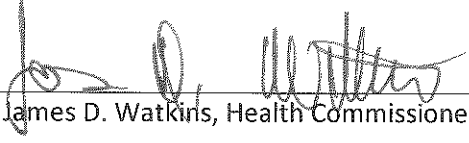





**Quality Improvement Plan  
Williams County Health District  
Signature Page**

Approved by:

 James D. Watkins, Health Commissioner	June 16, 2015 Date
 Jeff Yahraus, Board of Health President	June 16, 2015 Date

# Quality Improvement Plan

## Williams County Health District

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The Williams County Health District is committed to the ongoing improvement of the quality of services it provides. This Quality Improvement (QI) Plan serves as the foundation of this commitment.

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## Purpose & Introduction

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**Introduction** The Williams County Health District is committed to protecting and improving the health, safety, and well-being of the residents of our community. The purpose of this Quality Improvement (QI) Plan is to ensure that the principles of quality improvement are incorporated throughout the agency, create a culture of quality, and that review and reporting of surveys, audits, and QI activities are consistent among divisions. The QI plan provides the framework for:

- improvement of service,
- development of new programs/services, and
- establishment of performance measurement and reporting mechanisms.

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**Mission, vision, & values** **Mission:**  
To prevent disease and injury,  
To promote health and wellness,  
To protect you and your community.

**Vision:** Shaping the healthiest and safest community.

**Values:**  
Empowerment – providing information and the necessary resources to support healthy decision-making.  
Dedication – investing in the individual to improve quality of life.  
Collaboration – strengthening relationships to build a healthier community.

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**Ten essential services** Williams County Health District continuously strives to assure that the Ten Essential Services of Public Health are provided in our community:

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

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## Definitions & Acronyms

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**Introduction** A common vocabulary is used agency-wide when communicating about quality and quality improvement. Key terms and frequently used acronyms are listed alphabetically in this section.

**Definitions** Continuous Quality Improvement (CQI): A systematic, department-wide approach for achieving measurable improvements in the efficiency, effectiveness, performance, accountability, and outcomes of the processes or services provided. Applies use of a formal process (PDSA, etc.) to “dissect” a problem, discover a root cause, implement a solution, measure success/failures, and/or sustain gains.

Plan, Do, Study, Act (PDSA) is a four step quality improvement method in which step one is to plan an improvement, step two is to implement the plan, step three is to measure and evaluate how well the outcomes met the goals of the plan, and step four is to craft changes to the plan needed to ensure it meets its goal. The “PDSA” cycle is repeated, theoretically until the outcome is optimal.

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

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

Quality Culture: QI is fully embedded into the way the agency does business, across all levels, departments, and programs. Leadership and staff are fully committed to quality, and results of QI efforts are communicated internally and externally. Even if leadership changes, the basics of QI are so ingrained in staff that they seek out the root cause of problems. They do not assume that an intervention will be effective, but rather they establish and quantify progress toward measurable objectives. (Roadmap to a Culture of Quality Improvement, NACCHO, 2012)

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

Vision, Mission, Services, Goals Dashboard (VMSG): Performance management system tool.

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## Description of Quality

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

**Description of quality efforts** We are dedicated to advancing quality and performance within our agency. We strive to become nationally recognized as an effective and efficient provider of public health services. We capitalize on the expertise and commitment of our staff to meet and adapt to changing requirements.

**Current QI Efforts:**

The QI Council completed the Organizational QI Maturity self assessment tool in 2015. Quality goals (page 12) are based on the results of the assessment are updated annually. Quality improvement updates have been communicated regularly to staff during staff meetings. All staff has participated in basic QI training. Additionally, 13 of the 27 staff have participated QI Projects and/or QI Council. Staff members have the knowledge, skills, abilities, resources, and/or support to lead small QI projects with a QI facilitator. Few staff outside of management have submitted QI project proposals. QI champions exist and have increased their knowledge, skills and abilities to lead QI projects and are responsible for QI and performance management activities. Performance data is collected, monitored, and shared with staff on a regular basis. It is used more frequently for decision making, performance monitoring and QI project identification.

