

2011-1	<b>Public Health Quality Improvement Policy and Plan</b>	7/22/2011	
KDPH Policy Letter	Title	Effective Date	
Kentucky Department for Public Health 275 East Main Street Frankfort, KY 40601		Date of Review	Initials
	Signature		
	James S. Davis, MD		
	Acting Commissioner		

### Public Health Quality Improvement Policy and Plan (QIP)

1. **Purpose:** To establish a policy and procedure for quality improvement activities (QI) within the Kentucky Department for Public Health (KDPH).
2. **Policy Statement:** KDPH has an inherent interest in improving the programs and services it provides to its stakeholders. KDPH will evaluate its key programs, processes and services toward improving their effectiveness, efficiency, outputs, outcomes and customer satisfaction. KDPH desires to establish a culture of quality within the department; this culture will be achieved through continuous improvement at the department level (“Big QI”) as well as the program- or project-level (“small qi”).
3. **Overview of Quality in the Agency:** During the inception of this policy, the Kentucky Department for Public Health is at the beginning stages of QI with some staff trained in QI tools and methods. The department will establish a QI Committee to identify and monitor both Big QI and little “qi” projects. The department will develop a training curriculum to train KDPH staff in basic methods and tools. KDPH leadership will foster a culture of quality through emphasis and inquiry.
4. **Key Quality Terms:** Definitions identified are specific to this policy and plan and may vary from use in other applications.
  - **AIM Statement:** A brief set of statements that clarify the goal or purpose of a quality improvement project. The statements answer the questions: *What are we trying to accomplish; how and what do we need to measure to know that a change is an improvement; and what changes can we make that will result in improvements?*
  - **Big QI versus little qi:** Big QI denotes the macro effort toward quality improvement at the department or division level, while little qi represents small, limited quality improvement efforts at the program or process level.
  - **Continuous quality improvement (CQI):** 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. Also, CQI is an ongoing effort to improve the efficiency, effectiveness, quality, or performance of services, processes, capacities, and outcomes. These efforts can seek “incremental” improvement over time or “breakthrough” all at once. Among the most widely used

tools for continuous improvement is a four-step quality model, the Plan-Do-Check-Act (PDCA) cycle, also known as the Plan-Do-Study-Act (PDSA) cycle.

- **Metrics:** A collection of terms used in setting goals, indicators, measures, standards, baseline and benchmarks. The metrics are defined during the Plan phase of PDSA and are vital in monitoring the progress of a quality improvement project.
  - Measure – a basis for comparing performance or quality through quantification
  - Indicators – a measure which helps quantify the achievement of a goal; end result which lets us know if we are achieving a goal; measurable; refers to populations, whether or not they receive services
  - Standards – an established level of performance or quality; the minimum acceptable measurement expected or desired
  - Goal – broad, general statement of what will be achieved and how things will be different; what it takes to reach the vision (may not be measurable)
  - Benchmark –target to be reached; a near-term standard with which an indicator or particular performance measure is compared a level of performance established as a standard of quality
  - Baseline – an initial measurement of population or program
  - Performance measure – a measure of how well a program is working; work performed and results achieved; its efficiency and effectiveness; refers to client population/those who receive services; may relate to knowledge, skills, attitudes, values, behavior, condition, or status, (e.g., % of patients who keep appointment)
- **PDSA/PDCA:** The Plan – Do – Study Check (Study) – Act method is the most widely used, simple approach for use in quality improvement projects. The terminology of PDSA and PDCA may be used interchangeably. When described as the PDSA Cycle, the method is a continuous effort of repeated iterations of PDSA. KDPH endorses the PDSA method or approach for QI projects given its universal application; however, KDPH encourages the use of other models when appropriate for a specific QI project.



Figure 1. PDSA Model

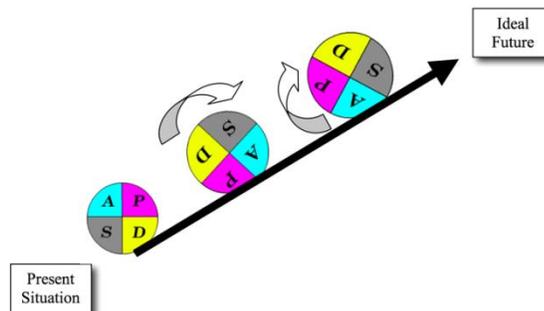


Figure 2. PDSA Cycle of Continuous Improvement

- **Quality:** An essential characteristic or attribute of a product, program, service, or process that helps determine the level of excellence or intrinsic value. Quality is essentially determined by the end-user or customer of the product; given the subjective nature of customer satisfaction, quality can vary from customer to customer. Quality can be expressed in a range from low or poor quality to high quality.

