Cumberland County Department of Public Health

QUALITY IMPROVEMENT PLAN

2021-2022

Contents

Introduction

The Cumberland County Department of Public Health (CCDPH) uses a Quality Improvement Team approach to Quality Improvement (QI). The purpose of the QI process is to ensure the mission and core values of Cumberland County and CCDPH are being met.

The goal is to have accountability for the work CCDPH does to accreditation boards, government bodies, and the residents in Cumberland County. The QI process in CCDPH will create alignment between the Community Health Improvement Plan (CHIP), CCDPH's Strategic Action Plan, programmatic goals, and individual employee performance as well as the Board of Health's internal and external priorities created every 3-5 years.

It is important to create a plan that provides a framework for the Health Department's work to foster a culture of performance and quality improvement. A strong commitment from all staff is necessary to create a performance and quality improvement culture. This involves measuring and monitoring selected outputs and outcomes to ensure that sustainable improvements are made. All initiatives are planned and implemented in a collaborative manner through the QI team and department representatives.

The Department of Health will provide citizens with a fully functioning, high achieving health department that meets their needs.

Mission, Vision & Core Values

OUR MISSION

To provide high quality service in a professional, efficient, and fiscally responsible manner while improving the health of Cumberland County.

OUR VISION

To have healthy people living in a healthy community.

CORE VALUES

CCDPH follows the County core values of **PRIDE**

Professionalism

Respect

Integrity with Accountability

Diversity

Excellent Customer Service

Recognizing that all people are different, we treat everyone with dignity and serve our diverse population with professionalism, respect, integrity, diversity and excellent customer service (PRIDE).

CUMBERLAND COUNTY
NORTH CAROLINA
Public Health

Definitions

Plan-Do-Study-Act (PDSA)
The PDSA cycle is shorthand for testing a change by developing a plan to test the change (**Plan**), carrying out the test (**Do**), observing and learning from the consequences (**Study**), and determining what modifications should be made to the test (**Act**). [1]

Quality Assurance (QA)
Prevention of quality problems through planned and systematic activities including documentation.

Quality Improvement (QI)
The utilization of deliberate and defined improvement processes 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. [2]

Strategic Plan
A plan that identifies projects that will have a positive impact upon the organization's internal operations. Directed at improving the overall value provided by the organization to all of its stakeholders.

Community Health Assessment (CHA)
The CHA is a fundamental tool of public health practice. Its aim is to describe the health of the community by presenting information on health status, community health needs, resources, and epidemiologic and other studies or current local health problems. [3]

Community Health Improvement Plan (CHIP)
The CHIP uses information from the Community Health Assessment. Strategies are identified and action teams are developed, comprised of public health leaders and community partners to address the problem identified in the CHA. [4]

Assessment
A process of collecting and analyzing data to determine the current, historical, or projected status of an organization. Assessments are performed when there is a major change to a process to assure that the specific change or new requirement has been successfully implemented.

SWOT Analysis
Identifies both internal and external factors that may impact an organization. **Strengths** are internal positive attributes of the organization and **weakness** are internal attributes that may hinder the success of an organization. **Opportunities** are external factors that may facilitate the activities of the organization, while **threats** are external factors that may prevent the organization from meeting its goals. [5]

Fishbone Diagram
Is a cause-and-effect discovery tool that helps figure out the reason(s) for defects, variations or failures within a process. In other words, it helps break down, in successive layers, root causes that potentially contribute to an effect. [6]

Alignment with Strategic Planning and North Carolina Local Health Department Accreditation

The Cumberland County Board of Health and the CCDPH staff undergo a yearlong strategic planning process. A summary of the strategic planning process is outlined in this section. In February each year, the Board of Health gathers for a retreat to set strategic priorities for the CCDPH. Board of Health members are provided, prior to and during the retreat, an overview of relevant national, state, and local data including Healthy North Carolina 2030, Robert Wood Johnson County Health Rankings, Cumberland County Needs Assessment and the annual State of the County Health (SOTCH) Report.