**Future QI Efforts:**

The health department leaders have embraced quality and will ensure the sustainability of the culture by maintaining necessary resources. Leadership turnover has minimal negative impact on the organizational culture. All staff will submit project proposals on a regular basis. Performance management and QI are fully embedded into the way business is done at the individual, team, and organization levels. The use of formal and informal QI tools and methods to solve problems and create improvements is second nature to employees. Performance data drives all decision making across the organization. The organization is regarded as quality-driven and innovative. Employees are granted autonomy to fulfill their QI responsibilities. Staff understands how they contribute to the organizations overall mission, vision, and strategic plan.

**Links to other agency plans** The WCHD will achieve our mission and work towards our vision by monitoring and evaluating programs and services on a continual basis.

The Strategic Plan commits to service excellence. Since 1919, our goal has been to work towards constant improvement in how we serve our community. The strategic plan states that WCHD staff will engage in one quality improvement project related to

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customer service annually. Other quality improvement projects may be based on other goals in the strategic plan.

The Community Health Improvement Plan (CHIP) priorities can be used as a source for potential QI projects. Potential projects that address CHIP priorities will be ranked with more weight during prioritization (See Project Selection).

The Workforce Development Plan sets goals that will help us to establish a culture of quality within the organization. In 2015, health department staff was formally trained in QI through the Ohio State University's Center for Public Health Practice (OSU CPHP) as part of the Workforce Development Plan. This agency goal is directly linked to individual staff, program, division, and agency performance. Individual staff members are required to complete the QI: Fundamentals Course by OSU CPHP. Managers will participate in training through Leadership Development Institute and learn QI principles. These principles are applied to programs and used to identify QI priorities within their division. The training and development of the workforce is one part of a comprehensive strategy toward agency quality improvement. Additionally, all employee job descriptions will include QI expectations.

It is important to monitor the performance of public health to effectively and efficiently improve the health of the population. WCHD's performance management system (VSMG) will be completely integrated into the health department's daily practice at all levels and includes: setting organizational objectives across all levels of the department, identifying indicators to measure progress toward achieving objectives on a regular basis, identifying responsibility for monitoring progress and reporting, identifying areas where achieving objectives requires focused quality improvement processes, and visible leadership for ongoing performance management.

Data reports that are created using the performance management system, VMSG Dashboard, will be utilized to inform business decisions as well as areas for improvement. All staff will have access to the system and will be responsible for entering and tracking program data. Other data tracked in the system will include customer and employee satisfaction surveys, key leader survey, strategic plan and community health improvement progress, as well as service data. Individual, program, division and agency goals are linked to the pillars of excellence (people, service, quality, growth and finance).

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**Quality improvement management, roles & responsibilities**

**Quality Improvement Council**

The Quality Improvement Council provides ongoing leadership and oversight of continuous quality improvement activities. The Council convenes quarterly. Meetings will be documented with agenda plans, meeting minutes, and sign-in sheets.

Responsibilities:

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

The Quality Improvement Council for the Williams County Health District consists of four members, representing each division including: administration, community health, environmental public health and nursing. A chairperson will be chosen by the council. The Council chair will serve a two year term period. Members will serve a two year time period with no more than two members rotating each year. One member of the Council will always be a division director. Consecutive terms are allowable. Individual responsibilities are described below.

<b>Council Member</b>	<b>Responsibility</b>
Chairperson	Provide vision & direction for QI program Convene Quality Council Allocate resources for activities Report to Board twice a year
Council members (3)	Identify appropriate staff for QI teams Oversee QI efforts within division Assure QI-related performance and/or professional development goal for all division staff Encourage staff to incorporate QI efforts into daily work Facilitate QI teams as needed

The Council strives for consensus on all decisions and agrees to abide by majority vote in absence of consensus. In the event of a tie, the Council chairperson will have final decision making authority.



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Administrative support (distribution of meeting agendas, summaries, and arrangements for meeting needs) is provided by Council members on a rotating basis. QI Teams are accountable to the Council.