- Quality Assurance (QA): A process that measures compliance with a previously established standards and expectations, including the protocols of the Kentucky Public Health Practice Reference (PHPR) and requirements of the Administrative Regulation (AR).
  - Quality Improvement (QI): An integrative process that links knowledge, structures, processes and outcomes to enhance quality throughout an organization. The intent is to improve the level of performance of key processes and outcomes within an organization.
  - Quality Improvement Methods: A variety of practices exist to assist in quality improvement efforts. The PDSA/PDCA or Shewhart Cycle was popularized by W. Edmonds Deming during the post-WWII effort to reindustrialize Japan. Other popular methods include Lean, Six-Sigma, Lean Six-Sigma, DMAIC, Performance Excellence (4<sup>th</sup> Generation Management), Model for Improvement, and Malcolm Baldrige National Quality Standards.
  - Quality Improvement Plan (QIP): A plan that identifies specific areas of current operational performance for improvement within the agency. These plans can and should cross-reference one another, so a quality improvement initiative that is in the QIP may also be in the Strategic Plan.
  - Quality Improvement Tools: A variety of tools used to identify how processes, programs, and services can be improved. Tools include flow charts, cause-and-effect diagrams, Pareto charts, scatter diagrams, control/run charts, brainstorming, logic models, SWOT analysis, and numerous others.
5. **QI Structure**: DPH will establish a QI Committee (QIC) to carry out the provisions of this policy. The QIC will be comprised of members as follows:

Composition: The QIC will be representative of the department. Terms will not be limited, except as determined by the Commissioner and/or the Division Directors. Membership will include the following, except as may be determined by the QIC to meet specific needs.

KDPH Commissioner or representative,  
 Assistant Chief of Staff to the Commissioner,  
 Performance Improvement Manager, Center for Performance Management (CPM)  
 One member appointed by each KDPH Division Director (an alternate should also be identified),  
 PHIB Branch Manager  
 State Accreditation Coordinator,  
 QI Specialist, CPM, and  
 Others as determined by the Commissioner

Scope: The work of the KDPH program will primarily address the programs, services and process of the Kentucky Department for Public Health. In special circumstances, work may involve processes that involve KDPH and local health departments (LHDs).

Roles, Responsibilities and Functions: The QIC will be responsible for the following:

- Development of the department's Quality Improvement Plan (QIP)
- Regularly meeting on a quarterly basis to review the progress of quality improvement efforts
- Establishing standards for quality improvement team charters, minutes, and reports
- Regularly reviewing the reports of the quality improvement teams
- Annually reviewing and updating the QIP and this policy as needed
- Carrying out actions necessary to meet the accreditation standards concerning QI (Domain 9) of the Public Health Accreditation Board (PHAB).
- Other activities as determined by the QIC needed to foster a culture of quality, to improve the efficiency, effectiveness, outcomes and satisfaction of customer.

Staffing and Administrative Support: The Commissioner will function as the chair, but defers the day-to-day activities to the Performance Improvement Manager (PIM). The PIM and staff of the CPM will be responsible for assuring development of agendas, completion of minutes and assembly of packets for QIC Meetings.

Resource Allocation: Resources for support of this plan will be budgeted as part of the Center for Performance Improvement Budget. Resources needed to fund specific QI efforts will remain the responsibility for the individual divisions.

- 6. Training:** Members of the QIC will receive sufficient training to carry out their responsibilities. Training may be provided during regular QIC meetings or at other times convenient to the members. The Center for Performance Management (CPM) will provide or arrange for training. CPM will also provide just-in-time training to those teams organized to carry out a quality improvement project. As appropriate, CPM may provide training during orientation and other appropriate venues, such as conferences and meetings.
- 7. Identification of QI Projects:** Quality Improvement projects are encouraged at all levels – department-wide, division, branch, section and team. Projects can be identified through an array of means, including suggestions, survey results, reports, team brainstorming, and others. Initially, each division will identify at least one area where improvement is needed. Initial projects are suggested to be narrow in scope to better ensure staff gain experience. Complex projects are not discouraged.

The CPM will periodically send a 'DPH-All' email reminding DPH staff they can make suggestions directly to the QIC via the PIM or through their supervisory chain. These emails provide an excellent method of disseminating success stories.

Identified QI projects align with one of the five KDPH strategic plan categories: People, Quality, Efficiency, Effectiveness, and Improved Outcomes. When a project aligns directly to a specific strategic goal or objective, it should be noted on the KDPH QI Plan.

For each QI project – generally little “qi” project – identified, a quality improvement team will be appointed, as appropriate. Successful quality improvement projects are

best accomplished through members with knowledge and experience of the processes, programs or services involved. Team members should include staff directly involved in the process. The CPM will provide training to the team sufficient to carry out the quality improvement project. Basic training will include an introduction to the PDSA methodology and flowcharting. Depending on the nature of the project, training on other tools will be provided such as cause-and-effect diagrams, check sheets, Pareto charts, control/run charts, histograms and scatter diagrams.

The QI team should generally follow the steps of the PDSA Cycle as identified in Figure 3 below. The PIM, the QI Specialist, or other technical expert will work with each QI team.