After a discussion of the data, Board members participate in a SWOT (Strengths, Weakness, Opportunities, and Threats) analysis. Board members use a nominal group process to brainstorm priorities individually and then in small groups. Each group has the opportunity to report to the full board their list of identified priorities. The full list of priorities is refined and reflected upon. Finally, Board members vote and develop a narrowed list of priorities. These priorities are then reported out to the Board of County Commissioners, to Cumberland County staff, and to the public.

CCDPH maintains a **Strategic Planning Team** to develop the priorities into timebound and specific goals and objectives. All CCDPH staff are eligible to be members of the Strategic Planning Team and there is an intentional effort to recruit staff members from all levels of the agency and from each department or program in the agency. The established Strategic Planning Team convenes monthly between June and November to develop specific goals and objectives for each internal and external priority developed by the Board of Health. Updates are provided to CCDPH in the department's weekly newsletter and during all staff meetings. Staff has the opportunity to provide feedback on developed goals and objectives via the department's anonymous Digital Solution Box.

During the November public Board of Health meeting during the strategic planning development year, staff present the developed goals and objectives to them for review and feedback. The Board of Health provides the opportunity during the monthly meeting for the public to provide input on the developed strategic plan. To learn more, visit the current and former strategic plans found on the **website**.

Health department programs will utilize the Strategic Action Plan to identify opportunities for implementation of quality improvement projects. The CCDPH Strategic Action Plan outlines three internally focused priorities. The second priority is to improve the quality and efficiency of health department services.

The intent of this plan is to meet North Carolina's Local Health Department Accreditation Requirements. Local health departments should "evaluate all services it provides for effectiveness in achieving desired outcomes" and implement a "quality… improvement process to assess the effectiveness of services and improve health outcomes."

Quality Improvement Team

CCDPH's quality improvement efforts are championed by a **Quality Improvement Team**. The aim of the QI team is to be representative of the department and include staff from different levels of the department. The QI team is comprised of representatives from the Health Department's Senior Leadership Team, Management Team, as well as frontline staff. The QI Team is chaired by the Deputy Health Director with administrative support from the Deputy's Administrative Assistant I. There are no member term limits, with no more than 20% of the team rotating off each year. Members participate with supervisory approval. This provides members with an opportunity to become experts in QI and allow continuity in the agency. Each year, opportunity will be given to all staff to join the QI team, while striving to have at least 1 representative from each department.

The role of the QI Team is to:

- Learn QI methods and tools and model these tools for others at agency
- Review, evaluate, and approve the agency QI plan annually
- Encourage and create a culture of quality improvement
- Champion QI activities, tools and techniques
- Review and approve QI projects
- Provide technical assistance to departments and programs as they complete their QI projects

The QI Team will convene monthly to carry about the responsibilities of the QI team. Minutes of QI Team meetings will be shared with all staff on the departments shared drive.

All CCDPH staff will participate in QI training and implement concepts into their daily work. Staff will participate their program or department's QI project as needed and requested. Some staff may participate in QI projects in multiple departments or programs. Any staff member can identify or submit QI projects to their supervisor for consideration to the QI Team.

Quality Improvement Training

Training the workforce on quality improvement is essential to create a culture of quality improvement within the agency. A copy of this QI plan will be available on the agency's shared drive.

The purpose of QI training is to review the agency's QI Plan, the PDSA cycle, and the use of QI tools including root cause analysis strategies such as fishbone diagrams and the 5 W's.

During new employment orientation, the Deputy Health Director will provide an overview of the agency's commitment to quality improvement. The Deputy provides a brief overview the agency's QI plan and opportunity to join the QI team. The direct supervisor will provide an overview of the QI project being implemented in the new employee's program or department.

Annually, all employees participate in QI training during an all staff meeting. Each staff is also given time during meeting to convene staff in their departments to develop their annual QI projects.

Training resources and tools include:

- Public Health Foundation Performance Management Toolkit
  http://www.phf.org/focusareas/performancemanagement/toolkit/Pages/Performance_Management_Toolkit.aspx
- Agency for Healthcare Research and Quality: Primary Care Practice Facilitation Curriculum
  https://pcmh.ahrq.gov/sites/default/files/attachments/pcpf-module-11-root-cause-analysis.pdf
- Institute for Healthcare Improvement
  http://www.ihi.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx

Identification and Selection of QI Projects

CCDPH engages in a yearly quality improvement process. The QI team is comprised with representation from each of the different departments.

