Barren River
DISTRICT HEALTH DEPARTMENT

2023-2026

Performance Management and Quality Improvement Plan

Mission, Vision, Values

Mission

Our mission is to serve our community by protecting and improving the environment and health of people through prevention, surveillance, education, and partnerships.

Vision

A healthy community for all people to live, learn, work, and play.

Values

Collaboration, Adaptability, Reliability, Excellence

Healthy Community. Happy Families.

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Purpose

Barren River District Health Department (BRDHD) is committed to creating a culture of quality through performance management, continuous quality improvement, and evaluation in our programs, service delivery, and population health outcomes among the residents of Barren, Butler, Edmonson, Hart, Logan, Metcalfe, Simpson, and Warren Counties.

BRDHD's 2023 Performance Management and Quality Improvement Plan serves as a foundation to describe our performance management (PM) and quality improvement (QI) goals, processes, responsibilities, and tools. The purpose of PM and QI are ultimately to help us achieve our agency's vision. They aid us in understanding our programs and their impact as well as in improving our effectiveness, efficiency, and relationships with our community.

This plan reinforces the strategic goals of the 2023 Strategic and Workforce Development Plans, helping to achieve a strategic vision laid out by leadership. The 2023 BRDHD PM/QI Plan also addresses the following standards and measures from our accreditors:

Public Health Accreditation Board Standards (v. 2022)

Standard 9.1: Build and foster a culture of quality.

Standard 9.2: Use and contribute to developing research, evidence, practice-based insights, and other forms of information for decision making.

Performance Management (PM)

Performance management (PM) is the active monitoring of data against set metrics with the purpose of making programs better, more effective, and more equitable. An effective PM system uses data strategically to gather valuable insight into different aspects of a program. PM also involves applying various tools, such as logic models, to connect planning, evaluation, and improvement. In addition to internal services and programs, PM can be used to track progress and the impact of agency plans such as the CHIP, Strategic Plan, PM/QI Plan, and Workforce Development Plan.

Performance Management Framework

BRDHD has adopted Public Health Foundation's Public Health Performance Management System Framework (Figure 1) as the model for establishing agency-wide PM. The framework indicates that performance standards, performance measurement, reporting progress, and quality improvement help maintain and are shaped by visible leadership, transparency, strategic alignment, a culture of

quality, and a customer focus. Each of these elements strengthen one another, making them all key parts of a successful PM system.

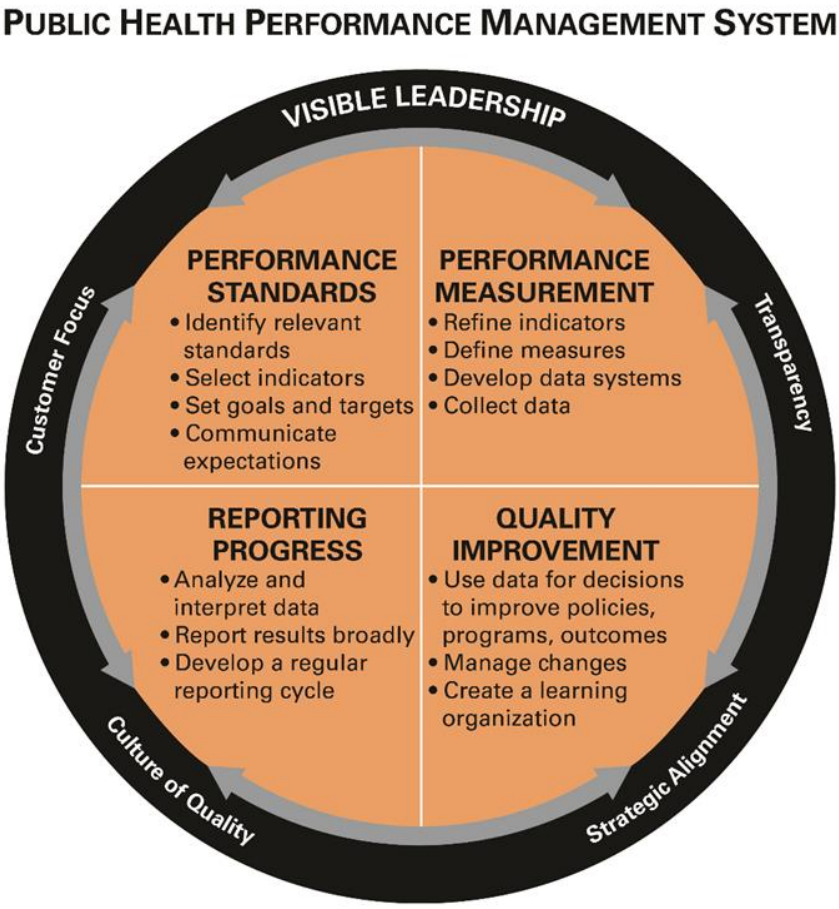


Figure 1: Public Health Foundation's Public Health Performance Management System Framework (2015)

Performance Management Dashboard

BRDHD will use *VMSG Dashboard* as its formal performance management system, with REDCap and other databases used to collect initial data. These, along with additional PM tools, will help BRDHD collect, track, and monitor data. The data collected through PM sets the foundation for effecting change throughout the agency, as it is used to make decisions both at the program level and agency-wide. We strive for an agency culture of evidence-based decision-making, where data is used to improve processes, make our work more impactful, and better meet the needs of our communities. Utilizing data helps us understand our strengths and weaknesses and supports the quality improvement (QI) process.

Using performance goals and SMART objectives, programs throughout BRDHD will determine the desired impact and outcomes of their work. Then they will decide which metrics will show progress towards those desired impacts and outcomes. Once goals, objectives, and metrics are set, program

leaders, Branch Directors, and other BRDHD staff with VMSG licenses and training are responsible for regularly entering relevant data into the VMSG Dashboard. The data is entered and compared against the set metrics where staff can then indicate which phase of progress the program is in:

-  Gold - success; the program has fully met the desired objective(s)
-  Green - ongoing progress
-  Yellow - paused progress
-  Red - no progress

This kind of continual monitoring can reveal gaps, emphasize opportunities, and inform policies and processes. The PM system will also help BRDHD communicate ongoing projects and program updates to staff and the Boards of Health as well as external stakeholders. VMSG's public dashboard will allow internal and external stakeholders without a VMSG license to monitor progress as well.

Setting Goals, Objectives, and Metrics

For all BRDHD programs, goals and SMART objectives will be developed by program leaders with the help of the Health Strategists. Goals are expected to be based on and align with relevant national, state, local, and/or grant standards as well as represent stakeholder interests.

A *performance management toolkit* with a set of common PM resources was created for program leaders and staff to help them develop realistic and impactful goals and objectives. These resources include templates for logic models (*Appendix A*) and SMART objectives (*Appendix B*).