All Williams County Health District staff will participate in QI projects as requested, nominate QI projects, participate in QI training, and incorporate QI concepts into daily work.

**Quality improvement process**

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Quality Improvement efforts may be large scale/long term or small scale/ short term processes. They may focus on our external customers or internal processes. All efforts should lead toward better public health service to the community.

The QI process begins when the Council selects a project using a priority matrix. Next, team members are chosen and a team leader is assigned by the Council. QI team leaders are responsible for drafting the team charter.

The team charter is then reviewed and approved by the team and is utilized to guide the project. The charter includes the team name, project mission, team sponsors, background, boundaries, and estimated timeline. A team charter template can be found in Appendix D.

**PDSA (Plan-Do-Study-Act)**

The WCHD employs the Plan-Do-Study-Act QI methodology (PDSA). PDSA is a four stage problem-solving model for improving a process or carrying out change. This model was made popular by Dr. W. Edwards Deming, an American statistician, college professor, and consultant. He referred to the model as the Shewhart cycle for learning and improvement and gave credit to its inventor, Walter A. Shewhart. Shewhart called the cycle Plan-Do-*Check*-Act or PDCA. Deming replaced the “check” stage with “study,” thereby creating Plan-Do-*Study*-Act or PDSA cycle.

The PDSA cycle should be used repeatedly for continuous improvement.

The PDSA cycle provides a model with a repeatable set of steps that any public health team or individual can learn and follow in order to improve any aspect of its health department or other agency.

**PDSA OVERVIEW**

**PLAN:**

Identify an opportunity for improvement.  
Develop a plan for how the improvement effort will occur.  
Also, what do you need to get there?

**DO:**

Carry out the plan you developed.  
Test your theory for improvement.

**STUDY:**

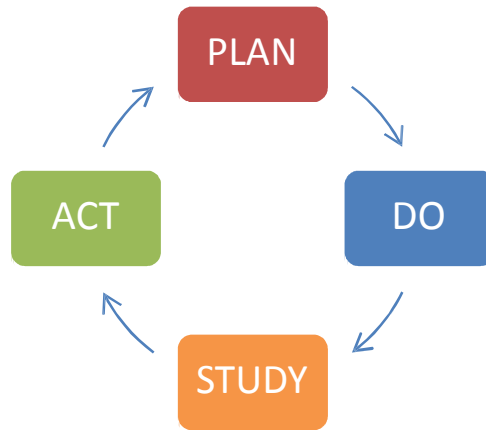
Use the data to study or check the results of the test conducted during the DO stage. Determine if your test was successful.

**ACT:**

Standardize your improvement or develop a new theory.

If you achieve success, then implement the process into the whole system for consistency.

If not, then continue the PDSA cycle to plan for a different approach to problems.



QI project teams will use Storyboards to communicate about their work to our staff, Board, and others. A Storyboard is way of documenting and displaying the journey taken through the QI process and the outcomes achieved in a quality project. The Storyboard allows the team to display key information of the QI process that has been completed by the team. It is designed to tell the story in a visual and brief manner and should be presented in a large poster format.

Furthermore, the Storyboard is a powerful, clear, graphic way of illustrating the process and the results of the team’s efforts. Storyboards can be used throughout the QI process to keep the team focused. It can also be used to keep others informed of progress and can be revised as new data is shared. A storyboard template can be found in Appendix E.

## Quality Goals & Implementation

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**Introduction** This section presents the overall goals and implementation plan for QI.

Goal	Measure	Timeframe	Person Responsible
All staff will complete CQI for Public Health: The Fundamentals online training.	Attendance; Certificate of Completion	First year of implementing Quality Improvement Plan	QI Council
Council members complete CQI for Public Health: Tool Time online training.	Certificate of Completion	March 31, 2015	QI Council
WCHD will initiate a performance management system.	VMSG Dashboard System	July 31, 2015	Health Commissioner
All job descriptions will include expectations for QI and QI core competencies. The job descriptions will also include training requirements and team participation.	Position descriptions with expectations; documentation of training and project participation	July 1, 2016	Health Commissioner
Communicate QI efforts to staff and board of health.	Meeting minutes	Biannually	QI Council, Chairperson
Staff participating in a QI project will complete CQI: Tool Time online training.	Certificate of Completion	Prior to the first QI Team meeting.	QI Council, team members
Support 1 or 2 QI projects per year. 1 QI project per year should be customer service related (see Strategic Plan: Priority 4, Objective 2).	Team documentation; storyboard	Annually	QI Council, team members
New QI Council members will complete an orientation with the QI Council chairperson. Will include a review of QI activities, the QI Plan, and meeting expectations.	Meeting Minutes	Prior to first QI Council meeting	QI Council Chairperson