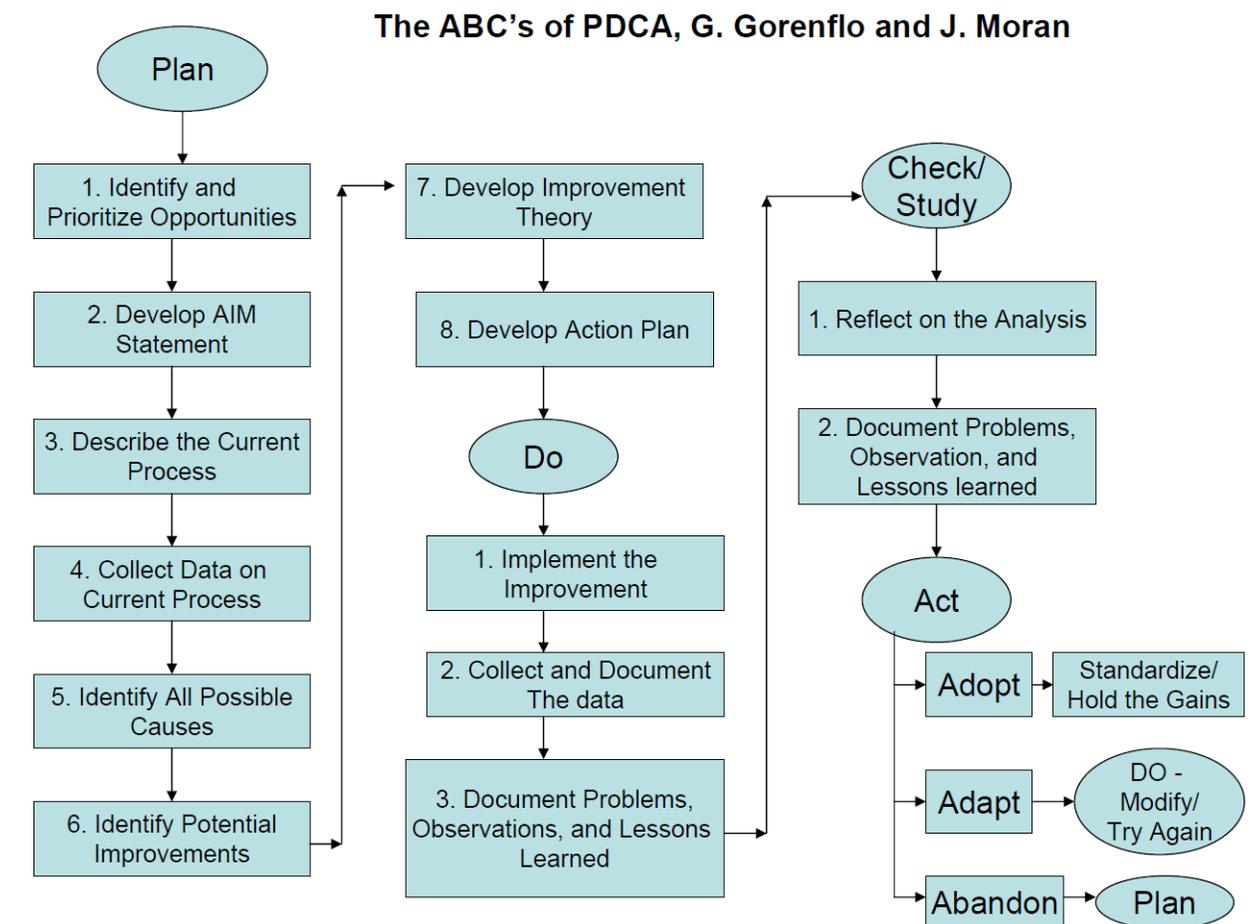


Figure 3. G. Gorenflo and J.Moran, Public Health Foundation

- 8. Goals, objectives and measures:** Each QI Team should define the performance measures of the project by developing an AIM statement. The AIM statement answers three questions:
- The first question, *what are we trying to accomplish*, provides the overall goal of the project.
  - The second question, *how and what do we need to measure to know that a change is an improvement*, provides clarity on measurement including the focus on data collection and evaluation.

- The third question, what changes can we make that will result in improvements, provides the focus on developing specific objectives.

Collectively, the AIM statement provides the direction the QI Team takes during the PLAN phase of the PDSA cycle.

- 9. Documenting, monitoring and reporting:** The QI Team will maintain an electronic or hardcopy planning and status report that documents the steps completed or planned. The QIC will establish standard templates for use in documenting and reporting the status of the project. Each QI Team establishes its schedule for meetings but provides updated status reports to the PIM prior to QIC meetings. The project is reviewed during the QIC meeting.

At the conclusion of the project, the QI Team will submit a final report and/or storyboard documenting the effort.

- 10. Communication and celebration:** The QIC will determine opportunities to communicate progress of quality improvement efforts. Success stories provide positive feedback to the members of the QI Team and inspired others to get involved in QI efforts.

- 11. QI program review:** On an annual basis the QIC should assess the effectiveness of the Public Health Quality Improvement Policy and Plan program and make revisions based on lessons learned during the year.