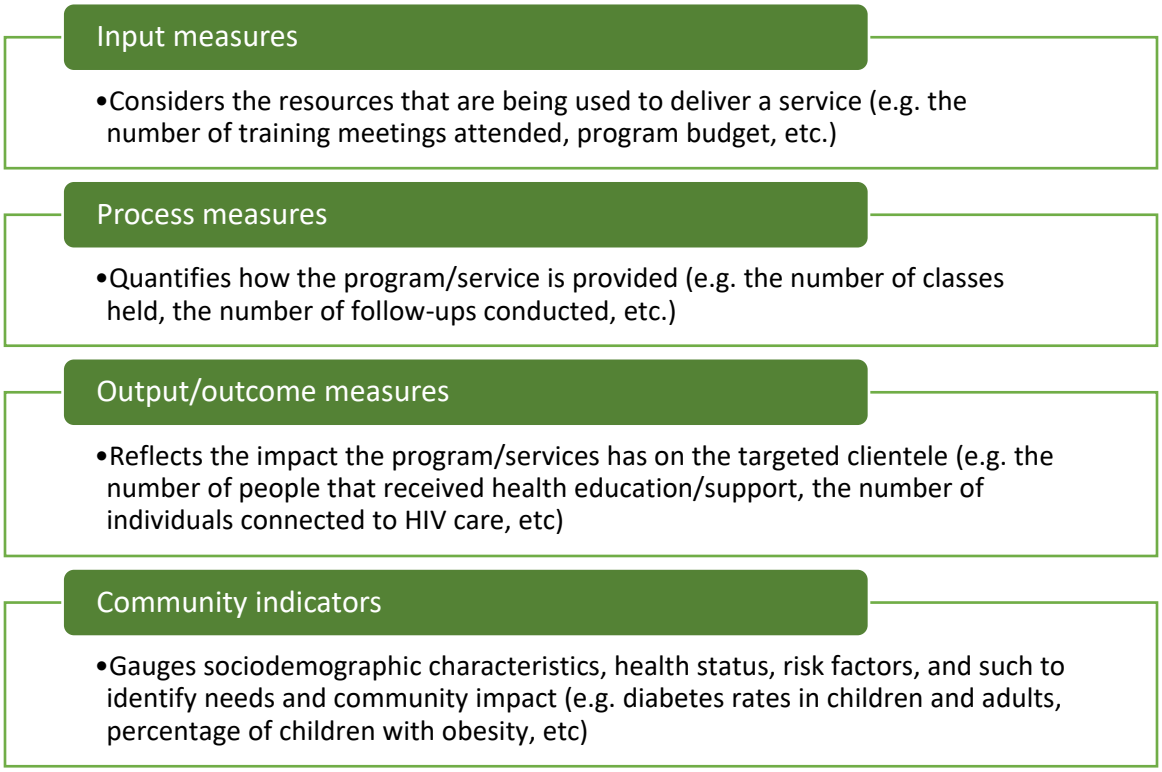
The logic model serves as a visual representation of the goals of a program and how the program intends to achieve those goals. Working through a logic model gives program leaders to the space to

- identify what resources go into a program (inputs),
- outline what services a program provides (activities),
- describe the immediate expected results of a program (outputs), and
- describe the intended impact of a program (outcomes).

By laying out and connecting all of these parts of the program, the logic model calls attention to gaps that may exist. For instance, if a program's goal is to conduct 10 virtual class sessions (activity) but it does not have the technological resources to provide the course materials and facilitate this goal (input), a gap exists and can be seen in the logic model.

Metrics, the specific data by which a program will measure its progress or success, should be directly related to the intended objectives and define meaningful data that can also be used to inform

possible program improvements. There are a variety of different metrics that may be used to measure the established objectives including:



Each program will set at least one goal and one SMART objective with a corresponding metric, which will be reviewed by the program leader and Health Strategists to ensure that the components can be monitored, are logically tied to the goal and objective, and have a strong reasoning to support.

Upon approval by the Health Strategists, the proposed goals, objectives, and metrics will be entered into VMSG where we are able to monitor, update, and track progress being made towards them. When used appropriately, this system should give program staff access to a collection of information that they can use to support their work and maintain standards required by external stakeholders.

Data Collection, Monitoring, and Reporting

Data will be collected and entered into VMSG by program leaders and Branch Directors. Depending on their respective program measures, programs will be typically updating their performance data monthly. Training on how to use VMSG will be planned and provided to all VMSG-licensed staff, including how to make updates to their goals and objectives as well as how to enter data to measure progress on activities being completed. Additional assistance and support for PM and VMSG will be provided by the Health Strategists as needed.

While PM data should be used to guide any decision-making within the program, it will be especially utilized in the annual budgeting process. Performance data will facilitate leadership in decision-making on which programs to claim as our local public health priorities and in creating annual work plans.

PM Facilitates QI

Quality improvement (QI) is an essential component of this broader performance system at BRDHD. Gaps in logic models or a lack of progress toward PM goals will emphasize opportunities for improvement. The Health Strategists, Branch Directors, program leaders, and QI Team will monitor the PM system to look for such opportunities. Logic models can serve as a tool to support QI opportunities as it connects to programs and services at a level that identifies waste. Health Strategists will encourage the use of logic models to help identify possible QI opportunities that can improve processes and outcomes.

Quality Improvement (QI)

QI is the data-oriented framework used to identify gaps and prioritize efforts for improvement. Continuous QI is the ongoing effort to increase effectiveness, efficiency, and stakeholder satisfaction by improving quality and performance at the program and/or agency level. This may be achieved through the implementation of QI projects that are targeted to bridge gaps and other indicators of quality in program processes that aim to achieve equity and improve the health of the community. A culture of continuous improvement, which we desire to have, means the process of testing and assessing will become self-regulating and implemented by staff at all levels.

Project Selection

QI projects should focus on processes within the agency that could be improved for efficiency, effectiveness, or client satisfaction. Potential QI projects may be identified through the following:

- Customer Feedback
- Staff Suggestions via *QI Project Suggestion Form*
- QI Team
- Stakeholder Feedback
- After-Action Reports
- Accreditation Standards (PHAB and PPHR)
- Performance Management Dashboard (VMSG)
- Other Agency Plans

The Health Strategists will review each project nominated using a decision tree to decide on course of action. The tree is designed to aid in prioritizing projects that:

- align with department's mission, vision, and values;
- support goals within existing agency plans;
- are customer-focused;
- are manageable in scope based on our resources and capacity;
- are data driven;
- and are timely, both in completion and relevance to operations.

QI Process and Tracking

BRDHD plans to use Plan-Do-Study-Act (PDSA) as its essential quality improvement method. All staff will be encouraged to use PDSA in QI projects. For more complex projects, BRDHD will utilize the PrISM Roadmap, an expanded PDSA, in order to better communicate our efforts to stakeholders and accreditors. The Health Strategists will also track QI projects using the PDSA template (*Appendix C*) or the PrISM Roadmap. These documents will be accessible on *BRDHD's shared drive* before, during, and after a project.