## Projects

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**Introduction** This section describes the process for QI project identification, selection, prioritization, and selection of team members. A brief description of the projects is included below.

**Project identification** Quality Improvement Council will convene to discuss potential projects identified by staff members using the following methods:

- Results from employee feedback through monthly rounding on staff
- Performance reflected in Ohio’s Health Department Profile and Performance Database or within WCHD performance management system
- After-action reports
- Customer satisfaction surveys
- Staff survey results/suggestions
- Program evaluations
- Needs related to accreditation preparation
- Community health assessment
- Community health improvement plans
- Audit or compliance issues

Questions to ask – where do ideas come from?

- What do my customers complain about most frequently?
- Which process is always broken? Takes too long?
- What does someone else do better?
- What gives me a headache?
- What do we seem to fix over and over again?
- Where do I take the path of least resistance rather than strive for a solution?
- Which processes have band-aids instead of permanent fixes?
- Which process generates the most scrap, rework, or errors that need correction?

Any staff member may recommend a project to the Council for consideration.

**Project Selection** When selecting project ideas, the following will be considered:

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

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Prioritization is necessary when the project will involve staff from multiple divisions or address priorities in the agency strategic plan. Project ideas will be prioritized using a criteria rating process in Appendix F.

**Team Selection** Team members will be selected so that the range of perspectives of the problem/project is represented; teams will consist of four to six members and represent affected departments, disciplines, and clients as needed.

Agency-wide projects must be approved by the QI Council since they will generally require involvement from different staff levels, address key priorities of the agency and will likely require committed resources. Individual programs and divisions may identify issues amenable to rapid cycle QI processes for program-based improvements. These small scale/short term projects may not require prioritization and will be approved by the responsible Division Director. Agency-wide CQI projects will be listed in the Appendix C.

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## Training

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**Introduction** Williams County Health Department has incorporated QI training goals and objectives within the Workforce Development Plan. The Workforce Development Plan will include goals, objectives, target audience, resources, sources of training, and individual(s) responsible for leading each objective.

**Training and support** Different types of training may be expected of team members, facilitators, and/or QI Council members. Requirements may not be the same for all employees. Possible training components include:

- Orientation to agency QI initiatives, policies and projects for all new employees
  - Mandatory completion of online QI learning modules for all new employees
  - Mandatory completion of online QI learning modules for all current staff
  - Other QI training events as they arise and are determined to be applicable
  - Additional training is referenced in the agency Workforce Development Plan
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## Evaluation and Monitoring

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**Introduction** This section describes the evaluation and monitoring for the QI Plan and projects. A plan and timeline for these activities will be included as part of Appendix G.

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**QI plan** This QI Plan will be reviewed and evaluated by the Council annually. The evaluation will assess:

- Effectiveness of meetings
- Effectiveness of the QI Plan in overseeing quality projects and integration within the agency
- Clarity of the QI Plan and its associated documents
- Lessons learned
- Progress toward and/achievement of goals as outlined in the Goals, Objectives and Implementation section
- Review of QI Team evaluations (see below)

An annual evaluation will address each of these items and the QI Council will make recommendations for change.

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**QI teams** When QI projects are in progress, one team member will attend QI Council meetings to report the project's current phase in the PDSA cycle and any identified resources needed. All teams will develop and submit project storyboards at the conclusion of the project. Within one month of a project's finalization, all team members will be surveyed to determine QI process learning, perceived contribution to the project, value of the project experience and ultimate outcome, lessons learned, and to seek suggestions for overall agency QI efforts.

