Quality Improvement Plan

2018 - 2023

Reviewed & adopted by the Quality Improvement Committee: October 31, 2018

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Purpose:

The purpose of LCDHD Quality Improvement (QI) Plan is to foster a culture of quality through continuous improvement of programs, services and administration.

History of Quality Assurance/Improvement:

LCDHD has always been innovative and fostered a culture of quality improvement but had no official quality improvement plan/program. Until this plan was developed in 2013, our major focus has been quality assurance, constantly monitoring progress of all programs and service delivery through utilization reviews, patient and employee satisfaction surveys, productivity data, etc. and making adjustments when necessary. Quality assurance is also important as it assesses for "quality decline, so LCDHD has implemented many performance measures to constantly assess and assure the quality or our services and programs. These performance measures are measured and reported utilizing our Performance Management Reporting Tool.

The QI Committee (QIC) was developed in March 2013 when LCDHD started making preparations for national accreditation. An Accreditation Coordinator/QI Director was appointed and a basic introduction to QI training was later provided to executive staff. LCDHD is in the beginning phases of implementing a formal performance management system and will continue to develop staff knowledge of QI methods and tools and implement them as appropriate. In the future, we will continue to constantly monitor progress and make necessary adjustments in program and service delivery where needed and also establish an organizational culture of continuous learning and quality improvement guided by research and the identified needs of stakeholders.

Research and Pilot Projects

Though this QI Plan doesn't focus on research or pilot projects, it is worth noting that the agency, in its efforts to promote quality, engages in these activities from time to time as well. More complex than a QI project, formal research projects are sometimes developed. These are then submitted to and monitored by an Institutional Review Board. Pilot projects, which are less complex and more informal than QI projects, are also sometimes developed and piloted in an area, then evaluated and adopted or abandoned pending the results of the project.

Key Quality Terms:

- 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 agency's Strategic Plan.

- Quality Improvement: An integrative process that links knowledge, structures, processes and outcomes to enhance quality throughout an organization. The intent is to improve the level of performance of key processes and outcomes within an organization.

    - "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" *(Accreditation Coalition Workgroup, 2009)*.

- Quality Assurance (QA): QA is a process that measures compliance with previously established standards and expectations, including the protocols of the Kentucky Department of Public Health (KDPH) Core Clinical Service Guide (CCSG) and the requirements of the KDPH Administrative Reference. See *Table 1* for distinctions between QA and QI.

Table 1: QA versus QI

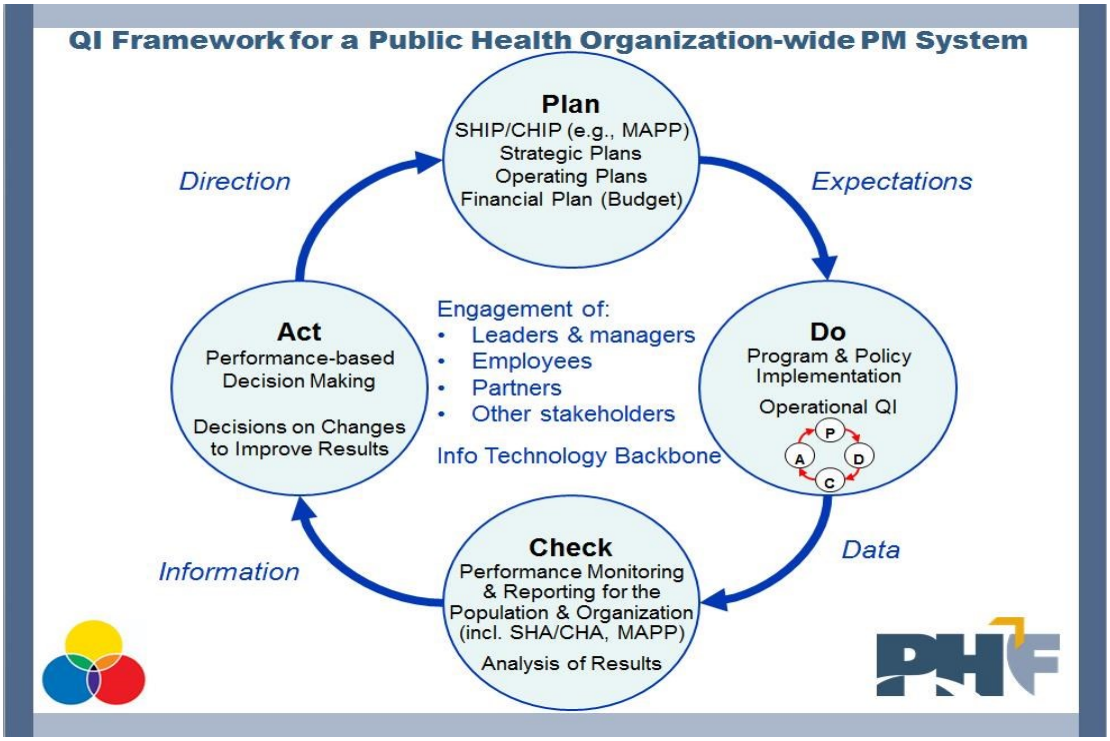
Quality Assurance	Quality Improvement
• Reactive	• Proactive
• Works on problems after they occur	• Works on processes
• Regulatory usually by State or Federal law	• Seeks to improve (culture shift)
• Led by management	• Led by staff
• Periodic look-back	• Continuous
• Responds to a mandate or crisis or fixed schedule	• Proactively selects a process to improve
• Meets a standard (Pass/Fail)	• To exceed expectations

("A Closer Look, QI Nuts and Bolts" ASTHO webinar presentation, 2010)

- QI Methods: A variety of practices exist to assist in QI efforts – such as Lean, Six Sigma, DMAIC, Performance Excellence (4th Generation Management), Model for Improvement and Malcolm Baldrige National Quality Standards and the PDCA/PDSA or Shewhart Cycle which was popularized by W. Edmonds Deming during the post WWII effort to reindustrialize Japan. The PDCA method is the most widely used, simple approach to QI so LCDHD has selected it to be the formal method used for QI projects.

- PDCA/PDSA: The Plan-Do-Check-Act (PDCA) or Plan-Do-Study-Act (PDSA) method is the most widely used, simple approach for quality improvement projects. PDCA and PDSA may be used interchangeably. *Figure 1 (on the next page)* illustrates the PDCA cycle and *Figure 2 (on page 6)* displays the steps involved in each phase of the PDCA model.

Figure 1: PDCA/PDSA Cycle



- QI Tools: A variety of tools used to identify how processes, programs and services can be improved. Tools include prioritization matrices, flow charts, cause-and-effect or fishbone diagrams, Pareto charts, scatter diagrams, control/run charts, brainstorming, logic models, SWOT analysis and numerous others. The LCDHD recommends using the following tools to assist in the documentation of QI projects:

  - **AIM Statement:** An explicit description of a team's desired outcomes, which are expressed in a measurable and time-specific way to clarify the goal or purpose of a quality improvement project. (*See Appendix A for a template to assist with developing an AIM statement.)* The statement should be SMART (Specific, Measurable, Achievable, Realistic, and Time-bound) and answer the questions:
    - what are you seeking to accomplish;
    - who is the target population;
    - what is the specific, numeric measure(s) you are seeking to achieve?

  - **Flow Charting:** a diagram in which graphic symbols depict the nature and flow of the steps in a process. This tool is particularly useful in the early stages of a project to help the team understand how the process currently works and may be compared to how the process is intended to work establishing a baseline for improvement. At the end of the project, the team may want to re-plot the modified process to show how the redefined process should occur. (*See Appendix B for an example to assist with beginning a flow chart.)* The benefits of a flow chart are that it:
    - Is a pictorial representation that promotes understanding of the process (creates a common vision)
    - Is a potential training tool for employees

- Clearly shows where problem areas and processes for improvement are (may also uncover variations and help identify wasteful steps in the process).