Project Evaluation

Within one month of a project's completion, the Health Strategists will conduct an evaluation in regard to the project's effectiveness and processes using the Status, Reason, Learning, Direction (SRLD) template provided by Continual Impact (*Appendix D*). The evaluation may include

- Progress toward and achievement of goals and objectives as outlined in the QI project charter;
- Effectiveness of project-specific team meetings;
- Alignment with the Strategic, Workforce Development, and PM/QI Plans;
- Satisfaction surveys;
- Lessons learned; and
- Any QI Team comments, contributions, and suggestions.

Communication

In addition to project tracking available on the *shared drive*, QI lessons learned, updates, and successes will be communicated in a variety of ways as needed and relevant to the target audience. The Health Strategists will outline the proposed projects and plans to District and Branch Directors and Boards of Health as needed.

Communication Route	Target Audience
The Barren River Rundown	All Staff, Board of Health
Board of Health Meetings and Reports	Board of Health

Exchange Meetings	Branch Leaders
Roundtable Meetings	Supervisors
Roundtable Meeting Minutes and Documents	Any Staff
Social Media	Community
Website	Community
District Meetings	All Staff
Branch Meetings	All Staff (within own branches)
QI Team Meetings	QI Team, Any Staff
QI Team Meeting Minutes and Documents	Any Staff
VMSG Dashboard	Supervisors
QI Plan	Any Staff
PHAB Annual Report	Any Staff
Community Impact Report	All Stakeholders and Staff

Engagement of All Staff

All staff have a role in creating a culture of quality at BRDHD and should incorporate QI concepts and tools into their daily work. Because of the expectation that all staff integrate QI into their work, QI knowledge, skills, and abilities (KSAs) should also be part of each employee's annual evaluations. Staff will have the opportunity to contribute to annual PM/QI Plan updates and are able to track progress on all agency plan objectives through VMSG's Public Dashboard.

Further, all staff are encouraged to identify and nominate QI projects within branch meetings and through the *QI Project Suggestion Form*. Staff especially interested in QI efforts should contact the Health Strategists to join the QI Team, whose role is described further in this plan.

The District and Branch Directors are directly responsible for supporting QI initiatives, with the department's mission and vision leading their decision-making. This includes ensuring staff are given the time and support to take part in QI efforts, contributing nominations for QI projects, assisting on execution of QI process, and any other needs of the agency in regards to QI.

All Staff Trainings and Learning Opportunities

As part of the required new hire trainings, employees will complete the Continual Impact QI training track one on *TRAIN KY* within their first six months of employment. This training, which was

developed for Kentucky health departments, will help integrate new employees into a culture of quality, ensure quality improvement conversations are a part of employee evaluations, and begin to establish a common language and standard tools for QI.

All staff are expected to learn new methods and processes in their jobs, especially those standardized processes that come out of QI initiatives. At the same time, leadership is expected to provide training for any changes in work processes or policies.

Supervisors will be asked to complete tracks one and two of the Continual Impact QI training on *TRAIN KY* to continue developing their QI-related KSAs. Supervisors stepping into the role of a VMSG account holder will also receive special training on the performance management process and dashboard.

At least one annual BRDHD quality improvement and/or performance management training will be offered to staff, led by the SQC Branch. These will typically be at a district-wide meeting or Roundtable but may also include Health Strategists speaking at individual branch meetings to work on a quality improvement project or tool specific to them.

The QI Team

BRDHD gathers volunteers or appointed staff to the QI Team with each new QI Plan or as needed. Efforts are made to get a diverse range of representation on the team, including representation from different types of staff, level of leadership, branches, locations, programs/services, etc.

The QI Team will be an active part of the QI process when necessary for the completion of a specific QI project. When called upon, the team or select members of the team are responsible for supporting the project, using the PM system to identify emerging QI needs, and recommending QI projects based on the agency's strategic and operational plans.

The QI Team will also be available on a project-specific basis to collect data needed to make initial quality improvement plans, including identifying the needs of any affected stakeholders, including community partners and clients.

Roles within the QI Team include:

- **Team Lead/Facilitator** will plan QI Team meetings, annually update the QI Plan, and oversee agency-wide QI initiatives. This role is filled by a Health Strategist.
- **IT Support** will provide the IT insight needed for many emerging QI needs.
- **Subject Matter Experts** will be active members of the QI Team and QI leaders within their branches. Their active membership includes learning new QI tools, contributing ideas and solutions, and consistently championing QI efforts.
- **Meeting Scribe** is responsible for taking minutes and uploading them to the shared drive.

Current State of Quality and PM

PM and QI are not new to BRDHD. We were especially gaining momentum in our PM and QI initiatives before the COVID-19 pandemic began. To respond to the new needs of our community during that time, formal QI projects and performance management outside of pandemic-related work were put on hold. BRDHD currently sits at a phase three on NACCHO's Roadmap to a Culture of Quality Improvement[1]. Emerging from the case management-style of the COVID-19 pandemic, we are now recommitting to our performance management system.

Although staff are familiar with the idea of PM, there are gaps in the application of these skills and the tools required to effectively and efficiently monitor performance. BRDHD's current PM dashboard is not used by staff as intended due to this limited knowledge and training on PM and VMSG.

In recent years, QI methods and tools have been informally used throughout BRDHD to create and evolve new systems, tools, protocols, policies, and methods; however, we have identified gaps in connecting these methods and tools to QI language. Small-scale quality improvement projects are ongoing, but we have identified gaps in connecting individual projects to the bigger picture and to agency strategic and organizational plans.

Findings related to PM and QI from agency-wide assessments are explained further below.

Core Competency Assessment Key Findings

On March 3, 2022 the District and Branch Directors completed a modified core competency assessment using the Core Competencies for Public Health Professionals developed by The Council on Linkages Between Academia and Public Health Practice. The District and Branch Directors scored BRDHD staff as a whole and came to a consensus on the final scores for each competency statement.