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## Communication

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**Introduction** In order to support quality as a usual-way-of-business, quality-related news is communicated on a regular basis using a variety of methods to staff, Board of Health, and community. This section describes how quality and quality initiatives are shared. A plan and timeline for these activities is included in Appendix G.

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**Quality sharing** The QI Council will communicate quality initiatives, training, projects, outcomes, and policies to the Board of Health, District Advisory Council, staff and the community.

### **Williams County Health District Employees**

- At all-staff meetings in April of each year:
  - Team members will report experiences and results of QI projects completed within the past 12 months
  - Team members will be recognized
  - A QI Council representative will report plan progress and evaluation results
- Project storyboards will be distributed at monthly staff meetings as appropriate.
- All Quality Council meeting documents (agendas, summaries) and QI Team documents (agendas, summaries, data tools, storyboards, etc.) will be maintained on the shared “S” drive for review by all staff members at any time. Hard copies will be available for employees who do not have access to the “S” drive.

### **Board of Health**

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

### **Public**

Project descriptions and results will be featured on the agency’s website and included in the annual report to the public.

### **Other**

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

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## List of Appendices

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The following documents are included as appendices to this Plan:

**Appendix A:** QI Resources

**Appendix B:** QI Toolkit

**Appendix C:** Summary of QI Projects

**Appendix D:** QI Team Charter Template

**Appendix E:** QI Project Storyboard Template

**Appendix F:** Project Selection Criteria

**Appendix G:** QI Activity Timeline

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## Appendix A: QI Resources

The following table lists some of those resources to support quality improvement in public health.

Resource	Location & Description
<b>American Society for Quality</b>	<a href="http://asq.org">http://asq.org</a> A membership organization whose mission is: <i>to increase the use and impact of quality in response to the diverse needs of the world.</i> Training, resources, certifications, and learning communities.
<b>Center for Public Health Practice, The Ohio State University College of Public Health</b>	<a href="http://cph.osu.edu/practice">http://cph.osu.edu/practice</a> Live and online competency-based training and other organizational development resources. <a href="https://www.cphplearn.org/">https://www.cphplearn.org/</a> Learning content management system; searchable catalog.
<b>Center for Public Health Quality</b>	<a href="http://www.centerforpublichealthquality.org/">http://www.centerforpublichealthquality.org/</a> A new, national resource with training, toolkits, consultation, and technical assistance.
<b>Centers for Disease Control and Prevention</b>	<a href="http://www.cdc.gov/stltpublichealth/performance/">http://www.cdc.gov/stltpublichealth/performance/</a> Concepts, resources, and links about quality improvement and performance management.
<b>National Association of County and City Health Officials (NACCHO)</b>	<a href="http://www.naccho.org/topics/infrastructure/accreditation/quality.cfm">http://www.naccho.org/topics/infrastructure/accreditation/quality.cfm</a> QI resources, training, templates. <a href="http://www.naccho.org/toolbox/program.cfm?id=25">http://www.naccho.org/toolbox/program.cfm?id=25</a> Searchable QI literature, templates, examples, etc. <a href="http://qiroadmap.org/">http://qiroadmap.org/</a> Roadmap to a Culture of Quality Improvement.
<b>National Network of Public Health Institutes (NNPHI)</b>	<a href="http://www.nnphi.org/api">www.nnphi.org/api</a> Accreditation and performance improvement resources. <a href="http://www.nnphi.org/npijsp/resources">www.nnphi.org/npijsp/resources</a> Public health improvement webinars and training. <a href="http://www.nnphi.org/phpit">www.nnphi.org/phpit</a> Public health performance improvement toolkit.
<b>Public Health Quality Improvement Exchange (PHQIX)</b>	<a href="https://www.phqix.org/">https://www.phqix.org/</a> Online community for learning and sharing about quality in public health. Searchable; forum for online dialogue and sharing (uploading) example documents (including example QI Plans).
<b>Public Health Accreditation Board (PHAB)</b>	<a href="http://www.phaboard.org/">http://www.phaboard.org/</a> Non-profit organization that oversees public health agency accreditation. Accreditation standards, measures, and requirements; training, resources, accreditation.
<b>Public Health Foundation (PHF)</b>	<a href="http://www.phf.org/focusareas/pmqi/pages/default.aspx">http://www.phf.org/focusareas/pmqi/pages/default.aspx</a> Performance management and quality improvement website, including Turning Point framework.
<b>TRAIN/Ohio TRAIN</b>	<a href="http://www.train.org">www.train.org</a> ; <a href="http://www.ohiotrain.org">www.ohiotrain.org</a> Searchable public health-related continuing education opportunities offered by affiliates from across the country, including Ohio.