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

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

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

- Encourages creativity
- Rapidly produces a large number of ideas
- Equalizes involvement by all team members
- Fosters a sense of ownership in the final decision as all members actively participate
- Provides input to other tools: "brain stormed" ideas can be used to form a diagram or they can be reduced by categorizing

Please see how these tools may be incorporated during the PCDA process in *Figure 2* and the templates in the appendices *(these can be accessed by clicking the links in the chart)*. The QI director will be available to help in modification/formatting of templates or to assist staff with projects when requested.

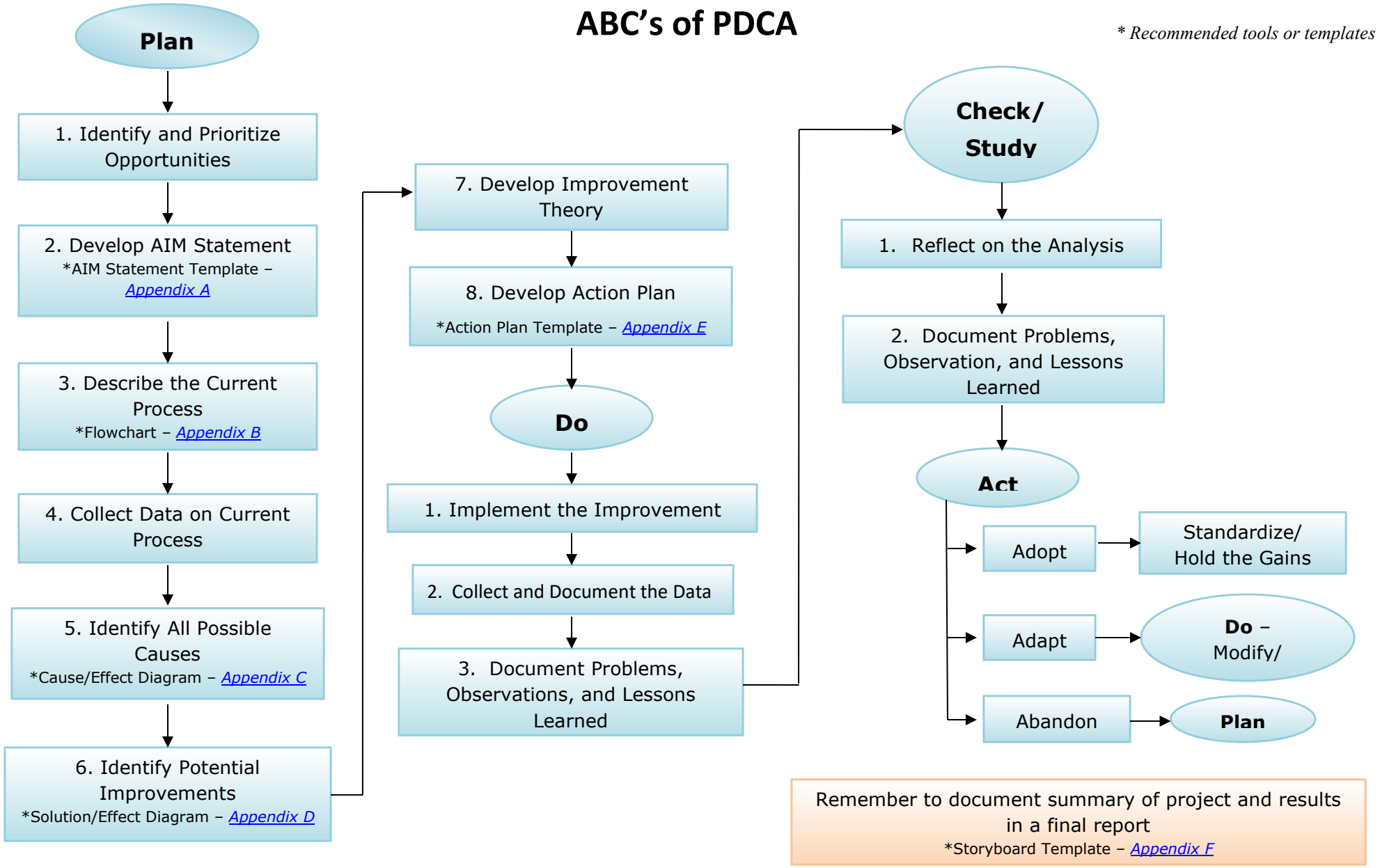


Figure 2: Phases of the PDCA Model (Gorenflo and Moran, Public Health Foundation)

- Continuous quality improvement (CQI): An ongoing effort to increase an agency's approach to manage performance and motivate improvement, including 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.

- Big QI versus little qi: Big QI denotes the macro effort toward quality improvement at the department level, while little qi represents small, discrete quality improvement efforts at the program level.

- Metrics: A collection of terms used in setting goals, indicators, measures, standards, baseline and benchmarks. The metrics are defined during the Plan phase of the PDCA model and are vital in monitoring the progress of quality improvement projects.
    - *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 I 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 as 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).

Organization Structure

LCDHD established a QIC to carry out the provisions of this plan and their intent to achieve national accreditation. The QIC includes all program directors so it is representative of all internal divisions, so essentially it is the "executive team" of the district. Terms will not be limited, except as determined by the Public Health Director. Membership is composed of the following LCDHD staff members:

- Amy Tomlinson, Executive Director
- Christine Weyman, Medical Director
- Carol Huckelby, Human Resources Manager
- Ronald Cimala, Director of Administrative Services
- Stuart Spillman, Environmental Director
- Janae Tucker, Quality Improvement Director
- Sam Price, Public Health Preparedness Manager
- Tracy Aaron, Health Education Director
- Sylvia Ferrell, HANDS Director
- Laura Woodrum, Director of Nursing
- Angela Simpson, Administrative Services Manager
- Jamie Lee, Wellness Outreach and Education Coordinator

Roles and Responsibilities: The QIC will guide and evaluate QI efforts by:

- Participating in monthly meetings to review progress of quality improvement efforts
- Engaging in and facilitating QI efforts
- Carrying out actions necessary to meet accreditation standards concerning Performance Management and QI (Domain 9) of the Public Health Accreditation Board (PHAB)
- Incorporating QI concepts into daily work
- Collecting and reporting data for performance measures
- Promoting, training, challenging and empowering LCDHD employees to participate in QI processes
- Identifying, monitoring, reviewing results from and making recommendations on QI projects
- Identifying appropriate staff to participate in QI projects as needed
- Reviewing performance measures
- Reviewing program evaluation reports
- Reviewing After Action Reports from outbreak investigations and emergency preparedness events and exercises
- Preparing annual reports for staff meetings and the Board of Health
- Reviewing recommendations for improvement based on self-assessments, PHAB Standards and Measures and site visit reports
- Annually reviewing and updating the QIP
- Other activities as determined by the QIC needed to foster a culture of quality and improve efficiency, effectiveness, outcomes and customer satisfaction
- Communicating selected QI results to stakeholders

Staffing and Administrative Support: The Executive Director will function as the chair of the QIC, but defers the day-to-day activities to the QI Director.

Resource Allocation: Resources for support of this plan will be budgeted annually as part of Cost Center 898. Resources needed to fund specific QI efforts will remain the responsibility of the individual divisions.

