

COCONINO COUNTY HEALTH DEPARTMENT

COCONINO COUNTY HEALTH DEPARTMENT EMPLOYEES DEEPEN THEIR UNDERSTANDING OF THE
10 ESSENTIAL PUBLIC HEALTH SERVICES

This report was completed by: Sara Wagner, MPH, Senior Health Planner

EXECUTIVE SUMMARY

Coconino County Health Department (CCHD) is located in North Central Arizona and primarily serves a rural population of nearly 130,000. Using the Public Health Accreditation Board (PHAB) self assessment and a quality improvement (QI) project, CCHD focused on Domain 8, “Maintain a competent public health workforce to delve into staff understanding of public health.” As a result, staff deepened their knowledge of the 10 Essential Public Health Services (EPHS), especially as it relates to accreditation preparation.

BACKGROUND/INTRODUCTION

CCHD’s interest in participating as a beta test site stemmed from the desire to be a highly-functional local health department. The chief health officer served on PHAB’s Standards Development Workgroup and saw value in moving the agency toward a higher level of service provision, one that adheres to meeting national standards in a more consistent way. The beta test application was submitted in summer 2009, a faux online application (to PHAB) was completed in December, and a self assessment ensued late last winter.

BETA TEST SELF ASSESSMENT

The Senior Management Team staff involved in the self assessment was comprised of the following individuals:

Name	Title, Service Unit
Diana Abele	Senior Manager, Finance Unit
Kimbal Babcock, MPH	Senior Manager, Clinical Services Unit
Denise Burley	Senior Manager, Access to Health Care Service Unit
Mike Oxtoby	Senior Manager, Health Education and Promotion Service Unit
Randy Phillips	Senior Manager, Environmental Services Unit
Lola Riggs	Senior Manager, Northern Region Service Unit
Sara Wagner, MPH	Senior Health Planner, Administration Accreditation Coordinator for the beta test
Barbara Worgess, MPH	Chief Health Officer, Administration

The accreditation coordinator engaged the senior managers at bi-weekly Senior Management Team meetings and program coordinators by request at their Service Unit meetings. All domains were discussed with the entire Senior Management Team since several service units share domains. The team also initiated additional weekly meetings for several months, which were fondly called “Big Picture Meetings,” to focus solely upon self assessment documentation.

Meanwhile, the accreditation coordinator copied and pasted from PHAB’s online self assessment tool to create an overview document that guided the team in collecting documentation. This was then duplicated on a shared drive:

Accreditation Beta Test Quality Improvement Project: Final Report

COCONINO COUNTY HEALTH DEPARTMENT

Part A: Administrative Capacity and Organization Provide infrastructure for Public Health Services		
A1.B: Develop and maintain an operational infrastructure to support the performance of public health functions.		
Measures A1.1.B: Review policies and procedures regarding agency operations, ensure policies regularly are made them accessible to staff	Required Documentation A1.1.B: Policy and Procedure Manual or individual policies (may be electronic) A1.1.B: Agency organizational chart A1.1.B: Reports of review at least every five years or prior of ongoing updating process A1.1.B: Description of methods for staff access to policies	Standards Committed to Measure and Demonstrated Fully Demonstrated Assessment of Measure or Process Present Evidence of Improvement
Measure Types: Process	Function Types: Health Department Level	
Required Documentation A1.1.B: Policy and Procedure Manual or individual policies (may be electronic) CCHD Policies and Procedures 2009 10 29.doc A1.1.B: Agency organizational chart CCHD Organizational Chart 2009 10 14.doc A1.1.B: Reports of review at least every five years or prior of ongoing updating process CO Business Plan, Timeline and Goals 2009 10 14.doc Business Analysis & Review, Strategic Planning 11 11 2009.doc A1.1.B: Description of methods for staff access to policies CCHD Video Timeline Instructions 1009 10 29.doc Public Comments.doc		
Part A: Administrative Capacity and Organization Provide infrastructure for Public Health Services		
A1.B: Develop and maintain an operational infrastructure to support the performance of public health functions.		
Measures A1.2.B: Communicate certain policies regarding confidentiality, including notification requirements	Required Documentation A1.2.B: Confidentiality Policies, including business associate agreements and electronic transfer of data policies A1.2.B: Documentation of training content and staff participants A1.2.B: Signed employee confidentiality forms, as required by policies	Standards Committed to Measure and Demonstrated Fully Demonstrated Assessment of Measure or Process Present
Measure Types:	Function Types:	

Folders for each Domain and Measure were also created on the shared drive:



Documentation was then placed into the appropriate folders. Each domain file also had a “NEW” folder to facilitate sharing of documentation possibilities among the team (if accepted, these examples were then properly labeled and moved to the appropriate “Domain” and “Measure” folders).