Department Assignments
Human Resources
Maintenance/Housekeeping AOIII Direct Reports (Tobacco, Triple P, Opioid, Healthiest Cities and Counties Challenge)
Sexual Transmitted Infections (STI) /Epidemiology Clinic Women, Infants, and Children (WIC)
Health Education Women's Health Clinic
Administration/Finance School Health
Immunization Clinic/Child Health Clinic
Environmental Health Medical Records
Lab CMARC/CMHRP

The QI Team works with CCDPH departments to create a yearly project which directly ties to the goals and objectives outlined in our Strategic Action Plan, Contract Agreement Addendums with the North Carolina Department of Health and Human Services, the CHA, or other grant contracts. The QI Team hosts an All Staff QI training once a year to review the PDSA model and conduct a root cause analysis using the Five Whys and fishbone diagram techniques (**Appendix A**) with staff to identify areas of improvement. Each department or program uses the results of the analysis to identify and select a final project. Each program or department provides feedback by completing a detailed project description (**Appendix B**) that is reviewed with their QI Team representative. This project description provides an overview of their project, timeline for completion, evaluation plan, identified team lead, and desired project accomplishments for the department.

The QI Team reviews and approves project descriptions to assure projects are feasible, align with the CCDPH Strategic Plan and this QI plan, and identify opportunities for collaboration across health department programs.

Timeline For Initial QI Implementation:

Activity	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Feb 21	Mar 21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21
Final Report on FY 19-20 Board of Health Goals																
Strategic Planning Meetings	X	X	X	X	X	X	X		X		X		X		X	
QI Team Meetings	X	X	X	X	X	X		X		X			X	X	X	X
Staff training on PDSA model				X												
QI Team meets with each assigned department	X															
Staff Selection and Submission of Projects (first draft)		X														
QI Team Reviews Projects, provide feedback			X													
Staff Selection and Submission of Projects (final draft)				X												
Begin Projects						X										
Board of Health Meetings																
Present Draft QI plan				X												
Present Final QI plan						X										
All Staff Meetings/Communication																
Updates during weekly update/available for feedback (weekly update spotlight on projects?)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Written QI plan drafted		X														
Final strategic plan published						X										

Implementation and Monitoring of QI Projects

CCDPH staff will use the Plan-Do-Study-Act (PDSA) model to implement QI project. Plan-Do-Study-Act is an iterative, four-stage problem-solving model used for improving a process or carrying out change.

PLAN

The program or department will identify the problem or opportunity to improve and plan a change or test to improve. This step is often accomplished during an All- Staff meeting as described above.

DO

The program or department will test out their solutions, often on a small scale, and record data as they implement the change. This data may include pre and post records or questionnaires, photo records, project narratives, etc.

STUDY

The program or department will examine and review the results of their solution. They will study the data to determine if the solution worked and what goals were achieved.

ACT

The program or department will make a decision based on the results incorporating an identified solution into a workforce, policy, procedure, etc. During this phase, the program may also identify future needs for quality improvement including testing different solutions.

Each program or department should report back their progress to their QI Team representative. The QI Team will monitor the implementation of each departments or programs project during QI meetings. The QI Team can provide ongoing technical assistance to each area as needed. At the conclusion of the project, each program or department, should complete a project storyboard or similar tool to report the findings and lessons learned.

Communication Plan

To foster a culture of quality of improvement communication about QI efforts to CCDPH staff, the Cumberland County Board of Health, key stakeholders, and the general public is important.

CCDPH Staff

- QI updates are provided in the employee newsletter at least quarterly.
- QI updates are provided during all staff meetings as needed. This includes opportunities for programs and departments to report out completed projects our status of ongoing projects.
- QI meeting agendas minutes, and project descriptions are maintained on the shared drive for review by all staff members at any time.

Board of Health

- The Director or Deputy Director will provide updates on the strategic plan to the Board of Health on a quarterly basis. During this time updates on QI projects that are also linked to Strategic Plan will also be provided.