QI Training

Quality Improvement Training was provided to the QIC by the Center for Performance Management (Kentucky Department for Public Health) in December 2013. All executive staff also completed the Performance Management Series of online modules presented by the Empire State Public Health Training Center (ESPHTC) in 2014. The Director of Administrative Services attended "Implementing a Quality Improvement Project" training provided at KPHA (Kentucky Public Health Association) in April 2014.

QI Training was provided to all LCDHD staff in July 2014 by the Performance Improvement Manager of the Commissioner's Office from Kentucky Department for Public Health. From this point forward, per the *LCDHD Workforce Development Plan*, each new employee will take the PHF QI Quick Guide Online Module to introduce them to QI concepts and arrangements will be made for position/program specific training if applicable. Additionally, all staff will receive refresher QI training periodically.

KDPH and the state accreditation coordinators work group are currently working with Continual Impact to develop a QI training series that will be available soon (target date July 2022) to all local health departments within the state and all LCDHD staff will complete these modules when released.

Identification of QI Projects

Priority for QI projects will be given to strategic initiatives identified in the *LCDHD Strategic Plan,* areas that are identified to need improvement based on the Performance Management reporting tool and PHAB Reaccreditation measures that are "not met". The Executive Director may also request that a specific QI project be conducted. In addition, all staff members are encouraged to request the implementation of a QI project. These QI proposals will be discussed at QIC meetings.

Customer feedback is imperative to the organization and is collected via electronic surveys (a QR code is printed on appointment reminders, flyers, program brochures, etc. requesting feedback from clients), program evaluations, mailed surveys, and anonymous suggestion boxes are placed in each LCDHD building. Annual employee satisfaction surveys are completed, as well as annual surveys seeking feedback from our governing board of health. All feedback is reported to the Executive Team via the appropriate department head in the performance management reporting tool which is discussed / analyzed during the monthly team meeting. If an area of concern is identified the executive team decides on what course of action is needed. A QI project is initiated if appropriate.

Projects are encouraged at all levels – department-wide, division, branch, section and team and may be identified through an array of means, including suggestions, survey results, reports, team brainstorming, service statistics, financial records, program goals and objectives, community health improvement goals and objectives, strategic plan goals and objectives, health indicator goals and objectives, after action reports, internal assessments, etc. However, not all process improvement should be a formal PDCA project (such as pilot projects); many processes will be considered "continuous quality improvement" rather than a specific QI initiative. Neither complex projects nor other QI processes are discouraged though.

During creation of the 2018 LCDHD Strategic Plan one of the Strategic Initiatives that would be implemented would center around QI development. Objective: 4.3.1. LCDHD will engage in at least three Quality Improvement (QI) Projects per year, beginning FY 2019. With at least two of them being focused on programmatic/community improvement; and one focused on internal agency improvement. All QI projects progress will be tracked in the LCDHD Performance Management Reporting Tool that is completed monthly via the Executive Team and other program leaders.

In November / December 2022, a Quality Improvement Self-Assessment will be completed to determine what phase of QI are we are currently in and we will work to correct any areas that we are lacking in.

Goals, Objectives and Measures

Each QI Team will define the performance measures of the project by developing an AIM statement (see key quality terms) that provides the direction the QI Team takes during the PLAN phase of the PDSA cycle. See attached chart (*Appendix H*) for a complete list of formal QI projects and AIM statements to date.

Documenting, Monitoring and Reporting

The QIC will establish standard templates for use in documenting and reporting the status of the project. Other templates besides the ones included in the plan are acceptable if they meet the reporting requirements. The QIC will also make recommendations for data collection methods or use of quality improvement tools if needed. Each QI Team establishes its schedule for meetings but provides updated status reports at QIC meetings. The QIC will review the status of all QI projects at their monthly meetings.

QI Teams are responsible for collecting and analyzing data related to their AIM statement. The QI Team will maintain an electronic or hardcopy planning and status report that documents the steps completed or planned. All QI Teams are responsible for developing a storyboard that depicts progress toward and steps taken to achieve the AIM statement. At the conclusion of the project, the QI Team will submit a final report and/or storyboard (see *Appendix F* for template) documenting the effort to the executive or quality improvement director.

Communication and Recognition

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 inspire others to get involved in QI efforts.

All QI Teams will communicate progress to the QIC. Updates on QI projects will be provided in our bimonthly Executive Staff / QIC meeting minutes, internal newsletter, annual staff meetings and at quarterly District Board of Health meetings. Upon the completion of QI projects storyboards will be displayed in common areas, in the newsletter, and on the LCDHD website. When appropriate, QI results will be communicated with the Board of Health at quarterly meetings or to the public through press releases. QI projects will also be submitted for state and national conference sessions, poster sessions and awards when the QIC and/or Board of Health deems appropriate.

QI Program Review

On at least an annual basis the QIC will assess the efficiency and effectiveness of LCDHD's QIP by reviewing the process and the progress toward achieving goals and objections. Modifications to the plan will be made based on lessons learned during the year.

This QIP will note measures of progress to date and the QI chart will be updated as new QI projects are added or changed. Any other alterations of the QI plan and reason for revisions will be documented in *Appendix G* of this plan.

Appendix A – AIM Statement Template

AIM Statement Template

An effective AIM statement tells:

- What will improve (be specific): _____
- How it will improve (must be measureable):_____
- For whom it will improve:_____
- When it will improve (time frame):_____

Now put it all together

(Ex. 1 - By September 30, 2013, HIV testing rates will increase from 42% to 75% of clients receiving services at the Gotham County STD clinic. Ex. 2 – Within 6 months, the LHD immunization program will decrease the wait time for clinic immunization patients from 20 minutes to 10 minutes by decreasing the number of overbooked appointments.) -

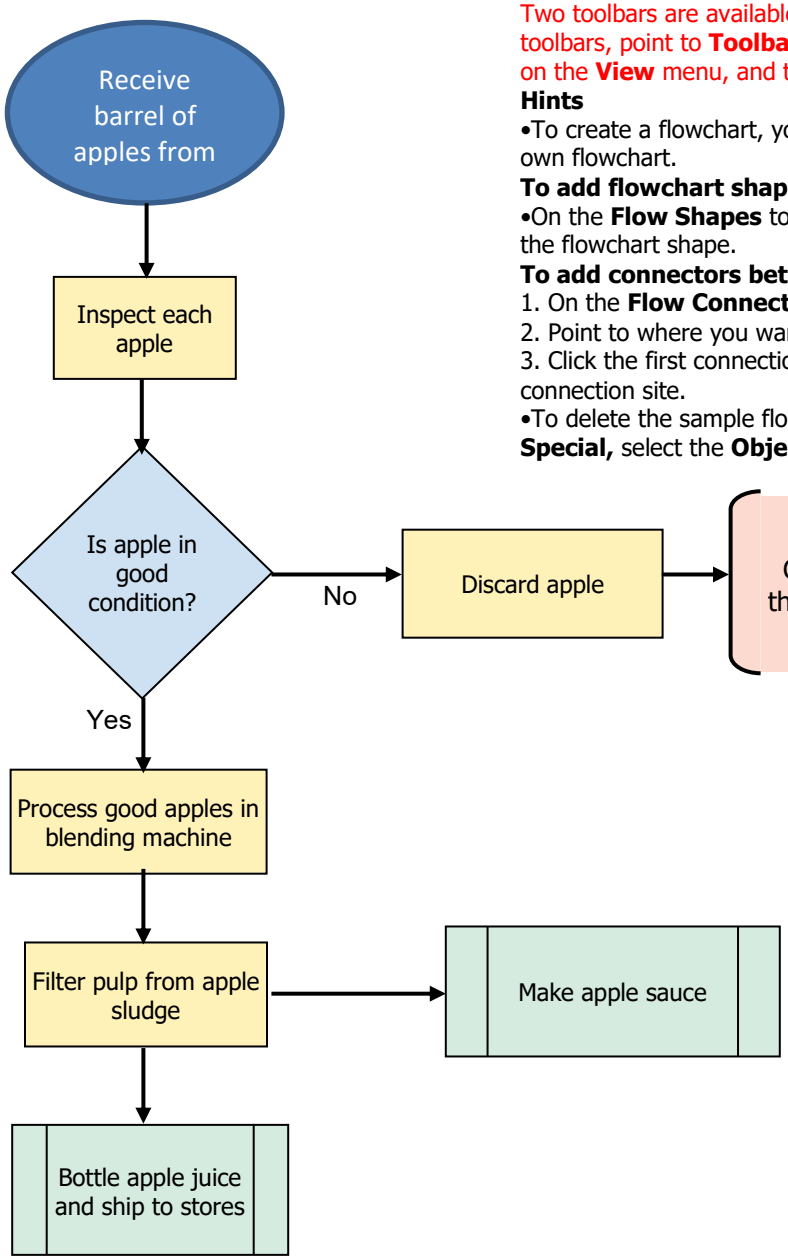
AIM STATEMENT:

_____

_____

_____

Appendix B – Simple Flowchart



Important: This flowchart was created in Excel - contact QI coordinator to recieve this template to work from. Other templates are also available.

Two toolbars are available with this template to help you create flowcharts. To display these toolbars, point to **Toolbars** on the **View** menu, and then click **Flow Shapes**. Point to **Toolbars** on the **View** menu, and then click **Flow Connectors**.

Hints

•To create a flowchart, you can modify this example or you can start from scratch to create your own flowchart.

To add flowchart shapes

•On the **Flow Shapes** toolbar, click the shape you want, and then click where you want to draw the flowchart shape.

To add connectors between the shapes

1. On the **Flow Connectors** toolbar, click the connector line you want.
2. Point to where you want to lock the connector.
3. Click the first connection site you want, point to the other shape, and then click the second connection site.

•To delete the sample flowchart and these instructions, click **Go To** on the **Edit** menu, click **Special,** select the **Objects** option, click **OK**, and then press DELETE.

A flowchart is used to create a process "picture," and is constructed using the following symbols:

Oval: shows beginning or ending step in a process. Should appear at the very top and very bottom of the flowchart to show the process' beginning and ending points with the activity or event signifying the beginning or ending is written inside.

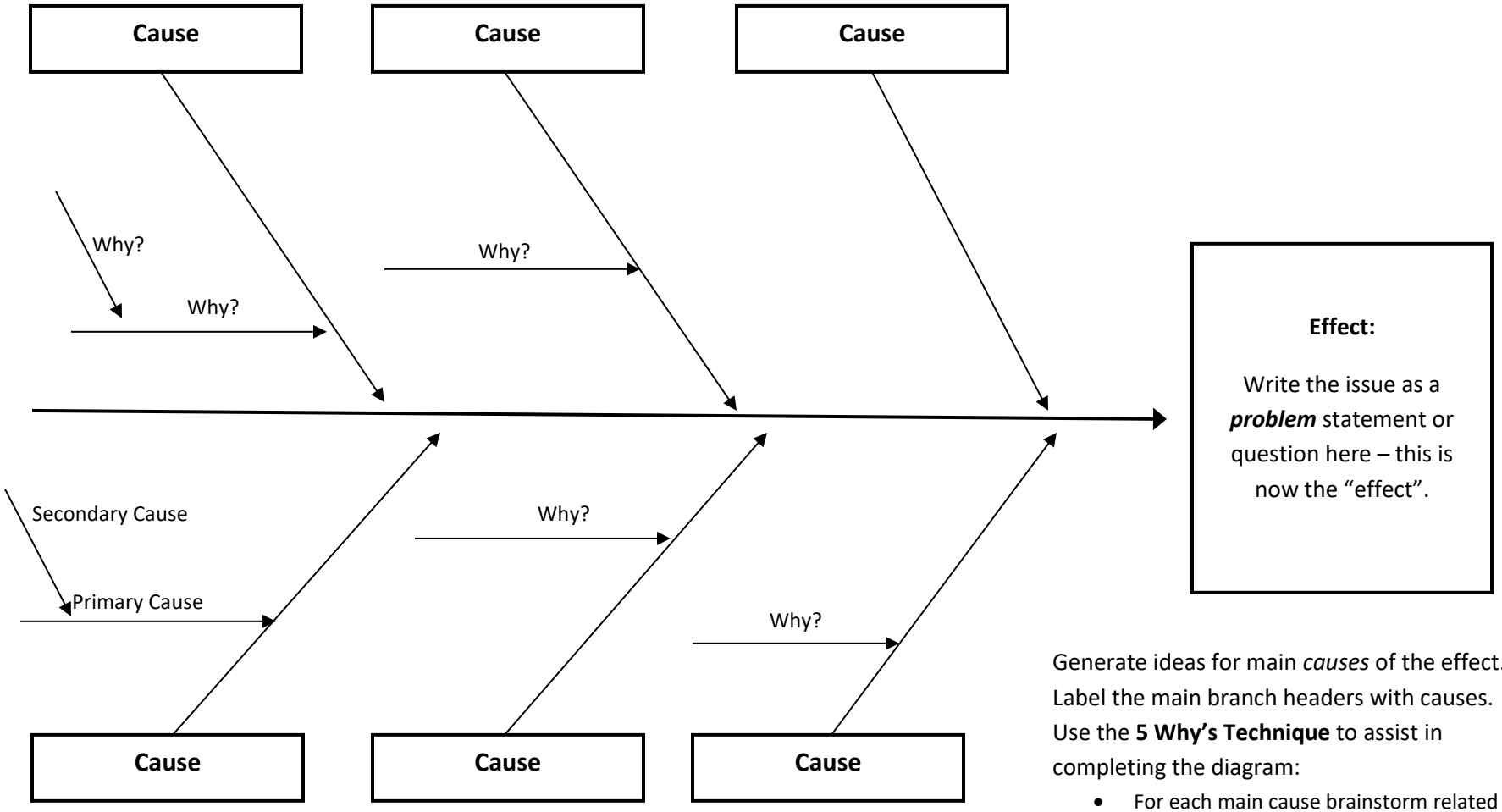
Rectangle: depicts particular step or task. A brief description of the activity and who completes it appears inside the rectangle.

Arrow: connects steps and shows direction of process flow

Diamond: indicates a decision point. Shows a decision point from which the process branches into separate paths. A question appears inside the diamond and the path taken depends on the answer to the question.