## Appendix B: QI Toolkit

### Quality Improvement (QI) Toolbox

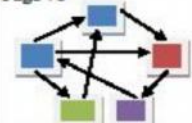
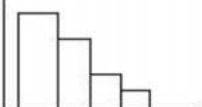
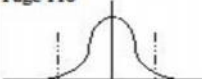

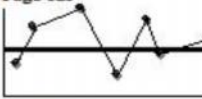




<i>QI Tool</i>	<i>What the Tool Does</i>	<i>Public Health Memory Jogger II</i>
Activity Network Diagram/ Gantt Chart	Used to: Schedule sequential and simultaneous tasks <ul style="list-style-type: none"> <li>• Gives team members the chance to show what their piece of the plan requires and helps team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

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

## Quality Improvement (QI) Toolbox



Interrelationship Digraph	<p>Used to: Look for drivers and outcomes</p> <ul style="list-style-type: none"> <li>Encourages team members to think in multiple directions rather than linearly.</li> <li>Explores the cause and effect relationships among all the issues.</li> <li>Allows a team to identify root cause(s) even when credible data doesn't exist.</li> </ul>	<p>Page 76</p> 																									
Matrix Diagram	<p>Used to: Find relationships</p> <ul style="list-style-type: none"> <li>Makes patterns of responsibilities visible and clear so that there is even distribution of tasks.</li> <li>Helps a team come to consensus on small decisions, enhancing the quality and support for the final decision.</li> </ul>	<p>Page 85</p> <table border="1" data-bbox="1040 573 1240 663"> <thead> <tr> <th></th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <th>1</th> <td></td> <td></td> <td></td> </tr> <tr> <th>2</th> <td></td> <td></td> <td></td> </tr> <tr> <th>3</th> <td></td> <td></td> <td></td> </tr> </tbody> </table>		A	B	C	1				2				3												
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Nominal Group Technique	<p>Used to: Rank for consensus</p> <ul style="list-style-type: none"> <li>Allows every team member to rank issues without being pressured by others.</li> <li>Makes a team's consensus visible.</li> <li>Puts quiet team members on an equal footing with more dominant members.</li> </ul>	<p>Page 91</p> <table border="1" data-bbox="1040 720 1240 827"> <thead> <tr> <th></th> <th>Jo</th> <th>Bob</th> <th>Hal</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th>A</th> <td>3</td> <td>4</td> <td>4</td> <td>11</td> </tr> <tr> <th>B</th> <td>2</td> <td>1</td> <td>2</td> <td>5</td> </tr> <tr> <th>C</th> <td>4</td> <td>3</td> <td>3</td> <td>10</td> </tr> <tr> <th>D</th> <td>1</td> <td>2</td> <td>1</td> <td>4</td> </tr> </tbody> </table>		Jo	Bob	Hal	Total	A	3	4	4	11	B	2	1	2	5	C	4	3	3	10	D	1	2	1	4
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A	3	4	4	11																							
B	2	1	2	5																							
C	4	3	3	10																							
D	1	2	1	4																							
Pareto Chart	<p>Used to: Focus on key problems</p> <ul style="list-style-type: none"> <li>Helps teams focus on those causes that will have the greatest impact if solved. (Based on the Pareto principle ~ 20 % of the sources cause 80% of any problem.)</li> <li>Progress is measured in a highly visible format that provides incentive to push on for more improvement.</li> </ul>	<p>Page 95</p> 																									
Prioritization Matrices	<p>Used to: Weigh your options</p> <ul style="list-style-type: none"> <li>Forces a team to focus on the best thing(s) to do and not everything they could do.</li> <li>Increases the chance of follow-through because consensus is sought at each step in the process (from criteria to conclusions)</li> </ul>	<p>Page 105</p> <table border="1" data-bbox="1040 1010 1240 1087"> <thead> <tr> <th>Cost</th> <th>A</th> <th>B</th> <th>C</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th>A</th> <td></td> <td>1/5</td> <td>1/10</td> <td>0.3</td> </tr> <tr> <th>B</th> <td>5</td> <td></td> <td>1</td> <td>6</td> </tr> <tr> <th>C</th> <td>10</td> <td>1</td> <td></td> <td>11</td> </tr> </tbody> </table>	Cost	A	B	C	Total	A		1/5	1/10	0.3	B	5		1	6	C	10	1		11					