CCHD hosted PHAB’s reviewers in an on-site visit on Aug. 11–12, 2010. The meeting consisted of three PHAB-appointed site visitors, in addition to observers from PHAB, NACCHO, and the Centers for Disease Control and Prevention. The entire Senior Management Team participated with program coordinators coming in as needed to explain specific documentation. A PowerPoint presentation about CCHD’s structure was shared, which turned out to be very valuable in bringing more life and clarity to the documentation provided. Overall, staff gained insight as to how to better tell CCHD stories, and it was an enjoyable experience.

Highlights from Self Assessment Results

Standard/Measure	Standard and Significance
Domain 4.1 (all measures)	Engage the public health system and the community in identifying and addressing health problems through an ongoing, collaborative process <ul style="list-style-type: none"> CCHD discovered that its collaboration with community members is very solid and one of their biggest strengths.
Domain 4.2 (all measures)	Promote understanding of and support for policies and strategies that will improve the public’s health <ul style="list-style-type: none"> CCHD found that its development of support for policies and strategies within their communities is also very strong.
Domain 7.1 (all measures)	Assess healthcare capacity and access to healthcare services <ul style="list-style-type: none"> CCHD learned that they are doing well in providing access to healthcare services within the public health system.
Domain 7.2 (all measures)	Identify and implement strategies to improve access to healthcare services

Accreditation Beta Test Quality Improvement Project: Final Report

COCONINO COUNTY HEALTH DEPARTMENT

	<ul style="list-style-type: none"> CCHD found it is on the right track when it comes to improving access to healthcare services.
Domain 8.1 (all measures)	<p>Recruit, hire, and retain a qualified and diverse public health workforce</p> <ul style="list-style-type: none"> CCHD received affirmation that it recruits a qualified workforce.
Domain 8.2 (all measures)	<p>Assess staff competencies and address gaps by enabling organizational and individual training and development opportunities</p> <ul style="list-style-type: none"> Ongoing development of a competent workforce proved to be an area where CCHD excelled in the self assessment; even so, after discussion, staff felt it would be optimal to address this standard in the QI process because they are striving to engage staff at all levels of service provision as they take the next steps toward preparing for national voluntary accreditation.
Domain 9.2.1	<p>Implement QI of public health processes, programs, and interventions</p> <ul style="list-style-type: none"> This was a top area of weakness for CCHD, as they had none of the required documentation to satisfy this measure. Therefore, they intend to develop a QI plan for the department that specifies which areas of operations need improvement and define the processes that will be used to work toward these improvements .
Domain 10.2.2	<p>Promote understanding and use of the current body of research results, evaluations, and evidence-based practices with appropriate audiences</p> <ul style="list-style-type: none"> This was also an area of exceptionally low scoring because documentation requires policies regarding research such as an Institutional Review Board and at least one example within the last three years where the policy was used. CCHD had no documents to provide as evidence for these requirements and thereby received a score of “not demonstrated.”

QUALITY IMPROVEMENT PROCESS (PLAN-DO-CHECK-ACT)

PLAN

The accreditation coordinator led the QI process. Other team members included members of the Senior Management Team who were also closely involved in the beta test. Initially, leadership had a hard time articulating what it is they wanted to measure (public health concepts, tools, etc.), so a great deal of time was spent discussing this.

Two different prioritization matrices were used to highlight potential priority areas to help identify a problem area to focus upon. First, PHAB measures that were scored not demonstrated were selected and placed into a prioritization matrix of strategic importance. Five basic measures of strategic importance were used to calculate relative decimal values with the following results:

- Maintain socially, culturally, and linguistically relevant approaches in agency processes, programs, and interventions was the top priority;
- Produce a community health improvement plan as the result of the community health improvement process was the second priority; and

Accreditation Beta Test Quality Improvement Project: Final Report

COCONINO COUNTY HEALTH DEPARTMENT

- Provide education to regulated entities regarding their responsibilities and methods to achieve full compliance with applicable laws and communicate research findings, including public health implications tied as the third priority.