Appendix C – Cause & Effect Diagram

CAUSE & EFFECT DIAGRAM Template

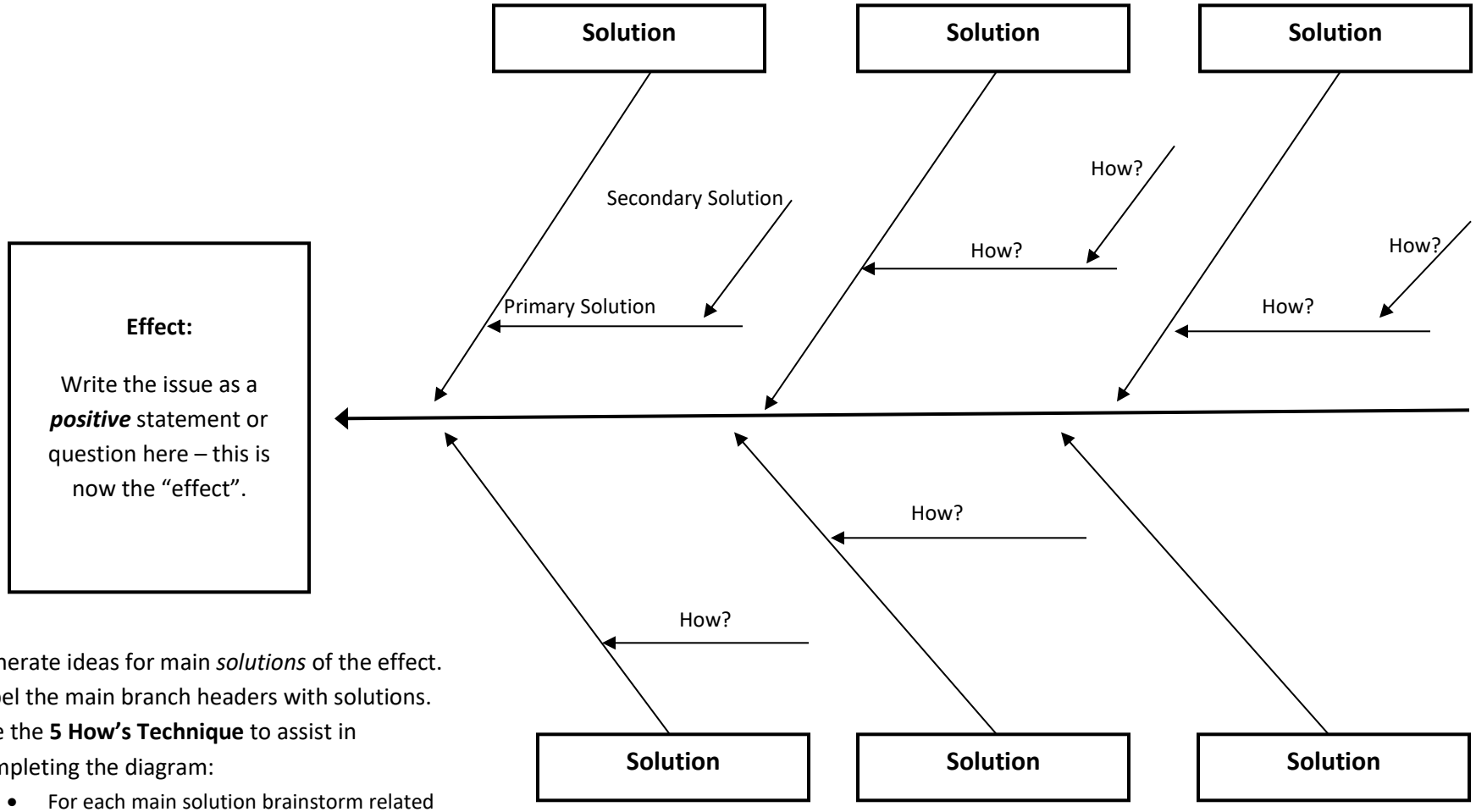


Generate ideas for main *causes* of the effect. Label the main branch headers with causes. Use the **5 Why's Technique** to assist in completing the diagram:

- For each main cause brainstorm related sub-causes that might affect the issue
- Keep repeating the question "why" until no other causes can be identified.
- List the sub-causes using secondary arrows.

Appendix D – Solution & Effect Diagram

SOLUTION & EFFECT DIAGRAM Template



Generate ideas for main *solutions* of the effect. Label the main branch headers with solutions. Use the **5 How's Technique** to assist in completing the diagram:

- For each main solution brainstorm related sub-solutions that might affect the issue
- Keep repeating the question "how" until no other solution can be identified.
- List the sub-solutions using secondary arrows.

Appendix E – QI Project Action Plan

LCDHD
Lake Cumberland District Health Department
A Healthy Today for a Brighter Tomorrow

Quality Improvement Action Plan

Project Name:		**Project Lead:**	
Team Members:			

Timeline & Milestones

Major Tasks	Task Owner	Estimated Start Date	Estimated Completion Date	Progress Status to Date	Comments
(All items should start with an action)					

Legend:

- **Blue - Strategies**
- **Gray - Complete**
- **Purple - Due in 30 days**
- **Orange - Due in 60 days**
- **Green - Due in 90 Days**
- **Red - Overdue**

May consider a new flow chart showing the revised process or create a timeline to assist in implementation, at a minimum list the action steps to be taken to represent implementation of improvement process.

Appendix F - Storyboard Template

Project Title

Lake Cumberland District Health Department
500 Bourne Avenue
Somerset, KY 42501

LCDHD
Lake Cumberland District Health Department
A Healthy Today for a Brighter Tomorrow

Quality Improvement Story Board

Team Members:

PLAN

Problem Statement

A VISUAL method for displaying a quality improvement story!
Start by stating the problem here.

Aim Statement

Use one of the templates to develop the Aim Statement and final result here.

Process Outline & Relevant Data

Examine the current approach. Describe current process including any data collected here. (E.g. How do you do it? What are the major steps in the process? Who is involved? What do they do? What is being done well? What could be done better?)

Collect initial data or at least identify data sources.

Identify Potential Causes

May use cause & effect chart/fishbone diagram or other tool to determine causes and insert/enter here.

Identify Potential Solutions

May use solution & effect chart/fishbone diagram or other tool to determine causes and insert/enter here.

Improvement Theory

If (this) is done, then (this will happen) resulting in improvement of (this). (The hypothesis you will test in the DO phase.)

DO

Test the Theory

Implement improvement, collect and document the data. Activities/plan to address any problems that occurred.

Document problems, observations and lessons learned.

CHECK

Study the Results

Study results and document reflection of analysis. Observations of changes compared to expectations.

Indicate whether or not you achieved your aim and your measures. What are the results of the activities that took place? What measurements were taken to identify if there has been a change? Describe your results.

Describe what worked well and what didn't, changes that you made along the way, things that you might do differently next time.

ACT

Standardize or Develop New Theory

Decision to adopt, adapt or abandon

Rationale for decision

What adjustments were made or next steps will take place if an improvement was not made? What will be done to sustain or standardize the solution? What are the next steps?

Future Plans

Sustainment plan for improvements realized.

Keep all or parts of the new process?

Date

Appendix G - QI Plan Revision Tracking Sheet

Date	Pages affected	Summary of changes (include reason for revisions)	Responsible staff
1/14/2020	8	Revised members list.	Janae Tucker
1/14/2020	Appendix F	Added more descriptive suggestions to each section to help staff know what was expected to be reported in each area of the final storyboard.	Janae Tucker
6/29/2021	Pg. 8, Appendix H	Reviewed by the Executive Team, the only revision made this year was to update the members list and all QI projects on tracking sheet.	Janae Tucker
2/23/2022	Pg. 8, 9, 10	Reviewed by the Executive Team. Members list updated. Trainings updated to include new modules. Added information about other templates being acceptable. Also added information regarding completing an agency QI self-assessment in 2022. Added information regarding customer feedback.	Janae Tucker

