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

(“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.
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 a program is working; work performed and results achieved; its efficiency and effectiveness; refers to client population/those who receive services; may relate to knowledge, skills, attitudes, values, behavior, condition or status (e.g., % of patients who keep appointment).

**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:

- Shawn Crabtree, Executive Director
- Carol Huckelby, Human Resources Manager
- Ronald Cimala, Director of Administrative Services
- Stuart Spillman, Environmental Director
- Janae Tucker, Quality Improvement Director
- Amy Tomlinson, 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.
Identification of QI Projects

Priority for QI projects will be given to strategic initiatives identified in the LCDHD Strategic Plan and PHAB standards/measures that are either partially or not demonstrated. 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.

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.

In November / December 2018, the NACCHO 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. 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 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 measurable): __________________________________________________

• 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:

_____________________________________________________________________________________

_____________________________________________________________________________________

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Appendix B – Simple Flowchart

Important: This flowchart was created in Excel - contact QI coordinator to receive 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.

Bottle apple juice and ship to stores

Receive barrel of apples from

Inspect each apple

Is apple in good condition?

Yes

Process good apples in blending machine

Filter pulp from apple sludge

Make apple sauce

Send to compost bin. Compost is cycled back to the farm as nutrients for the apple orchard soil.

No

Discard apple

Is apple in good condition?

Bottle apple juice and ship to stores

Receive barrel of apples from

Inspect each apple

Is apple in good condition?

Yes

Process good apples in blending machine

Filter pulp from apple sludge

Make apple sauce

Send to compost bin. Compost is cycled back to the farm as nutrients for the apple orchard soil.

No

Discard apple
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.

Effect:
Write the issue as a *problem* statement or question here – this is now the “effect”. 
Appendix D – Solution & Effect Diagram

SOLUTION & EFFECT DIAGRAM Template

Effect:
Write the issue as a positive statement or question here – this is now the “effect”.

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

Quality Improvement Action Plan

<table>
<thead>
<tr>
<th>Major Tasks</th>
<th>Task Owner</th>
<th>Estimated Start Date</th>
<th>Estimated Completion Date</th>
<th>Progress Status to Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>(All items should start with an action)</td>
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</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Quality Improvement Story Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Members:</td>
</tr>
</tbody>
</table>

## Project Title

### 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?
# Appendix G - QI Plan Revision Tracking Sheet

<table>
<thead>
<tr>
<th>Date</th>
<th>Pages affected</th>
<th>Summary of changes (include reason for revisions)</th>
<th>Responsible staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/14/2020</td>
<td>8</td>
<td>Removed Christine Weyman from members list since she has retired.</td>
<td>Janae Tucker</td>
</tr>
<tr>
<td>1/14/2020</td>
<td>Appendix F</td>
<td>Added more descriptive suggestions to each section to help staff know what was expected to be reported in each area of the final storyboard.</td>
<td>Janae Tucker</td>
</tr>
</tbody>
</table>
### Appendix H - QI Project Tracking Sheet

<table>
<thead>
<tr>
<th>Team Leader &amp; members / Project/ Date initiated</th>
<th>AIM Statement</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Janae Tucker</strong> Safety Committee March 2012 Increasing Safety Awareness</td>
<td>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.</td>
<td>Survey results regarding knowledge of safety information were much better on an average during and after our QI project.</td>
</tr>
<tr>
<td><strong>Shawn Crabtree, Leah Jasper, Christine Weyman, Melinda Copenhaver, Jamie Lee, Laura Woodrum, Janae Tucker, Tracy Aaron, Daniel McFeeters</strong> March 27, 2014 Worksite Wellness Program Development Project</td>
<td>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.</td>
<td>Post health data was collected &amp; 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.</td>
</tr>
<tr>
<td><strong>Melinda Copenhaver</strong> Pamela Acey April 4, 2014 Increase WIC Participation Team</td>
<td>The goal of this project is to return WIC participation rates to pre-open access scheduling rate in these two counties by September 2014.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Leah Jasper, Carol Lane, Joan Crist, Lisa Harris, Shyla Bourne, Janae Tucker</strong> December 4, 2014 Vendor Log</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Christine Weyman, Jeanne Gaskins, Melissa Garner</strong> January 2015 Increasing Immunization Rates for Children in McCreary County</td>
<td>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.</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Leah Jasper, Carol Lane, Pam Godby, Wilma Munsey, Shyla Bourne, Janae Tucker</strong> March 23, 2015 Making HR &amp; payroll forms available to</td>
<td>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</td>
<td>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.</td>
</tr>
<tr>
<td>Employee/Sponsor</td>
<td>Project Details</td>
<td>Notes</td>
</tr>
<tr>
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| **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. |
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

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.

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 hours. 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.

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.
<p>| 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 &amp; Campylobacter Rates in Clinton &amp; 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. |
| 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. Pending. |
| Development of Online Food Handler’s Certification Course | 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 &quot;Services per Clerical FTEs&quot;, as well as decreased billing denials due to ineligibility. 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. 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 | Daniel McFeeters, Melinda Copenhaver, Pulaski County Clerical Staff May 2, 2018 Decrease frustration and inefficiency in clerical processes. | |</p>
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<td><strong>Tracy Aaron, Patricia Burton</strong></td>
<td>July 27, 2018. Increase participation in the Pulaski County health coalition.</td>
<td>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.</td>
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<td><strong>Carol Huckleby, Stuart Spillman, Brian Ramsey, Becky Baker, Jefferson Spillman, Janae Tucker</strong></td>
<td>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.</td>
<td>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.</td>
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<td><strong>Sabrina Merrick, Becky Baker, Bell Elementary Staff, Janae Tucker</strong></td>
<td>October 10, 2018. Effort with Bell Elementary School to improve nutritional habits of students utilizing the CATCH program.</td>
<td>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.</td>
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| **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. | 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%. |
<p>| <strong>Stuart Spillman, Ronald Cimala, Belinda McKnight, Jefferson Hickman, Janae Tucker</strong> | 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 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. | Pending. |
| <strong>Jamie Lee, Janet Cowherd, Vickie</strong> | Increase education opportunities for populations with, or at-risk of developing, type II diabetes. | Pending. |</p>
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<td>Albertson, Janae Tucker</td>
<td>April 18, 2019</td>
<td>Increase DSME class participation &amp; completion rates 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.</td>
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<td>Carol Huckelby, Amy Tomlinson, Brian Ramsey, Lisa Anderson, Cristy Haynes</td>
<td>May 30, 2019</td>
<td>Orientation QI Project To develop a cost-effective orientation process that will improve staff knowledge and satisfaction with the process by January 1, 2020.</td>
<td>Pending</td>
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<td>Carol Huckelby, Christy Haynes, Green River District Health Department (HR), Marshall County Health Department (HR)</td>
<td>June 1, 2019</td>
<td>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 workplace...what it is, how to avoid it, and how to report it by January 1, 2020.</td>
<td>Pending</td>
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<td>Sylvia Ferrell, Michelle Wesley, Connie Arnold, Whitney Jones, Angela Simpson, Janae Tucker, local birthing hospitals and prenatal care providers</td>
<td>November 12, 2019</td>
<td>HANDS Diaper Promotion Project 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.</td>
<td>Pending</td>
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Next Project!!!!