Next, every PHAB measure from the self assessment that scored not demonstrated was plugged into a weighted prioritization matrix. Four basic measures were used: linkage to Healthy Coconino 2012 (CCHD's strategic plan) (.25); likelihood of staff to embrace changes (.25); likelihood of completion by November 2010 (.75); and importance to residents CCHD serves (.75). Scores were calculated again with the following results:

- Maintain socially, culturally, and linguistically relevant approaches in agency processes, programs, and interventions was the top priority;
- Produce a community health improvement plan (CHIP) as the result of the community health improvement process tied with implement elements and strategies of the CHIP in partnership with others as the second priority; and
- Develop and maintain a Public Health Emergency Response Plan was the third priority.

Given that "maintain socially, culturally, and linguistically relevant approaches in agency processes, programs, and interventions" came out as the top priority in both matrices (see attached prioritization matrices), this became the focus area for the QI process. Meanwhile, CCHD was transitioning its governance and structure and having solidified a commitment toward pursuing national voluntary accreditation when it becomes available in 2011, decided that developing a common language and understanding of basic public health concepts with all staff is essential at this juncture and the culture most important to cultivate. Therefore, the team chose Domain 8, "Maintain a competent public health workforce as the QI area of improvement," with a focus on Standard 8.2, "Assess staff competencies and address gaps by enabling organizational and individual training and development opportunities."

Since much of what CCHD hoped to accomplish in the ensuing months stemmed from preparing for national voluntary accreditation, all staff had to be directly involved with getting the system ready. In order to engage staff, a shared language must be promoted in order to communicate effectively. Frontline workers would then be the litmus test to ensure they understand the bigger picture of where CCHD was heading.

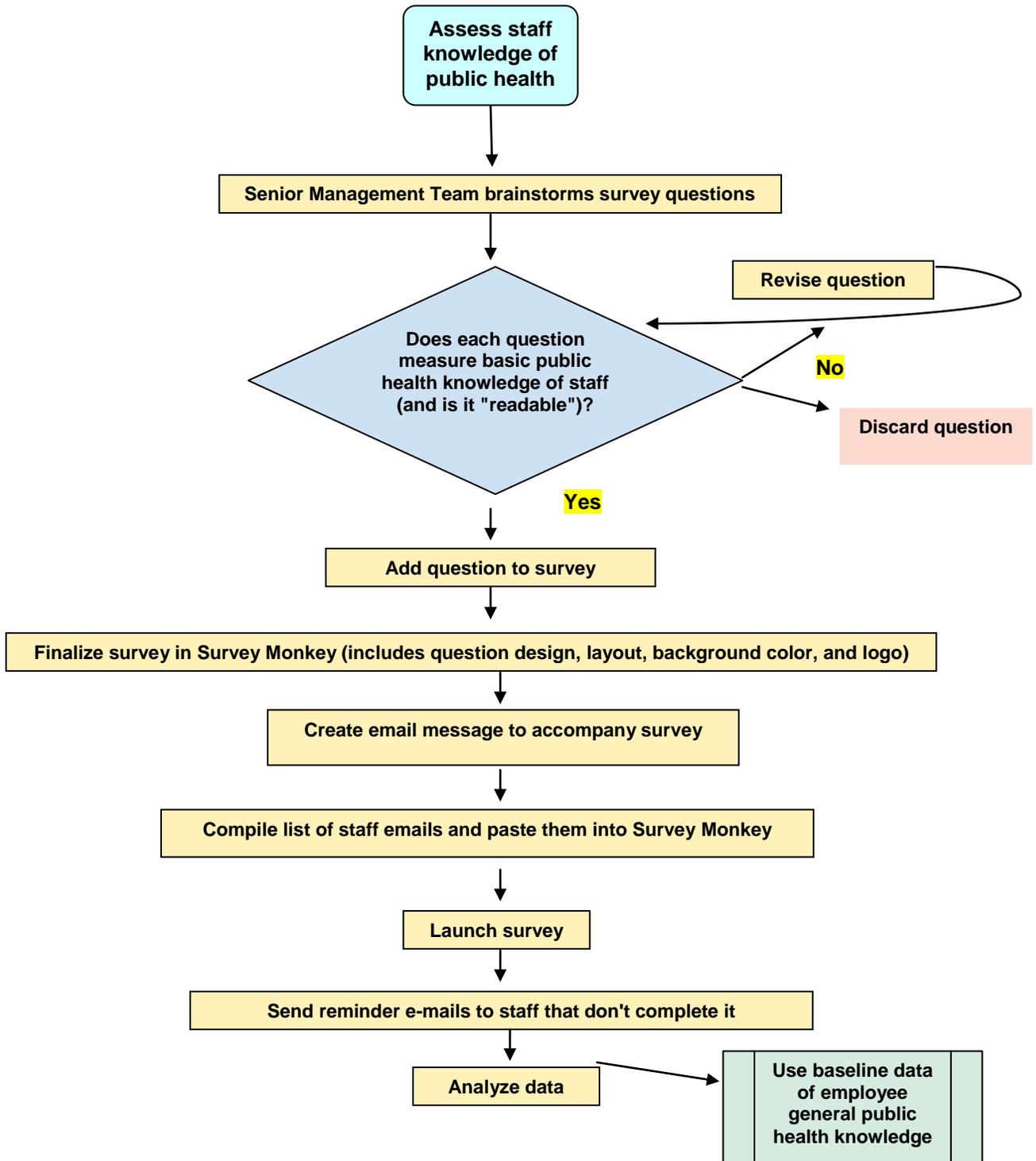
The initial aim statement for this QI project was, "By Nov. 19, 2010, establish an intervention strategy for increasing staff knowledge and understanding of public health." The later, revised aim statement read, "By Nov. 19, 2010, 90 percent of staff will correctly identify the 10 EPHS in a multiple-choice scenario." Finally, a last revision was done on Dec. 5 that read, "By Dec. 6, 2010, 90 percent of staff who were given an in-service on the 10 EPHS will correctly identify the 10 EPHS in a multiple-choice scenario."