Appendix H - QI Project Tracking Sheet

Team Leader & members / Project/ Date initiated	**AIM Statement**	**Results**
Janae Tucker Safety Committee March 2012 Increasing Safety Awareness	LCDHD will implement methods to improve staff knowledge of safety policies/procedures. We will show an increase in employee's awareness of how to access safety information and increase reaction/response time in emergency drills.	Survey results regarding knowledge of safety information were much better on an average during and after our QI project.
Shawn Crabtree, Leah Jasper, Christine Weyman, Melinda Copenhaver, Jamie Lee, Laura Woodrum, Janae Tucker, Tracy Aaron, Daniel McFeeters March 27, 2014 Worksite Wellness Program Development Project	An opportunity exists to improve the health status of the working population. A viable worksite wellness program will be developed beginning with a research and control group as determined in conjunction with the Chamber of Commerce and ending with completion of interventions and post-evaluation in 6 months. Baseline measures will include pre and post tests for diabetes, tobacco use, HTN and obesity. This effort should improve the overall health status of the worksite employees in the identified industry, proven by improved lab work, post-wellness profile showing improved health status and decreased worker absenteeism.	Post health data was collected & compared to base-line data. Improvements were identified in several areas, including significant differences in blood pressure reading pre/ post-program. Waist measurements, BMI changes, cholesterol, triglycerides also showed changes for the better upon program completion. Participants also reported that challenges were beneficial and had stimulated health life-style changes. An increase in knowledge was reported post education programs as Healthy Heart (↑67%). WHI leaders were very satisfied with the program and rated it high quality.
Melinda Copenhaver Pamela Acey April 4, 2014 Increase WIC Participation Team	The goal of this project is to return WIC participation rates to pre-open access scheduling rate in these two counties by September 2014.	Project did not have expected outcomes. We are still trying new things but the KPHLI group has picked this as their formal project now (June 2015) and will continue it.
Leah Jasper, Carol Lane, Joan Crist, Lisa Harris, Shyla Bourne, Janae Tucker December 4, 2014 Vendor Log	By December 12th, 2014, a process of requesting, tracking and assigning vendor numbers that makes all needed information readily available to staff will be implemented.	Very successful. Through this project we identified there were other employees that accessed the vendor log and when we started working with CDP to pull the needed data down they thought they could reprogram the system to give us the information we needed and automatically assign the next vendor # when needed so there would be no duplication errors, which made the log much easier to maintain and use as it can be accessed from each employee computer when needed and will be up to date when opened, even if changes were made seconds ago.
Christine Weyman, Jeanne Gaskins, Melissa Garner January 2015 Increasing Immunization Rates for Children in McCreary County	By July 31, 2015, the immunization status of at least 85% of children 24 months of age who are seen in the McCreary County Health Department will be up to date based on ACIP recommendations.	This project was completed with success in September 2016. It took a little longer than anticipated and required a lot of work from staff as we tried different interventions to find something that work to get these children immunized by age two, but we were finally successful.
Leah Jasper, Carol Lane, Pam Godby, Wilma Munsey, Shyla Bourne, Janae Tucker March 23, 2015 Making HR & payroll forms available to	To increase efficient access to employee forms, • all appropriate HR/administrative forms or links to locations with the appropriate forms will be made available on the LCDHD WIKI by 7/1/15 • at the July 8th staff meeting, HR will train staff to use the WIKI for forms • After July 8, 2015, when employees request the forms available on the WIKI, HR will coach	Project completed with great results. Employees surveyed regarding the new process for obtaining employee forms expressed satisfaction. Forms that had not been considered were added as staff reviewed the site and requested they be uploaded for them to access more efficiently and other departments started having their forms added to wiki also.

employees electronically through wiki.	employees on obtaining forms from the WIKI if that method is the most efficient.	
Sam Price, Rhonda Akin, Renea Atkinson, Tyler Baker, Shannon Beaty, Heather Capps, Janet Cowherd, DeAnn Cross, Jelaine Harlow, Megan Harrison, Jefferson Hickman, Connie Mann-Polston, Tina Meece, Melissa Wells, Janae Tucker February 25, 2015 Increasing Participation in the Employee Satisfaction Survey Process	When employee satisfaction surveys are sent out July 1st, 2015 at least 75% of employees will participate in the annual Employee Satisfaction Survey process. The new process will guide administrative staff in agency quality improvement, not just be a process to collect information.	Project completed October 15, 2015. There was an 81% response rate to the new employee satisfaction/process. The committee met and reviewed the results and made recommendations to the executive director for follow-up. The survey underwent minor wording changes to clarify questions at the meeting. Employee satisfaction surveys will be sent out annually. The committee will continue to meet and review the results. Any recommendations from the committee will be sent to the Executive Director for consideration and follow-up so the new process was adopted.
Leah Jasper, Carol Lane, Shyla Bourne, Mary Silvers April 21, 2015 Increase Efficiency with Which Cell Phone Stipends Are Processed	Because the processing of monthly cell phone stipends takes at least one day per month of staff time, the Accounting Staff will evaluate the process to determine if it can be improved and the time shortened, and if a more efficient process is identified, implement it for the June 2015 monthly stipend.	Staff had to be coached on appropriate coding for the first several travel vouchers The new process has saved Shyla Bourne the approximately 4 hours she used to spend preparing the 75 separate bills. The new process has saved Carol Lane the 1-2 hours she used to spend preparing the 75 separate bills. The new process has saved Mary Silvers the 1-2 hours she used to spend preparing the 75 separate bills but she the new process has added approximately .5 hours to the review of the expense/travel vouchers.
Stuart Spillman, Devon Wiedeman June 1, 2015 Electronic Complaint Forms for the Public	By August 5, 2015, complaints will be submitted electronically instead of via mail, which will benefit the complainant and Health Department staff by allowing quicker, more convenient, less time-consuming, and less expensive processing.	As this project was in progress another project was started which would make our LCDHD website "mobile friendly", as a result this form will be developed and implemented onto our new website and is no longer a QI project. The contracted will develop this tool and integrate it into the new website.
Stuart Spillman, all environmental staff September 2015 Environmental Fee Collections	All permit fees owed will be collected by the environmental office by November 2015 or written off and a new tracking system will be implemented to assure permit fees are collected within a month of due date by November 2015.	During a state audit of the environmental offices it was discovered that many permit fees had not been collected over the last 5 years. A Report 47 is now available to show outstanding permit fees that the program was unaware of. This report will be printed out monthly and the environmentalist will work the report and collect fees that are due within one month. This will be added to the district performance management database to assure that each county report is reviewed and worked monthly and that fees are collected within a timely manner.
Beverly Brockman, Laura Woodrum, Melinda Copenhaver, Donna Parrish, Janae Tucker, Cindy Nettles, Sandra Jones, Pamela Acey Dec 18, 2015 SDS Policy Workgroup	To make Same Day Scheduling and scheduling policies consistent district wide by standardizing policies and training staff on implementation. Staff and patients will see improvements in this process as evidence by a follow-up survey in January 2017.	In January 2017, a survey was completed by clinic staff to determine if the project had been successful. Survey results showed that: - 72% of staff agree that the consistency of scheduling has improved across the district with the new procedures - 88% of staff state that the new late clinic hours are meeting the needs of the patients in their communities, and - 80% state that the new length of service guidelines were appropriate. So, based on this measure, the objectives of this QI project were met or exceeded.