BRDHD scored lowest in two of the three domains most closely associated with PM and QI:

- Domain 1: Data Analytics and Assessment Skills
- Domain 2: Policy Development and Program Planning Skills

Rationale for the scoring decisions was collected by the assessment's facilitators and provide more context to BRDHD's current and needed knowledge, skills, and abilities (KSAs). Some common PM and QI themes in the qualitative data were:

- Staff don't always see the "bigger picture" to their daily work, like how it fits into BRDHD's mission, vision, and strategic priorities
- Staff don't know where to look for data

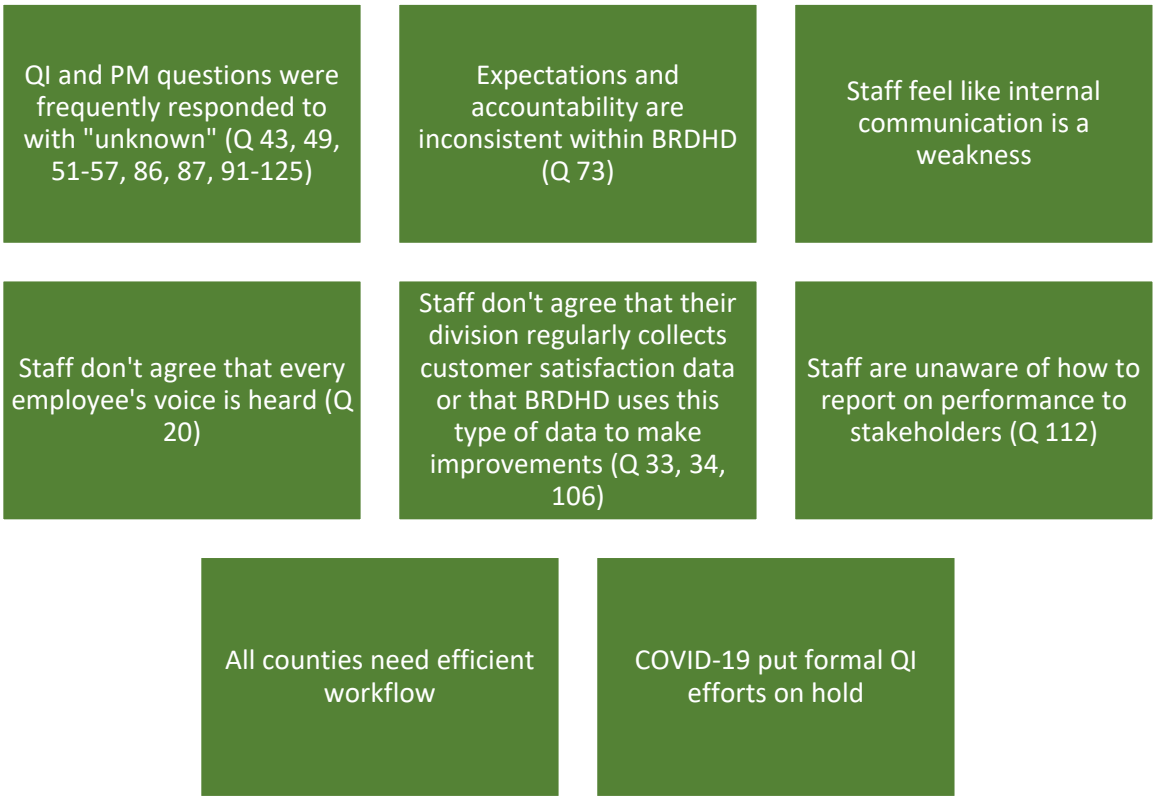
- There are many different places we have to report data to, especially for the state, but we don't always have access to that data once it's submitted
- Once program reviews or evaluations have happened, there is little follow-through
- For data collection, staff lack a clear understanding of why it's being collected and how it should be used

Workforce Culture Survey Key Findings

All BRDHD staff were invited to participate in the Workforce Culture Survey from March 25 to April 1, 2022. This survey was designed to assess organizational climate and staff preferences for training topics. BRDHD had an 85% response rate (93 out of 109 staff). The complete survey results can be found in *BRDHD's shared drive*.

One section of the Workforce Culture Survey asked staff to indicate how knowledgeable they feel about various public health programs and functions. One PM-related area in which staff indicated the least amount of knowledge was Data in Public Health.

Other important PM and QI themes from the Workforce Culture Survey and the comments from it include:



SWOT Analysis

Using the data reviewed above from various assessments, surveys, and comments, the District and Branch Directors engaged in strategic planning sessions from March to October 2022. From these sessions a strengths, weaknesses, opportunities, and threats (SWOT) analysis was developed.

Strengths

- Community Partnership Skills
- Services and Programs
- Trainings
- Responsibility
- Relationship-building
- Community
- Coalitions
- Staff
- WIC
- HANDS

Weaknesses

- Internal Communication
- Building and Safety
- Public Health Sciences Skills
- Recruitment and Retention (especially Clinic, HANDS, CD Team)
- Expectations and Accountability
- Data Analytics and Assessment Skills
- Policy Development and Program Planning Skills (especially ethics policy)
- Staff Benefits
- QI and PM
- Diversity, Inclusion, and Health Equity
- Agency Plans Monitoring

Opportunities

- New Board of Health Members
- Public Perception
- External Collaboration/Partners
- Social Media, Website, Newspapers, TV, Radio, etc.
- Information Technology and Security
- CHA Dashboard
- VMSG for PM dashboards
- REDCap for data collection and databasing

Threats

- Aging Population
- Vaccine lifespans compared to supply/demand
- Distrust of healthcare system
- State job application processing
- Misinformation (vaccines, stigmas, etc.)
- Budget and Funding
- Merit System Compensation Structure
- Pandemic and Outbreaks --> Burnout
- Climate Change and Extreme Weather

Desired Future State of Quality and PM

BRDHD leadership recognizes the need for tracking program-level data through a platform like VMSG where all stakeholders can monitor progress. This need is also emphasized by our accreditors, the Public Health Accreditation Board. Therefore, we envision a future in which all staff know how to use VMSG, both through a licensed account and through public dashboards. Staff will then be able to follow through with the expectation that they regularly update program data within VMSG. This will also help with reporting to stakeholders, as the Strategy, Quality, and Communication (SQC) Branch will be able to pull data from VMSG to create reports and infographics.

To promote effective PM, we will also implement specific tools, such as the logic model and SMART objectives worksheet, as well as provide training and help to staff as needed via Health Strategists. Programs will be able to continually evaluate their progress and address gaps quicker and with more sustainable solutions than is possible without an effective PM system.

To address gaps found through the PM system and tools, we envision all staff equipped with the KSAs to understand the gap, test and evaluate solutions, and learn from the process. In other words, we envision PM and QI interconnected in the minds of all staff, which should also help the agency develop systems-thinking skills.

As previously mentioned, BRDHD currently sits at a phase 3 in NACCHO's Roadmap to a Culture of Quality Improvement; we hope to get to phase 5, Formal Agency-Wide QI, by 2026 (*Appendix F*). To do this, all staff need a common language and toolkit for QI, and leadership will have to develop clear expectations for their staff around QI and support staff growth in QI-related KSAs.

PM/QI Objectives, Actions, and Metrics

This section lays out more specific ways we plan to achieve our desired state of quality improvement and performance management.