CCHD realized there were no systematic processes in place to assess staff competencies and address gaps by enabling organizational and individual training and development opportunities within the context of public health. While a "Public Health 101" training module is presented to new employees, it is not made available to all staff. Therefore, in order to assess where the staff's basic understanding of public health, CCHD originally intended to pilot test some questions that could indicate who would need further training. For this QI project, however, just one of these questions was examined in-depth, with a training being provided to each participant, within the context of his or her service unit. If the aim statement was not achieved, the team intended to use the results in

COCONINO COUNTY HEALTH DEPARTMENT

the evaluation to conduct a root cause analysis to consider how future trainings could be improved. If the aim statement was achieved, a similar (service unit-specific) training method would be used for future QI efforts.

The following flowchart depicts the process used to design the survey to obtain baseline data (via SurveyMonkey, an online tool):



COCONINO COUNTY HEALTH DEPARTMENT

Although a cause and effect diagram was not constructed, nor the “five whys” exercise used to better understand relationships between causes and sub causes of why some staff have not had formal public health training (this information could then have been used to guide the planning of proactive changes within CCHD’s work culture), the following questions were asked in the survey to get an idea of staff’s formal public health training, both before and after they started working at CCHD:

- “When you began working at CCHD had you ...”
(several options were given, to select from)
- “Since you started working at CCHD, have you ...”
(note: this would be BEYOND what you may have indicated in the last question):”
(again, several options were given, to select from)

Other questions were designed to collect the following:

Quantitative Data:

- Two questions (2 and 3) focused upon public health training
- Four questions (5, 6, 7, 8) focused upon general public health knowledge
- One question (9) focused upon CCHD mandates

Qualitative Data:

- One question (10) was open-ended, asking each employee to talk about how their job contributes to public health

The following improvement theories were explored:

- a) If CCHD improves its Public Health 101 training and implement it with all staff, then employees will understand the basic concepts of public health better.
- b) If CCHD adopts the “This is Public Health” (TIPH) national campaign, more employees will see a link between public health and their daily work.
- c) If CCHD shows staff the “A Day in the Life” PowerPoint, staff will better understand how public health is inseparable from their daily lives, as well as the work they do for CCHD.

The long-term goal is to implement a Public Health 101 intervention with all staff, to ensure that CCHD staff have a shared understanding of basic public health concepts (regardless of their prior training). However, since the next general staff meeting is not until spring 2011, CCHD opted to tackle just one proactive step with this QI project and further refined their focus to Question 7 of the fall 2010 employee survey (see Original Survey attachment), which read:

“Which of the following is NOT one of the 10 Essential Public Health Services? (hint: there's more than one!)”