Leah Jasper, Vickie Livesay, Shyla Bourne, Melinda Copenhaver, Lauren Copenhaver October 12, 2015 Insurance Billing Process	As insurance collections have decreased, but the amount of time required to process the claims has not decreased, and additionally, insurance claims as old as several years have not been resolved but remain on the aging report, an opportunity exists to improve the billing and collection processes, by achieving the following, beginning October 2015: •Resolve 90% of current outstanding claims older than 90 days by December 2015 •Decrease clerical time needed to process insurance claims from .75 FTEs to .50 FTEs by December 2015 •Increase 2016-17 clinic insurance collections to at least $40K (2014-15 levels) •Process 90% of all insurance claims within 90 days, by no later than December 2015	•All claim documentation, from reports to adjustments, are filed and stored electronically •Staff time required to process insurance routine claims has decreased from roughly .75 FTEs to less than .25 FTEs •Outstanding claims 90 days or older have been decreased 94% from more than $80K to $5K •Outstanding insurance claims on aging report are routinely reviewed every month with only 6% of claims 90 days or older. •Average monthly collections have not increased, primarily due to the contract renegotiation with Anthem which is still in process. Anthem still has billing issues for all counties except Cumberland, but Anthem is paying for Cumberland claims now. We theorize this will improve when Anthem gets their system is set up correctly
Carol Huckelby, Tracy Aaron, Leah Jasper, Jamie Lee, Janae Tucker and Laura Woodrum November 12, 2015 Grants Management	By September 31, 2016, LCDHD will have formalized grants management policies and procedures. By March 31, 2017 procedures will be in place. *(By creating policies and procedures that address communication, coordination, tracking and staff utilization and skills through the lifecycle of the grant process we will better management grant applications and awards.)*	This project was completed in November 2016 with policies & procedures in place. A database to help track all of the grants was developed, checklists were created and process to monitor that staff were utilizing the tools was put into place. It was realized during this project that another project would probably be started in the near future regarding a standardized tool or program developed to help track individual grant goals in the future.
Sylvia Ferrell, Tommy Hall, Daniel McFeeters, Leah Jasper, Connie Mann-Polston, Brenda Dial, Mary Ramsey, Lisa Gregory, Michelle Wesley, Janae Tucker August 19, 2016 HANDS Electronic Health Records	As HANDS revenues were less than HANDS expenditures for both the 15 and the 16 fiscal years, an opportunity exists to decrease expenses by: 1. Decrease clerical travel expense by 90% from 4.5 hours per week by June 30, 2017, 2. Decrease the home visitor charting time amount from by 50%, from 9 hours per week per home visitor, by June 30, 2017 date, freeing up the home visitor to perform more home visits 3. Decrease the clerical filing time amount from by 80%, from 60 hours per week, by June 30, 2017, allowing the clerical staff to support more home visitors 4. Decrease office supplies/medical records supplies expenses 25% from 2017 totals.	Status of goals after the implementation of the EFR: 1. Prior to the electronic system, HANDS was traveling 3 clerical staff to neighboring county 3 days each week. The total time spent by these 3 staff driving in one day R/T was approx.4 hour. They traveled 3 days each week for a total 12 hours per week, or a total of 48 hours per month. With HANDS EMR in place, these same 3 clerical staff now enter all data and billing for all assigned counties, from their Base County and only travel to neighboring county 2 days each month with total travel time of 6.5 hr.; saving 41.5 hours of unproductive travel time over the period of one month. Prior to EMR these same 3 clerical staff were driving 1728 miles per month. They now drive only 286 miles per month saving LCDHD HANDS 1442 reimbursable miles per month. 2. Prior to system, all HANDS home visitors were spending approximately 1.25 hours per day gathering forms and supplies to complete their home visits. Now, all home visitors are spending approximately 30 minutes per day gathering forms and supplies to complete their visits; a difference of 45 minutes per home visitor; a 60% reduction in visit prep time. 3. Prior to system; there were a total of 5 FT data entry clerks working in HANDS. Each clerk spent approximately 3.5 hours per day on data entry, leaving the other 4 hours to complete filing, etc. Now, with the EMR in place each clerical data entry clerk spends approximately 30 minutes per day doing filing, etc. duties, a saving of 85 to 88% per day of time formerly spent to filing duties. Also, due to the amount of time saved by the clerical staff; one FT HANDS clerical position was cut completely on Jan. 2, 2017. 4. Cost of office administration/med. record supplies decreased by 20% by March 1, 2017 instead of the 25%, but the savings will continue to increase as fewer supplies are required.
Melinda Copenhaver, Shyla Bourne, Janae Tucker November 18, 2016	The process for gaining employee access to systems that are required for them to perform their job duties will be improved so that new staff will have access to needed systems (HANDS 2.0, WebIZ, KY PEF, Portal, TRAIN, etc) the day	Due to implementation of the upcoming EHR rollout this project has been place on hold. Will be resumed after all the system changes, etc take place if needed.

Employee Access to Secure Systems	they come on duty by June 2017. This will also benefit current staff that are responsible for granting/requesting access by allowing preparation time before new staff come on board.	
Christine Weyman, Amanda England, Heather Capps, Laura Woodrum, Sherri Gibson, Janae Tucker, Stuart Spillman January 10, 2017 Effort to Decrease Salmonella & Campylobacter Rates in Clinton & Cumberland Counties	Decrease Campylobacter and Salmonella causes in Clinton and Cumberland Counties for the general public by 25% by January 2018.	According to LCDHD primary data collected for food-borne illness during and after this project; -Campylobacter cases decreased by 23.5%, and -Salmonella cases decreased by 59% for Clinton and Cumberland Counties combined.
Leah Jasper, Tyler Baker, Joan Crist, Lisa Harris, Mary Silvers, Robyn Sneed February 7, 2018 Electronic Accounts Payable Process	With the threat of increased pension expenses per employee during the 2019 fiscal year, and with the immediate retirement/transfer of 1.5 accounting staff, there's an opportunity to evaluate the existing Accounts Payable Process, to find increased efficiencies, and implement them by May 31, 2018, to accomplishing 100% of the necessary Accounts Payable tasks in 90% of the existing time.	•New Bill Payment keying/approving process: o Adopting the new process did save hours of staff time each Thursday, but at first it caused the other staff to more slowly process their piece of the process. It took several months before we were able to routinely measure a time savings of 6 employee hours per week, however our goal was 7 employee hours per week. •Online Bill Paying: o Online bill-pay proved to be confusing for providers when they received the checks as they came directly from the bank with only a note on the check stub, and providers often weren't able to determine to which account they should apply payments. o Online bill-pay was only electronically transferred if the bank had an electronic relationship with the recipient. Otherwise, the bank mailed a check. This meant checks were received 5-10 days later than they would have, had we mailed them o Bank reconciliation was more complicated with ACH payments as they were cleared much later than LCDHD checks initiated and mailed in-house
Stuart Spillman, Courtney Roberts, Corey Patterson, and Sam Price April 1, 2018 Development of Online Food Handler's Certification Course	By April 1, 2019 the number of Food Handler's Certifications should increase by at least 25%, due to increased availability of Food Handler's Certification training via online access to certification classes with positive feedback from course participants.	The basic platform was developed and went live on August 1, 2018 with 5 local health departments, including LCDHD on board. From that time until July 2019 we had 85% of Kentucky health departments utilizing this platform for their required trainings. 8,960 individuals across the state have now completed the course. Revenues are covering all associated costs of the course and has even generated some funding for each LHD involved, even though they have no cost or time invested, they just place the link on their website they share in the profit. The online course developed during this project was adopted. Improvements continue to be developed. For example, a phone app was developed to let inspectors check certifications while in the field. The app is currently being tweaked to recognize which restaurant the inspector is at and will automatically populate all associated certificates for them.
Daniel McFeeters, Melinda Copenhaver, Pulaski County Clerical Staff May 2, 2018	Improve the workflow of the clerical processes with the goal of increasing efficiency, allowing staff to process more patients with less staff time, and increasing accuracy. We aim to identify and implement changes by July 31, 2018. Success will be measured by increased	All clerical staff were provided an opportunity to utilize the KeePass password manager that assisted in keeping track of frequently changed passwords and saved time since lost passwords were no longer as much of a problem. Navi-net trial is being utilized to see if it will be cost effective. It may be more cost inhibitive than time saving.