Strategic Priority	Objective	Actions	Measure	Timeframe
For Our Staff				
Create a culture of buy-in.	By 2024, all staff will be trained on the basic tools of PM and QI.	1. PM/QI will become part of the employee evaluation process. 2. All staff will complete training track 1 of CI's QI Training track provided by the state.	Data Source: Training Tracking Baseline: 10% Target: 100%	2023 – 2024
For Our Community				
Promote and report on our services and programs.	By 2025, the Health Strategists will be regularly reporting on QI projects and PM initiatives to all staff and the Boards of Health.	1. The Health Strategists will create a reporting template to communicate big QI project updates and PM progress to the Boards of Health and all staff. This could include graphics for the Barren River Rundown.	Data Source: Barren River Rundown, BOH Meeting Minutes Baseline: 0 BOH meeting or BRR reports Target: 1 BRR per quarter; 1 local BOH, 1 district BOH annually	2023 – 2025

Strengthen policy development and program planning skills.	By 2024, all branches will have their programs' up-to-date goals, objectives, and measures outlined in VMSG.	1. Program and service leads will continue to meet with Health Strategist to develop goals, objectives, and performance measures. 2. Standardized PM and QI tools will be available on the shared drive. 3. We will identify the best opportunities to collect customer and community feedback.	Data Source: VMSG Baseline: 10% of branches Target: 100% of branches	2023 – 2024
For Our Future				
Strengthen management and finance skills.	By 2026, all supervisors will be trained on additional QI methods and tools.	1. Supervisors will complete tracks 1 and 2 of Continual Impact's QI training. 2. Identify additional training/tools related to lean and waste.	Data Source: Training Tracker Baseline: 0% of Supervisors Target: 100% of Supervisors	2023 – 2026
	By 2026, all supervisors will be trained on BRDHD's performance management process and technologies.	1. Supervisors will receive VMSG training. 2. Identify additional training/tools related to evaluation.	Data Source: Training Tracker Baseline: 0% of Supervisors Target: 100% of Supervisors	2023 – 2026

	By 2026, supervisors will be frequently reporting on PM and QI initiatives to Roundtable.	1. Create a standard tool/template to help supervisors report on PM and QI.	Data Source: Roundtable Minutes Baseline: Irregular Target: 1 Roundtable Minute per Quarter (4 per year)	2023 – 2026

Monitoring & Evaluating the PM/QI Plan

Health Strategists, the QI Team, and District and Branch Directors will use all agency plans to identify and prioritize quality improvement efforts. The Health Strategists will oversee these efforts as well as monitor and report on them to relevant stakeholders. The VMSG Dashboard and public dashboards will be used to track and communicate QI Plan progress; the QI Plan section of the dashboard should be evaluated by the QI Team when relevant changes are necessary.

The PM/QI Plan will be managed and annually (August) updated by the SQC Branch. District and Branch Directors will review and approve any proposed annual updates to the QI Plan at a monthly Exchange meeting.

The QI Team and Health Strategists will create annual reports for the development of Community Impact Reports. These annual reports may include:

- PM/QI Plan progress
- Lessons learned
- QI and PM wins
- Evaluation of the QI Team's work in the past year
- Identified gaps or needs on the QI Team
- Identified agency-wide QI opportunities
- An assessment of the department using NACCHO's QI Self-Assessment Tool 2.0 [2]

Links to Other Agency Plans

The PM/QI Plan acts as a stepping stone to achieve our vision of a healthy community for all people to live, learn, work, and play. The goal of our performance management system and quality improvement initiatives is to get our community closer to our vision; this goal includes prioritizing health equity and addressing root causes and social determinants affecting our residents' health.

This plan reinforces and supports the 2023 Workforce Development and Strategic Plans. Shared data collection tools and strategic planning sessions allowed the District and Branch Directors to analyze the root causes of various identified gaps. Through the strategic planning process for these three intra-agency plans, six themes emerged and became the strategic priorities for the agency. Although these priorities are in the three plans, each plan emphasizes different objectives, actions, and metrics to achieve the priority goals and measure success.

PM and QI-related trainings are also incorporated into the Workforce Development Plan to help grow staff knowledge, skills, and abilities. Further, Strategic Plan, Workforce Development Plan, and CHIP objectives not on track, as monitored within the PM dashboard, will be prioritized for quality improvement efforts.

Record of Revisions

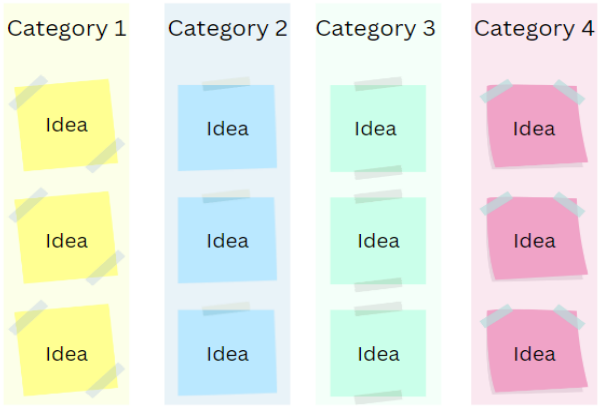
A record of changes to this plan is to be used to track any changes. The PM/QI Plan is intended to be a living document, meaning it should be reviewed and updated regularly (at minimum, annually).

Pages Revised & Description of Revisions Made	Date	Person Responsible

Toolkit and Terms

A common vocabulary and standard tools are used agency-wide when communicating about organizational performance and quality improvement. Key terms and tools are listed here alphabetically.

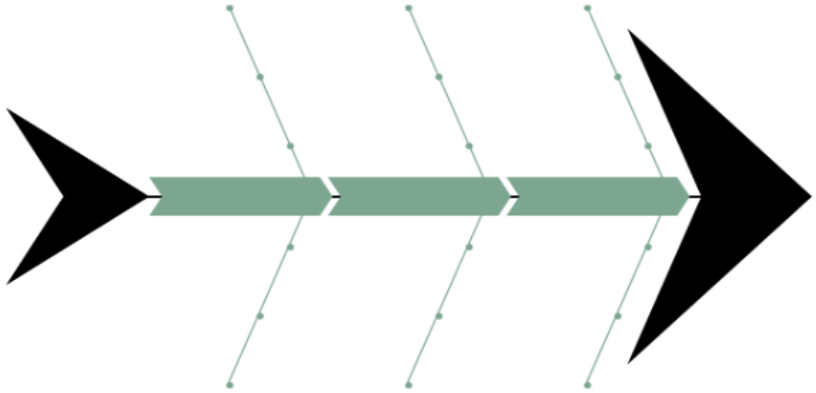
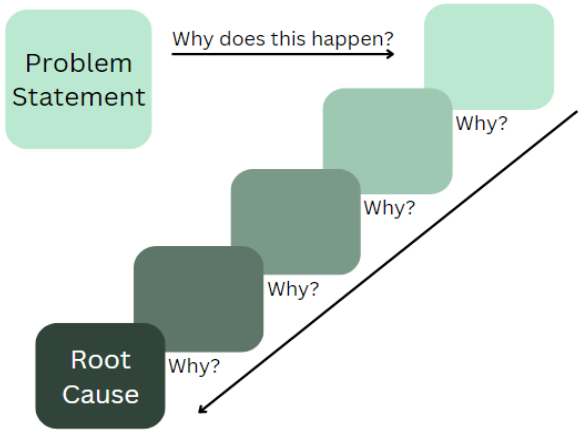
Affinity Diagram



