Customer/Stakeholder if appropriate	
	Timekeeper	
	Recorder	
	Member	
	Member	
	Member	

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Meeting logistics:	Team guidelines: <i>(What are the expectations for conduct and participation all team members agree to abide by?)</i>
Facilitator:	
Regular meeting schedule:	
<p>Discuss the problem or opportunity for improvement including scope and boundaries: <i>(What is the scope of the problem or opportunity we are addressing? Where does it begin and/or end?) [The Project Leader should clarify this with the Executive Sponsor as needed)</i></p>	
<p>Develop Aim Statement <i>(What are we trying to accomplish? [Do not start to determine strategies at this point.] Enter the AIM Statement in the Dashboard as your objective. "Tag" this objective in the relevant areas. If you need assistance check with a QI Cloud representative)</i></p>	
<p>Establish Interim Targets -if applicable: <i>(What milestones would we expect to achieve on the way to achieving our AIM? Enter interim targets as activities in the Dashboard under the AIM objective)</i></p>	
<p>Step Three: Examine the Current Approach</p>	

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What is the current process? *(Consider creating a flowchart)*

What data do we have? What data do we need? Where will we get it? *(Consider obtaining input from customers or stakeholders as well as using other data sources available to the department/program)*

Analyze and display baseline data: *(Add diagrams or charts to this document)*

Determine the root cause(s) of the problem: *(Use fishbone diagram or 5- Why's to help with this)*

Considerations: *(Consider any assumptions, constraints, and/or obstacles. Be realistic and consider the sphere of influence)*

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Revise Aim Statement: *(Based on what you've learned, modify the Aim Statement and interim targets if needed. Remember to modify them in the Dashboard too.)*

Step Four: Identify Potential Solutions

Identify all potential solutions to the problem: *(Based on the root causes. Brainstorming is great for this.)*

Review model or best practices to identify potential improvements: *(Check the Evidence Based Approaches (EBA) database on the intranet.)*

Choose the best solution: *(The one most likely to accomplish your Aim Statement. Nominal voting, prioritizing, and other QI tools in the Public Health Memory Jogger can help with this.)*

Step Five: Develop an Improvement Theory

Develop a theory for improvement: What is your prediction? *(Use an "If... Then" approach.)*

Develop a strategy to test the theory: *(What will be tested? How? When? Who needs to know about the test? What resources are needed?)*

DO: Test the Theory for Improvement

Step Six: Test the theory

Carry out the test on a small scale. *(Identify and track activities related to this test in the Dashboard with assigned leads, start and end dates and performance measures.)*

Collect, chart, and display data to determine effectiveness of the test: *(Add diagrams or charts to this document)*

Document problems, unexpected observations, and unintended side effects: *(Summarize these to the notes section in the Dashboard under the associated activities as well.)*

STUDY: Use Data to Study Results of the Test

Step Seven: Study the Results

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Determine if your test was successful: *(Did the results match the theory? Did you have unintended side effects? Is there an improvement? Compare results against baseline data and the measures of success stated in the Aim Statement and describe below.)*

Do you need to test the improvement under other conditions? *(What other conditions are necessary?)*

Report what you learned! *(Were increases in efficiencies gained? Were you able to identify any return on investment -monetary or otherwise? Be sure to give an update to the QI Cloud representative and Executive Sponsor. Who else should be updated on your progress?)*

ACT: Standardize the Improvement and Establish Future Plans

Step Eight: Standardize the Improvement or Develop a New Theory

If your improvement was successful on a small scale test it on a wider scale. *(Continue testing until an acceptable level of improvement is achieved. Document your process and outcomes.)*

Make plans to standardize the improvement: *(Are there things that need to be done to make the changes permanent? Change in policy, update orientation materials etc. Identify steps to preserve your gains and sustain your accomplishments.)*

If your change was not an improvement, complete steps four through seven again to develop a new theory and test it; often several

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cycles are needed to produce the desired improvement. *(If multiple cycles are used, please add additional pages to document all additional cycles- simply copy and paste the template for steps four through seven from the pages above and mark each new section as cycle 2, cycle 3 and so forth.)*

Step Nine: Establish Future Plans

Communicate your accomplishments: *(Mark your objective (AIM statement) as achieved in the Dashboard and create a storyboard to communicate your findings. Share it with your QI Cloud representative and post it on SharePoint.)*

Celebrate your success! *(Brainstorm ideas or make long term plans for additional improvements providing recommendations to your Executive Sponsor and/or QI Cloud representative as appropriate)*

QI Project Storyboard Template



[Fill in Project Title Here]

AIM Statement: [fill in AIM statement here]

PLAN

Identify an Opportunity
and
Plan for Improvement

1. Getting Started:

[Start typing here]

2. Assemble the Team:

[Start typing here]

3. Examine the Current Approach:

[Start typing here]

4. Identify Potential Solutions:

[Start typing here]

5. Develop an Improvement Theory:

[Start typing here]

DO:

Test the Theory
for Improvement

6. Test the Theory:

[Start typing here]

STUDY

Use Data to Study
Results of the Test

6. Test the Theory:

[Start typing here]

ACT:

Standardize the Improvement
and Establish Future Plans

8. Standardize the Improvement or Develop a New Theory

[Start typing here]

9. Establish Future Plans

[Start typing here]

APPENDIX G: QI TRAINING PLAN

TIER 1: "JUST IN TIME" BROWN BAG, AND Q-TIP WORKSHOPS

- QI versus Research
- QI data pitfalls
- QI tools

TIER 2 BASIC QI TOPICS (FOR ALL EMPLOYEES)

- Public Health New Employee
- Culture of QI
- Key Features of QI
- Difference between Big QI, Little QI, and Individual QI
- Models for Improvement: Plan, Do, Study, Act
- Examples of QI Projects Being Implemented
- Every Staff's Role in QI
- What QI looks like at MCDPH

TIER 3 ADVANCED QI TOPICS

- The PDSA Process In Detail
- Working With Teams
- Balanced Efforts Related to QI
- More In-Depth Look at Little QI and Big QI
- Creating the Culture of QI

ENDNOTES

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