Decrease frustration and inefficiency in clerical processes.	"Services per Clerical FTEs", as well as decreased billing denials due to ineligibility.	Process flow charts were created to track registration intake procedures but no other areas were identified that would save time or could be corrected without a state EMR or changes to software enhancements. The company that provides technical assistance to the local HDs through the state department was contacted but they stated that they could not provide an EMR for an individual HD, or they would not be allowed to participate in an RFP for the state health department.
Tracy Aaron, Patricia Burton July 27, 2018 Increase participation in the Pulaski County health coalition.	Increase participation in PC coalition by 25% before June 30, 2019.	Had to abandon project due to staffing issues in the county. May pick it back up once new staff in place and oriented to program.
Carol Huckelby, Stuart Spillman, Brian Ramsey, Becky Baker, Jefferson Spillman, Janae Tucker October 31, 2018 Electronic Evaluation Process	1. Time for evaluations to make it through the complete cycle will decrease by 50% (from 2 months to less than 1 month) by May 30, 2019. 2. 90% of all evaluations are completed and submitted electronically before the evaluation is due to be returned to the Human Resources Office, by May 30, 2019.	After testing the electronic performance evaluation with a small group, it was determined to be successful. There have only been minor glitches with the program, usually related to user error. There has been no negative feedback regarding the form or the process. All performance evaluations are completed and submitted electronically now. The completed forms are being returned to HR within 2 days after the evaluation has taken place; most within hours after completion.
Sabrina Merrick, Becky Baker, Bell Elementary Staff, Janae Tucker October 10, 2018 Effort with Bell Elementary School to improve nutritional habits of students utilizing the CATCH program.	An opportunity exists to improve the nutritional habits and increase recognition of physical activity among 1st grade students at Bell Elementary. Using the Coordinated Approach to Child Health (CATCH) program to focus on healthy behavioral changes that students can adopt to increase their knowledge and exposure to nutritional choices; recognition of physical activities; and positively influence BMI rates. Success will be measured by assessing student's knowledge of nutritional foods and ability to identify how to be physically active as well as BMI measurements pre-program implementation and again nearing the school year end. Deadline to complete is May 31, 2018.	There were notable improvements from the baseline measurements, as defined by goals of this project, when data was assessed. One objective was to increase student's knowledge related to what nutritional foods and healthy physical activity are. The post program survey showed an improvement on correct responses to all questions in the survey. The BMI data was compared student for student for the school year. The average of all students enrolled at Bell elementary in the fall was an average of 18.13 for the school year, with year-end results averaging 18.96. There was not a significant change in BMI this school year
Sabrina Merrick, Becky Baker, Meece Middle School Staff, Janae Tucker October 10, 2018 Effort with Meece Middle School to improve participation in physical activities utilizing the CATCH program.	An opportunity exists to improve participation in physical activities among 5th grade students at Meece Middle. Using the Coordinated Approach to Child Health (CATCH) program to focus on healthy behavioral changes that students can implement to increase their knowledge of how to be physically active; improved ability in physical activity participation; and positively influence BMI rates. Success will be measured by assessing student's average time to complete a 1-mile run/walk; students' ability to identify what is appropriate physical activity; as well as BMI measurements pre-program implementation and again nearing the school year end. Deadline to complete is May 31, 2018.	Improvements were seen via comparison of the baseline data measurements and the post-program measurements as defined by the goals of this project: • Students completed a 1-mile run/walk to assess their physical fitness abilities. Initial completion time of the mile averaged 15.3 minutes, with a post-program average completion rate of 11.7 minutes! The fastest time to complete the mile also improved from 7.3 minutes to 6.45 minutes. • Another tool was the pre- and post-survey tool utilized to measure knowledge related to physical fitness habits (Refer to Figure 1), with outcomes that verified an increase of student's knowledge in the area. • Initial BMI measurements averaged 22%, this decreased slightly at the end of this project to 21.8%.
Stuart Spillman, Ronald Cimala, Belinda McKnight, Jefferson Hickman, Janae Tucker	All environmental deposits will be submitted to the financial director before the 10th of each month by 12/31/2019. Also, as a result of this project there will be a back-up person for the	Just filing in batches saved several hours of time each month that the environmental secretary can now spend working on deposits. All deposits have been submitted to the financial director before

	environmental secretary to assist with job duties and be available to fill in if the current secretary ever needs to be off for an extended period of time.	the 10th of each month since starting this project and implementing the new filing system.
Jamie Lee, Janet Cowherd, Vickie Albertson, Janae Tucker April 18, 2019 Increase DSME class participation & completion rates	Increase education opportunities for populations with, or at-risk of developing, type II diabetes by increasing Diabetes Self-Management Class offerings via LCDHD staff from 21 courses per year to 24 courses per year by June 30, 2020. Community member participation rate in classes offered by LCDHD staff, and course completion rate, will increase by at least 10% by June 30, 2020.	Our attendance did not improve using the straight online format. In fact – it was the exact same averaging 5.5 per class. However, the number of people attending from the Lake Cumberland District declined. As a result of this project, we have revised our online registration process to streamline which class clients would like to attend. We are offering classes for anyone in the state, not just in the Lake Cumberland District. The State Diabetes Team made a calendar so we could refer clients to classes throughout the state. Classes are now promoted on the LCDHD website calendar, via social media, flyers are taken to MD offices and shared with community partners throughout the district. We are partnering with a MD office in Louisville to increase education for their patients and have just started using CareAlign for this process.
Carol Huckelby, Amy Tomlinson, Brian Ramsey, Lisa Anderson, Cristy Haynes May 30, 2019 Orientation QI Project	To develop a cost-effective orientation process that will improve staff knowledge and satisfaction with the process by January 1, 2020	This project was abandoned due to the COVID19 pandemic due to restrictions in place and the extra duties of HR and IT staff during that time. The project was planned to be picked back up but during the lapse of time there were legislative changes that took place and we returned to the merit system regulations and were no longer hiring through staffing agencies so the project was no longer relevant.
Carol Huckelby, Christy Haynes, Green River District Health Department (HR), Marshall County Health Department (HR) June 1, 2019 Develop Harassment Training for LHD staff across the state	Develop a cost-effective method to increase knowledge among Kentucky local health department staff regarding harassment in the work place…what it is, how to avoid it, and how to report it by January 1, 2020.	This project had to be abandoned due to the COVID19 pandemic due to restrictions in place and the extra duties of all HR staff during that time. This project may be picked back up at a later date.
Laura Woodrum, Ann Stevens, Angela Simpson, Dawn Redman, Heather Capps, Janae Tucker May 30, 2019 Increase WIC Retention	Increase WIC participation/retention rates by 10% in 3 counties by June 30, 2020.	This project was abandoned due to continued decline in participation rates to date. However, part of the reason who are abandoning the project is due to recent revisions to KY DPH WIC regulations/requirements changes as they become implemented due to statewide rates decreasing also. Their goal is to decrease the administrative burden on local agencies and increase access for participants. According to data reports for January 2020, there has been a slight increase in participation rates in our district.
Sylvia Ferrell, Michelle Wesley, Connie Arnold, Whitney Jones, Angela Simpson, Janae Tucker, local birthing hospitals and prenatal care providers November 12, 2019	Increase HANDS infant enrollment by 10% districtwide by March 31, 2019. A program promotion via a diaper incentive certificate, given out to all initial prenatal patients in local offices and postpartum bags at the birthing hospitals in the district, encouraging mothers to come to the local health department and learn more about the available programs.	This project was concluded and vouchers for free diapers will no longer be printed due to limited outreach and the fact that we only had a 3.5% return rate and no referrals were obtained via this effort. Diapers that were purchased for this effort will be used as incentives for participation in the program or given to HANDS families in need in the future.

HANDS Diaper Promotion Project		
Next Project!!!!		