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A		1/5	1/10	0.3																							
B	5		1	6																							
C	10	1		11																							
Process Capability	<p>Used to: Measure conformance to customer requirements</p> <ul style="list-style-type: none"> <li>Helps a team answer the question "Is the process capable?"</li> <li>Helps to determine if there has been a change in the process.</li> </ul>	<p>Page 116</p> 																									
Radar Chart	<p>Used to: Rate organization performance</p> <ul style="list-style-type: none"> <li>Makes concentrations of strengths and weaknesses visible.</li> <li>Clearly defines full performance in each category.</li> <li>Captures the different perceptions of all the team members about organization performance.</li> </ul>	<p>Page 121</p> 																									
Run Chart	<p>Used to: Track trends</p> <ul style="list-style-type: none"> <li>Monitors the performance of one or more processes over time to detect trends, shifts, or cycles.</li> <li>Allows a team to compare a performance measure before and after implementation of a solution to measure its impact.</li> </ul>	<p>Page 125</p> 																									
Scatter Diagram	<p>Used to: Measure relationships between variables</p> <ul style="list-style-type: none"> <li>Supplies the data to confirm a hypothesis that two variables are related.</li> <li>Provides a follow-up to a Cause &amp; Effect Diagram to find out if there is more than just a consensus connection between causes and the effect.</li> </ul>	<p>Page 129</p> 																									
Tree Diagram	<p>Used to: Map the tasks for implementation</p> <ul style="list-style-type: none"> <li>Allows all participants (and reviewers outside the team) to check all of the logical links and completeness at every level of plan detail.</li> <li>Reveals the real level of complexity involved in the achievement of any goal, making potentially overwhelming projects manageable, as well as uncovering unknown complexity.</li> </ul>	<p>Page 140</p> 																									

## Appendix C: Summary of QI Projects

### Projects Completed to Date

Project Name	Project AIM	Outcome
Billing Process (2012)	Goal of the billing procedure project is to streamline and eliminate potential errors in the process by multiple entries within the next 60 days. We will accomplish this by not having to enter some of the same data into a spreadsheet from the invoice. The target of this improvement is internal to save time and money.	A standardized billing process was adopted and a new invoice system was created.
Computer Inventory (2012)	Managers will have a consistent process to determine computer specifications needed to carryout organizations activities. Process will be completed by July 2012. One hundred percent of employees will have the ability to understand how computer purchase decisions are made.	A flowchart was created to ensure consistency in purchasing computer equipment.
Contracts and MOUs (2014)	To improve the process of who needs to know about a new contract or MOU.	A flowchart for contracts and MOUs was created.

### Currently Active Projects as of April 2015

Project Name	Project AIM	Status/Outcome
Immunization Action Plan (IAP)	To increase the UTD (up to date) immunization rate of 24-35 month old infants administered by the Williams County Health Department, identified through the AFIX (Assess, Feedback, Incentive, Exchange) Assessment Analysis. Specifically, we want to increase the 4:3:1:3:3:1:4 series and the #4 Dtap rate by 10% by September 30, 2015. Initial rate was assessed in February (series: 65%; 4th Dtap: 68%) and will be re-run in April, June, and August.	Project identified and team members selected and trained (03-18-15).