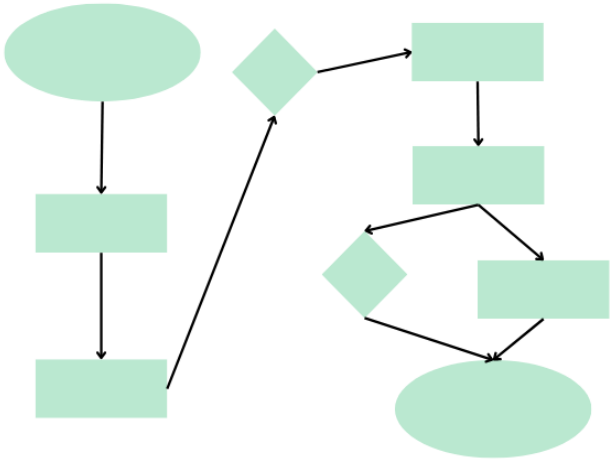
Affinity Diagrams are a tool used to group large amounts of ideas, issues, items, or observations into categories for further analysis. This tool is often used after brainstorming to organize the data, and it allows an opportunity to identify key priorities.

Brainstorm

This creative technique is designed to generate lots of ideas during a short period of time. Brainstorming is about quantity of ideas not quality.

Fishbone Diagram	
	This is a tool that can be used to visually display the multiple probable causes of an issue and the respective effect. This is especially helpful when there are many different things impacting a program or problem.
Five Whys	
	This tool is designed to explore the cause and effect relationships underlying a problem and determine the problem's root cause by repeatedly asking "why?" It may take more or less than five whys.

Flowchart

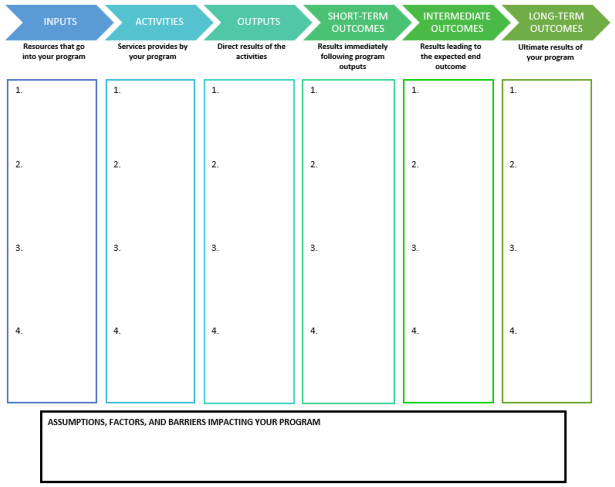


Flowcharts can depict all of the steps in a process from start to finish, with each step represented with a different shape. Arrows connect the shapes to show the sequence of steps. Flowcharts are best used to show the visible and invisible steps in a process. Creating a flowchart allows a team to understand the current state of a process.

Kaizen

Kaizen means to improve for the better. It is a continuous process improvement philosophy. A Kaizen event, which is usually completed within a week, is a problem-solving approach that requires training and facilitation to analyze and re-orient a process.

Logic Model



This tool is used to organize and connect various aspects of a program to illustrate the association between resources, activities, and intended outcomes. It can be a useful tool in identifying a program's gaps.

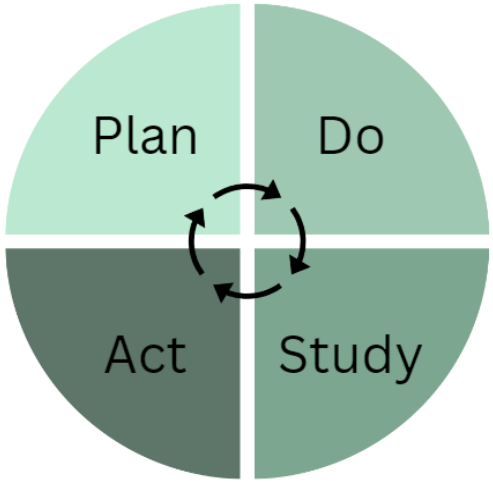
Template available on *BRDHD's shared drive* and *Appendix A*.

Nominal Group Technique

	Person 1	Person 2	Person 3	Person 4	Person 5
Idea 1	4	4	2	3	2
Idea 2	5	5	3	5	4
Idea 3	1	2	1	2	1
Idea 4	2	1	4	1	3
Idea 5	3	3	5	4	5

This tool can be used quickly to rank team member preferences about the importance of an idea/issue related to an identified problem. Each participant generates, shares, and ranks ideas individually then a collective decision is made. Best used to narrow down a large list into top priorities and to create collective solutions.

PDSA Cycle



The Plan-Do-Study-Act (PDSA) cycle is a four-step model for creating and implementing change. Best used when beginning a new improvement process or preparing to implement a change. Useful for both incremental and complete redesign change plans.

Template available on *BRDHD's shared drive* and *Appendix C*.

PrISM Roadmap


PrISM™ PROJECT TEAM PROBLEM SOLVING

Project Team:
Timeline:

SOLVE

What is the Gap?
1. Starting Point
2. Vision
3. Current State

What is the Goal for Improvement?
4. Goal or Target Condition
5. Customers & Beneficiaries
6. Benefit
7. Measures & Targets
8. Conditions

What is the Approach?
9. Team Members & Roles
10. Project Schedule
11a. Data and Information Collection

TRY & LEARN

Try Solutions; what did you learn?
14. Construct & Execute tests
15. Document Results
16. Analyze Results & Extract Learning

Understanding the Problems:
11b. Current and Future State Process Maps
12. Cause and Effect Analysis

What are your Conclusions?
13. Improvement Hypotheses & Problem Solving Summary

INSTALL

How will you make the new way happen?
17. Plan Rollout & Execute
18. Measures of Success

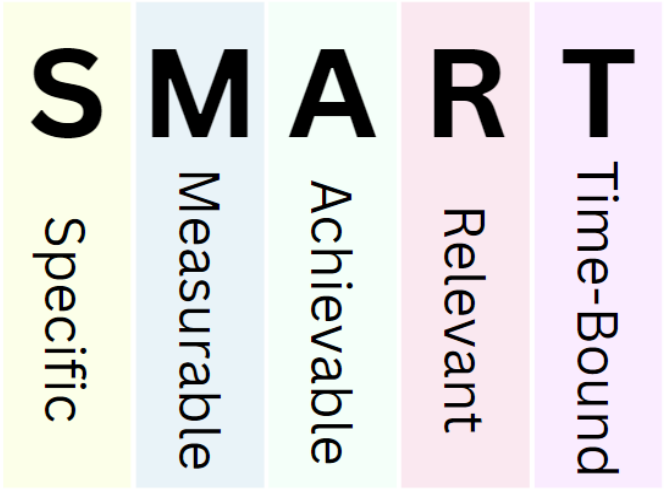
Note: Use above hyperlinks to navigate to the project steps.

