Quality Improvement Project: Quality Assurance Electronic Audit Tool

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BACKGROUND

PDCA/PDSA Cycle

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. During the "plan" phase, the goal is to recognize an opportunity and plan a change. During the "do" phase, the attention is on testing the change that has been planned. During the "check" or "study" step, the goal is to review and analyze the results to identify what has been learned. The last step, "act," focuses on taking action based on the study results. Both positive and negative results are learning how to move forward by either testing a different approach, or implementing the change on a wider scale. Two rounds of the PDCA/PDSA cycle were needed for this project.

PLAN

Identify an Opportunity and Plan for Improvement

Opportunity/AIM Statement

To be able to quantify and efficiently track NCHD audit trends/records over time.

Current Process Map

1. Each program creates audit tool based on state/other requirements
   - Audit tools are shared with County Nurse Managers
2. QA Team goes to county to conduct audit
   - (If 1 auditor can't make it, they must make up their part within 2 weeks)
3. Each auditor reviews their own program
4. Auditors fill out their program's paper-based audit tool(s)
5. When audit is complete, each auditor summarizes their findings during the exit interview with Nurse/Office manager(s)
6. Complete paper-based audit tools are given to QA Coordinator to summarize and record.
7. QA Coordinator creates audit summary to send to County Nurse/Office manager(s)
8. Nurse Manager creates corrective action plan and sends back to QA team within 2 weeks of receiving audit summary.

Baseline Data

Previously, there was no baseline data because there was no way to quantify past audit results. The purpose of developing this tool was to make it possible to analyze past audit results, quantify a score, and compare to other counties over time.

Customers/Stakeholders	Needs Addressed
Nurse Managers	Assisting them in a realistic internal audit to prepare for potential external audits
Audit Team members	To make audits more helpful and efficient
Patients	See that their suggested improvements are acknowledged

Identify All Possible Causes via Root Cause Analysis

Improve audit process by:

- Providing an overall score/grade for the audit
- Providing individual score/grade for each program being audited
- Converting previous years' audits into this tool to be able to compare over time.

Success Measures

Provide an overall grade/score that realistically reflects how the county performed in the audit.

Available Resources

QI Coordinator, QI Tools, other district's tools/processes

Develop An Improvement Theory

IF we can quantify the audit summary, **THEN** we can track audits better.

IF we can use electronic tools, **THEN** the QA visit may be more efficient.

Action Plan

During the June 27, 2014 Houston County Health Department audit, the electronic tool was first tested. It was retested for the second round of PDCA/PDSA during the January 16, 2015 at the Hancock County Health Department. This second test included a few changes to address issues that arose during the first test.

DO

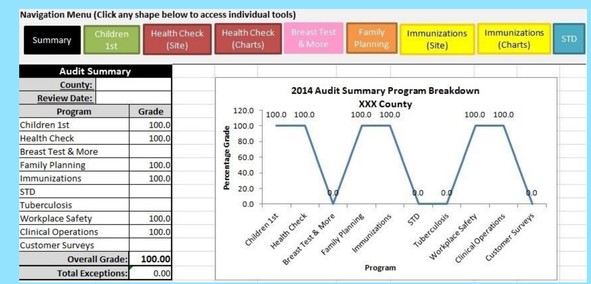
Test the Theory for Improvement

Implement the Improvement

The electronic audit tool was first tested during the June 27, 2014 audit at Houston County Health Department.

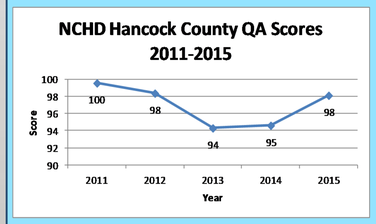
Unexpected observations included that since the tool was on an excel file, when we tried to print out the results, the spreadsheet printed on 6 different pages. Thus, we are in need of developing an audit summary template for the exit interview.

The second round of testing was done January 16, 2015 at Hancock County Health Department. We created handouts that only state the number of errors to give to the county staff, pre-filled out the e-tool to make the process more efficient, password protected the e-tool to ensure patient confidentiality, and added 2013 and 2014 audit results so that 2015 results could be compared.



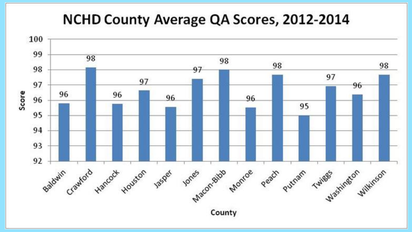
Collect and Document the Data

During the January 16, 2015 audit, the data collected was able to be compared to the previous four years.



The graph to the left shows a summary of Hancock County's average overall audit score from 2011-2015.

The graph to the right shows a summary of each NCHD County's average score from 2012-2014.



CHECK/STUDY

Use Data to Study Results of the Test

Analyze the Effect of the Intervention

The quantitative score helped show both the QA team and the county health dept. staff the areas that need improvement. The nurse managers seemed to really like the new grading/scoring system. The QA team members became more comfortable with the electronic tools the more they used them. There is a learning curve, but team members are reacting positively to the change.

ACT

Establish Future Plans

QI Project Status: QI Project Status: ADAPT (Round 1)/ADOPT (Round 2)

This project worked overall, but a few things needed to be edited/added to make things work more effectively. After testing again in January 2015, the project worked very well. By editing/correcting some of the initial problems, we have created an even better process.

Communication Plan

Will display this storyboard at the NCHD district office and website.
Will also present this QI project during the following conferences:

- -National Network of Public Health Institutes (NNPHI) QI Open Forum in San Antonio, Texas, March 18-20, 2015
- -Georgia Public Health Association 2015 Conference, Atlanta, Georgia, April 13-14, 2015.

References

Georgia Department of Public Health, North Central Health District. (2011). *Quality Improvement Plan*. Macon, GA.

Georgia Department of Public Health, Office of Nursing. (2010). *Quality Assurance/Quality Improvement (QA/QI) for Public Health Nursing Practice Manual*. Atlanta, GA. Retrieved from http://dph.georgia.gov/resourcesformsmanuals

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- Miranda Helms, Emergency Preparedness

North Central Health District 's Quality Improvement Council

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