## Appendix D: QI Team Charter Template

<b>Team Name:</b>			
<b>Project Mission:</b>			
<b>Team sponsor(s):</b> individual(s) who own the existing process and have authority to approve changes			
<b>Background:</b> strategic importance, what has been happening, importance to customer			
<b>Boundaries:</b> limits on scope of process change allowable as defined by team sponsor, legal restrictions, budget, etc.			
<b>What team has authority to do:</b> authority to pilot improvement/make recommendations/other			
<b>Estimated date for completion:</b>			
<b>Meeting frequency &amp; duration:</b>			
<b>Team Leader:</b>			
<b>Team members:</b>	<b>name</b>	<b>e-mail</b>	<b>phone</b>
<b>Facilitator:</b>			
<b>Timekeeper:</b>			
<b>Notetaker/Scribe:</b>			
<b>Other notes about team/work:</b>			

# Appendix E: QI Storyboard Template

**Project Name Health**  
**Department Name**  
**Address, Phone,**  
**Size, Population Served**

**Plan**  
Select and Identify the Problem

**Background information**

Your Text Here

**Assemble the Team**

Your Text Here

**Define the Aim:**

Your Text Here

**Analyze the Current Approach**

Your Text Here

**Identify Potential Solutions**

Your Text Here

**Develop an Improvement Theory**

Your Text Here

**Do**  
Test the Theory for Improvement

**Test the Theory**

Your Text Here

**Study**  
Use Data to Study Results of the Test

**Study the Results**

Your Text Here

**Act**  
Standardize the Improvement and  
Establish Future Plans

**Standardize the Improvement or Develop New Theory**

Your Text Here

**Establish Future Plans**

Your Text Here

## Appendix F: Project Selection Criteria

**3 Part Reality**

	Potential Project	Potential Project	Potential Project	Potential Project	Potential Project	Potential Project	Potential Project	Potential Project	Potential Project
<b>Technical</b>									
Is it a process?									
Is the scope manageable?									
Can it be measured?									
Can it be completed in a reasonable amount of time?									
Do we have data available? Or, can you reasonably obtain data?									
<b>Strategic</b>									
Is it important? To whom?									
Does it support mission/vision?									
Is it customer focused?									
Do you know the solution? (If 'yes', do <i>not</i> check.)									
Is it a "sacred cow"? (If 'yes', do <i>not</i> check.)									
<b>Empowerment</b>									
Is it within the team's control?									
Are their pre-conceived solutions? (If 'yes', do <i>not</i> check.)									
Is leadership prepared to implement change?									
Is there probability of success?									
<b>TOTAL:</b>									
<b>Agency Specific Criteria</b>									
CHIP Priority									
State Mandated Program									
PHAB Required									



## Appendix G: QI Activity Timeline

Activity	Timeline/frequency	Person responsible
Selection of QI Council	Initial (June 2015) and ongoing	Health Commissioner and Division Directors
Quality Council meetings	Every-other-month: January, March, May, July, September, November	Quality Council
Select QI projects and teams	Ongoing	Quality Council
QI Project reports to Quality Council	Quarterly	QI team leaders
Evaluation to QI Team members	Within one month of project conclusion	Quality Council
Review QI plan	Annually	Quality Council
Report to Board of Health <ul style="list-style-type: none"> <li>• Projects</li> <li>• Plan updates</li> <li>• Evaluations</li> </ul>	Biannually	QI Council, Chairperson
Quality reports in all-staff meeting: <ul style="list-style-type: none"> <li>• Project reports</li> <li>• Team recognition</li> <li>• Quality Council report (plan updates, evaluations)</li> </ul>	Annually	Quality Council and QI team leaders
Project feature on website	Ongoing – updated at least annually	Webmaster
Project feature in annual report	Annually	QI Council, Chairperson
Storyboards in conference room	Ongoing	Quality Council
Maintenance of Quality Council and team records on shared drive	Ongoing	Quality Council, Chairperson