Summary – improvement hypotheses and results

The PrISM Roadmap is a detailed PDSA cycle used for complex QI projects. This expanded PDSA tool also captures details that are important to report to stakeholders and accreditors.

Template available on *BRDHD's shared drive*.

REDCap	
	**REDCap** is a browser-based survey and database software. Programs throughout the health department use REDCap to report on their activities, gather feedback, and complete standardized forms.

SMART Objective	
	Objectives set by programs and within projects should follow the SMART format. A complete objective answers what will change, by how much, by when, and by whom. Template available on *BRDHD's shared drive* and *Appendix B*.

SWOT Analysis

A Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis identifies external and internal, positive and negative factors that influence the department and organizes these factors as helpful or harmful. SWOT Analysis is used in strategic planning and to develop After Action Reports. It can also be used to evaluate a program.

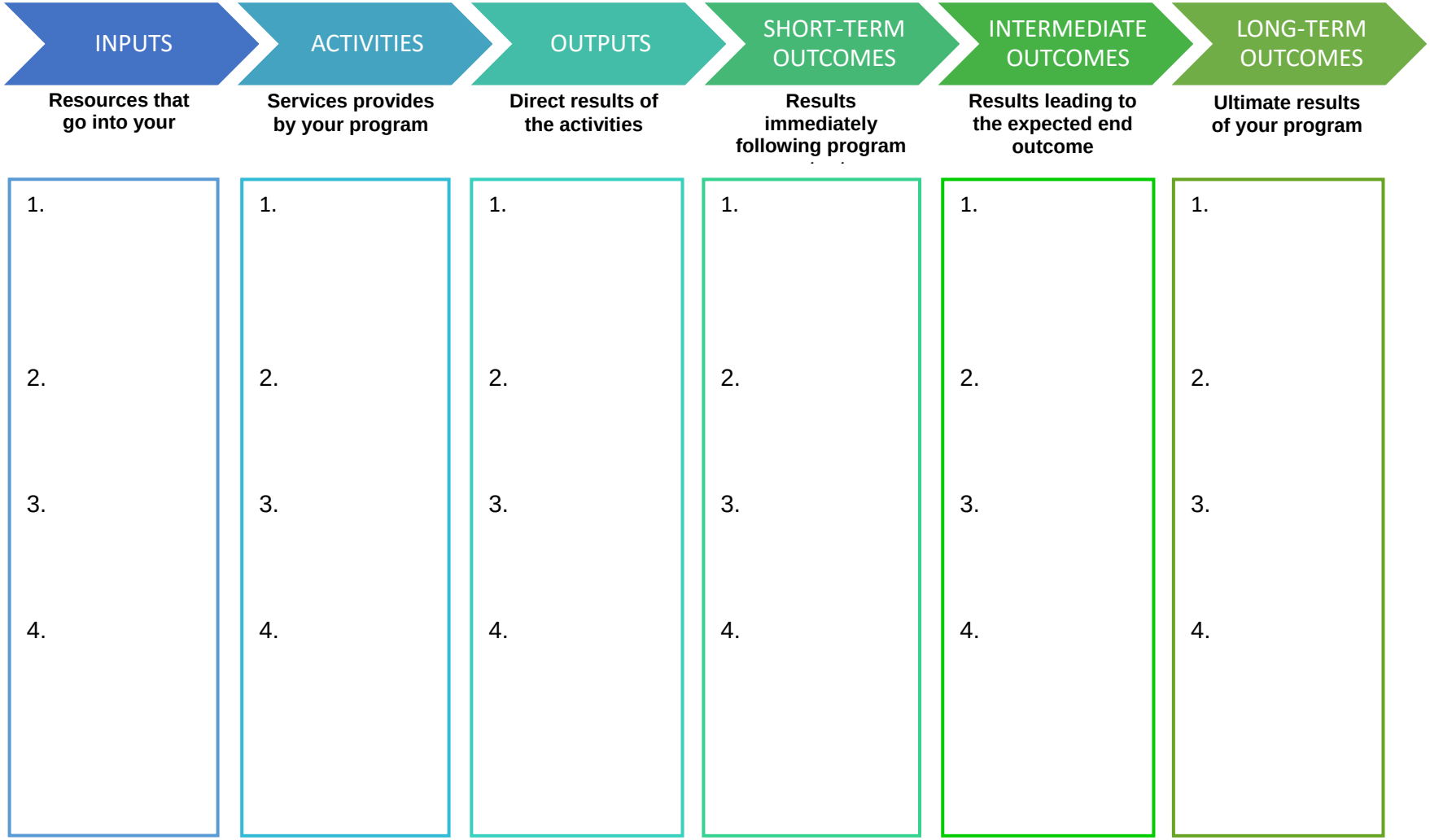
VMSG

VMSG DASHBOARD
Public Health Performance Management System

VMSG is the browser-based Public Health Performance Management System. VMSG allows us to input our goals, objectives, and metrics for each program as well as track our progress in agency and organizational plans. VMSG will also be used to keep track of accreditation documentation.

VMSG User Guide available on *BRDHD's shared drive*.

Appendix A: Logic Model Template



ASSUMPTIONS, FACTORS, AND BARRIERS IMPACTING YOUR PROGRAM

Appendix B: SMART Objectives Worksheet from NACCHO

Instructions: *Complete the following worksheet to write broad goals that are linked to your program purpose and overall agency strategy. For each goal, write SMART objectives which are sub-steps or milestones toward achieving goals and strategic priorities.*

Program Purpose/Mission Statement: **Agency Level Strategic Priority:**			
Goal: What is the broad, long- term outcome we want to achieve?	Goal 1:		
SMART Objectives	**Objective 1.1**	**Objective 1.2**	**Objective 1.3**
Specific: Who? (target population and persons doing the activity) and What? (action/activity)			
Measurable: How will we quantify success?			
Achievable: Is this feasible given current resources and constraints?			
Relevant: Will this help make significant progress toward the goal/strategic priority?			
Time-bound: By when will this objective be met?			
Objective Statement: Use the information brainstormed above to draft SMART Objective statements.	Objective 1.1:	Objective 1.2:	Objective 1.3:

Appendix C: PDSA Tracking Sheet

QI Project Tracking Sheet

Project Title:

Project Dates: __/__/___ through __/__/___

	Steps of PDSA Approach	Key Elements	Notes
PLAN	**Step 1** Getting Started	¨ Identify area, problem, or opportunity for improvement ¨ Estimate and commit needed resources ¨ Obtain approval (if needed) to conduct QI	
	Step 2 Assemble the Team	¨ Identify and assemble team members (including customers and/or stakeholders) ¨ Discuss problem or opportunity for improvement ¨ Identify team member roles & responsibilities ¨ Establish initial timeline for improvement activity and schedule regular team meetings ¨ Develop Aim Statement - *What are we trying to accomplish?* - *How will we know that a change is an improvement?* - *What change can we make that will result in improvement?*	
	Step 3 Examine the Current Approach	¨ Examine the current approach or process flow ¨ Obtain existing baseline data, or create and execute data collection plan to understand the current approach ¨ Obtain input from customers and/or stakeholders ¨ Analyze and display baseline data ¨ Determine root cause(s) of problem ¨ Revise Aim Statement based on baseline data as needed	
	Step 4 Identify Potential Solutions	¨ Identify all potential solutions to the problem based on the root cause(s) ¨ Review model or best practices to identify potential improvements ¨ Pick the best solution (the one most likely to accomplish your Aim Statement)	
	Step 5 Develop an Improvement Theory	¨ Develop a theory for improvement - *What is your prediction?* - *Use an "If . . . . Then" approach* ¨ Develop a strategy to test the theory - *What will be tested? How? When?* - *Who needs to know about the test?*	

DO	**Step 6** Test the Theory	¨ Carry out the test on a small scale ¨ Collect, chart, and display data to determine effectiveness of the test ¨ Document problems, unexpected observations, and unintended side effects	
STUDY	**Step 7** Study the Results	¨ Determine if your test was successful: - *Compare results against baseline data and the measures of success stated in the Aim Statement* - *Did the results match the theory/prediction?* - *Did you have unintended side effects?* - *Is there an improvement?* - *Do you need to test the improvement under other conditions?* ¨ Describe and report what you learned	
ACT	**Step 8** Standardize the Improvement or Develop a New Theory	¨ If your improvement was successful on a small scale test it on a wider scale - *Continue testing until an acceptable level of improvement is achieved* - *Make plans to standardize the improvement* ¨ If your change was not an improvement, develop a new theory and test it; often several cycles are needed to produce the desired improvement	
	Step 9 Establish Future Plans	¨ Celebrate your success ¨ Communicate your accomplishments to internal and external customers ¨ Take steps to preserve your gains and sustain your accomplishments ¨ Make long term plans for additional improvements ¨ Conduct iterative PDSA cycles, when needed	

Appendix D: SRLD Template from Continual Impact

Task	**Date of Task**	**Date of SRLD**
Organization	**Facilitator**	**Participants**

STATUS			
Measures *What are the measures of success?*	**Targets** *What was supposed to happen?*	**Results** *What actually happened?*	**Achievement** *At, Above, or Below Expectation?*
1.		1.	1.

+ What was positive that helped you achieve the results? (Accelerators)		
REASONS *(What led to results and achievement?)*	**LEARNINGS** *(What advice and benefit?)*	**DIRECTIONS** *(What actions, Who will do them, When will they be done?)*
Machines (Systems and Equipment)	1.	1.
Methods	1.	1.
Materials	1.	1.
Measurement (and Information)	1.	1.
Mother Nature (Environment)	1.	1.
People	1.	1.

- What prevented more progress? (Barriers)		
REASONS *(What led to results and achievement?)*	**LEARNINGS** *(What advice and benefit?)*	**DIRECTIONS** *(What actions, Who will do them, When will they be done?)*
Machines (Systems and Equipment)	1.	1.
Methods	1.	1.
Materials	1.	1.
Measurement (and Information)	1.	1.
Mother Nature (Environment)	1.	1.
People	1.	1.

Appendix E: Culture of QI Phase 3 vs. Phase 5

Select Characteristics of *NACCHO's Roadmap to a Culture of Quality Improvement*
Phases 3 Compared to Phase 5

Phase 3.0	Phase 5.0
Employee Empowerment	
• Employee QI KSAs are assessed and gaps are incorporated into workforce development and QI plans. • Employees remain resistant to QI and may view it as a passing phase and added responsibility. QI is avoided due to competing priorities. • Employees are engaged with developing and understanding performance measures related to their work and how they connect with the agency mission.	• An inventory of internal and external QI trainings and resources (basic and advanced) are available to all staff. • Most employees fully embrace QI and view it as a valuable tool to improve their work. • Employees use performance measures and data to identify and implement improvements to their own work. • Employees understand how they contribute to the agency's overall mission, vision, and strategy.
Teamwork and Collaboration	
• Groups of employees may meet on an informal or ad-hoc basis for the purposes of problem solving or innovation. • One or two teams may have convened to implement formal or informal QI projects. • Some employees may participate in formal external learning communities to improve work. • Peer sharing and learning is occurring on an informal basis but no formal methods for sharing and collaboration exist within the agency.	• Informal groups of employees from various parts of the agency are commonly formed for problem solving and innovation. • Formal QI project teams are formed throughout the agency. • Several formal methods for peer sharing and learning exist within the agency (e.g. learning community, storyboards, lunch & lunch). • Best practices and QI successes are applied and translated from one part of the agency to another.
Leadership Commitment	
• Executive leaders understand QI and its value to the agency's work. Middle managers/supervisors may still	• Executive leaders and middle managers throughout the agency hold staff accountable to engaging in QI.

demonstrate resistance. • Executive leaders communicate to employees about the agency's QI goals on an inconsistent basis. • Executive leaders have dedicated some resources (training, FTE, etc.) but do not actively seek out additional resources or funding for quality initiatives.	• All leaders are knowledgeable about QI and quality principles, and are able to support staff around QI initiatives. • Executive leaders dedicate sufficient staff time and resources to reaching agency QI goals. • Leaders address staff resistance or other barriers to QI on an ongoing basis.
Customer Focus	
• The development of performance standards and measures related to customer satisfaction is informally occurring in some parts of the agency.	• Customer satisfaction performance standards and measures are standard throughout the agency, as appropriate. • Customer satisfaction data is actively used to improve performance.
QI Infrastructure	
• One or two staff (e.g. QI Coordinator) are responsible for leading QI and PM related activities. • Some performance data exists but is not consistently used for decision making, performance monitoring, and QI project identification.	• All programs, departments, or divisions have clearly defined plans for performance data collection, analysis, and reporting against pre-defined objectives and standards. • A centralized information system for storing and accessing performance data allows for user-friendly performance monitoring and reporting. • Agency and department level decisions are always data driven. Performance data is used to identify agency QI projects.
Continuous Process Improvement	
• A small number of processes are being improved through discrete QI projects using a formal QI model (e.g. PDCA), however, projects do not always fully align with steps in the selected model (e.g. lack of baseline data, insufficient Root Cause Analysis).	• Formal QI projects are being implemented to improve processes in all departments and divisions of the agency. • Formal QI projects result in documented process improvements and monitored for sustainability. Improved processes are standardized and adopted agency-wide. • Basic and advanced QI tools and

● Performance data is inconsistently used as a part of improvement projects. ● QI projects may not be resulting in significant improvements or take an excessive amount of time to complete. ● Process improvements are not documented or monitored for sustained success.	techniques are commonly used for informal problem solving and formal QI projects. ● Many agency-wide processes are clearly defined, efficient, and standardized throughout agency.

Source: *https://virtualcommunities.naccho.org/qi-roadmap/phases*