General Public/Community Partners

- QI efforts can be highlighted on the CCDPH website or social media along with updates on our Strategic Plan

Appendix A: Strategic Planning Team Documents and Worksheets

Sample Internal Tracking Spreadsheet

Priority 3	Improve health literacy through expanded communication platforms and school outreach efforts
Goal 1	Improve health literacy through expanded communication platforms
Objective 1	By July 2022, 100% of school health nurses will have access to the Language Line via mobile devices to use in the schools
Strategy 1	Assess current funding and grant opportunities to supply the mobile devices.
Strategy 2	Train school health nurses on using the Language Line
Objective 2	By June 2021, CCDPH will provide chronic disease information on at least two platforms for community members to access
Strategy 1	Utilize EHR for patients to contact with questions about their medications, etc., and send out a easy to understand breakdown document for the patient to use
Strategy 2	Create a FAQ section on the websitefor chronic condition questions (hypertension, diabetes, substance misuse, etc.) most prevalent in Cumberland County
Objective 3	By December 2021, at least 50% of printed materials will be at no higher than an 8th grade reading level and in both English and Spanish
Strategy 1	Establish materials and handouts for clinics to urilize when discussing conditions with patients in both English and Spanish
Goal 2	Improve health literacy through outreach efforts
Objective 1	By June 2022, inlcude at least one health literacy question on the Community Health Assessment
Strategy 1	Fireside Chats quarterly that will address health concerns, strategies for improvement and available resources
Strategy 2	Implement evidence-based health literacy interventions https://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/strategies/health-literacy-interventions
Strategy 3	Promote health literacy videos on social media/play in waiting rooms (Questions to Ask Your Doctor) https://www.ahrq.gov/questions/index.html
Strategy 4	Distribute health literacy materials to provider offices
Strategy 5	Distribute health literacy materials for churches, community agencies and nursing homes

Person Responsible Worksheet

Priority # Internal or External	Goal	Objective #	Who's Responsible	Resources Needed

Sample Internal Priority Spreadsheet

Priority: Increase staff recruitment and retention, assess employee satisfaction and improve morale			
Goal: Increase employee satisfaction			
Objective:			
Internal/External Partners Needed		Resources	Group Responsible
Internal	External		

Sample External Priority Spreadsheet

Priority: Increase partnerships and collaboration with groups from various sectors, including academic, military, healthcare and faith-based organizations			
Goal:			
Objective:			
Internal/External Partners Needed		Resources	Group Responsible
Internal	External		

Appendix B: Q1 Team Project Description

Project Title:	Submitted By:
Date Submitted:	Department Name:
Objective:	Estimated End Date of Project (2021):
Briefly identify or describe the program, project or process that should be addressed (focus in on the problem):	
Project Identification: a. How did you determine that this was an issue for your department? b. What resources and support will be needed to complete the project?	
What are we trying to accomplish? (A brief goal statement)	
How will we know that a change is an improvement? (These must be SMART objectives: Specific, Measurable, Achievable, Realistic, and Time bound) Long term: Medium term: Short term:	
What changes do you want to make that will result in an improvement? (Initial hypotheses and description of data needed to focus the project and the development of an intervention)	

How will you evaluate your project over the next 6-9 months?	
Who is your QI Technical Assistance?	Who from your department will help lead this QI project?

FOR OFFICIAL USE

☐ Reviewed by QI Team Date Reviewed:

Comments from QI Team:

☐ Approved by QI Team Date Approved:

References

1 http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx
Institute for Healthcare Improvement

Plan-Do-Study-Act (PDSA) is an iterative, four-stage problem solving model used for gaining learning and knowledge for the continual improvement of a product, service, or process.

2 Riley, W., Moran, J., Corso, L., Beitsch, L., Bialek, R., and Cofsky, A. Defining Quality Improvement in Public Health. J Public Health Management Practice 2010; 16(1)5-7.

3 https://www.health.ny.gov/statistics/chac/docs/chaguide.pdf

4 https://www.cdc.gov/publichealthgateway/cha/plan.html

5 https://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/swot-analysis/main

6 Introduction to Quality Control, Kaoru Ishikawa

Department of Public Health