- Encourage senior citizens to be active
- Protect people from health problems and health hazards
- Give people information they need to make healthy choices
- Immunize overseas travelers
- Develop public health policies and plans
- Ensure that school children are safe

COCONINO COUNTY HEALTH DEPARTMENT

- Maintain a competent public health workforce
- Evaluate and improve programs and interventions

This question was selected because it seemed to be the most foundational of all the questions in the survey and is what the PHAB Domains are based upon. This was seen as a way to enable CCHD to get the most out of this project by conducting a valuable QI project while aligning CCHD staff with accreditation preparation. Therefore, the improvement theory became “If staff associate how their job contributes to public health (within the context of one of the 10 EPHS), then they will learn the 10 EPHS more quickly.” The team will know if this intervention has resulted in improvement when they see the scores in question 7 improve (in other words, when staff correctly identify the three “false” 10 EPHS in question 7).

CCHD planned to administer the online survey to all staff via SurveyMonkey, which would also collect and analyze responses. The online survey was administered to all staff via SurveyMonkey and the senior health planner created training packets for in-service trainings, consisting of an agenda, the *Operational Definition of a Functional Local Health Department –Overview of the 10 EPHS*, collective service unit responses to question 7 (pertaining to the 10 EPHS), PHAB Summary of Proposed Domains and Standards, and collective service unit responses to question 9 (essay question about how their jobs contribute to public health). Senior managers scheduled the senior health planner to do in-services with their teams on the 10 EPHS. During these in-services, service unit-specific responses to question 9, “How does your job contribute to Public Health?” were categorized within the 10 EPHS and PHAB domains and standards by service unit staff, to highlight how this framework fits into their daily work lives, and thereby how each person plays a vital role in helping CCHD to achieve the 10 EPHS. Finally, a post-test survey question was created and administered via SurveyMonkey (about the 10 EPHS) to each employee who attends an in-service to see if their scores improve after this intervention. Post-test data was collected and analyzed, enabling the senior health planner to prepare a final report, to highlight findings. TIPH t-shirts, calendars, stickers, and pins were also ordered to be used as incentives for staff to complete the post-test.

DO

One hundred percent of staff, 113 individuals, completed the survey. SurveyMonkey collected all online responses, generating baseline data. Survey Monkey also analyzed these responses with question 7 serving as a “pre-test” (see attached *Pre-test (partially correct)*). The senior health planner created and distributed the training packets (see attachments: Training packet sample – Environmental Services Unit, Training packet sample – Question 7, Training packet sample – Question 9, and PHAB Summary of Proposed Domains and Standards). Senior managers scheduled the senior health planner to do in-services with their teams and planner provided in-services to service units, individuals who missed their service unit in-services, and via teleconference (to two remote service units over two hours away and one service unit campus across town). One hundred and three individuals, or 91.2 percent of staff, received the in-service, which focused on reviewing the definition of the 10 EPHS; service units’ answers to question 7; correct answers; PHAB Summary of Proposed Domains and Standards; service units’ answers to question 9; and what is likely to come in 2011 for accreditation preparation (in the context of documentation collection and overall benefits to CCHD). During these in-services, employees discussed how their responses to question 9 were categorized within the 10 EPHS and PHAB domains and standards to highlight how this framework fits into their daily work lives, plus how each person plays a vital role in helping CCHD

COCONINO COUNTY HEALTH DEPARTMENT

achieve the 10 EPHS. A post-test survey question (about the 10 EPHS) was administered via SurveyMonkey to all 103 employees who attended an in-service (just two questions were asked in the post-test, their service unit and the same exact question about the 10 EPHS that had been asked via question 7 in the original survey). Data was collected in SurveyMonkey for 101 employees who took the post-test (only two staff who received the training did not yet complete their post-test; 10 staff have yet to take the training); 98.1 percent of those who were given an intervention took the post-test. Post-test data was analyzed by SurveyMonkey. The senior health planner prepared a final report highlighting findings. TIPH incentives were procured and distributed accordingly (when staff completed the post-test).

CHECK

When the intervention began, only 17.7 percent of all staff correctly selected all three “false” 10 EPHS in question 7 (see pre-test (all three correct) attachment). Remarkably, during the post-test, 72.3 percent correctly identified all three (see post-test (all three correct) attachment).

If one considers staff who didn’t correctly select all three false answers in question 7 (rather, just one or two of the three), scores were considerably better. In fact, the following are results from the pre-test (see pre-test (partially correct) attachment):

- 60.2% correctly identified “Encourage senior citizens to be active” as not being one of the 10 EPHS.
- 54.0% correctly identified “Immunize overseas travelers” as not being one of the 10 EPHS.
- 48.7% correctly identified “Encourage senior citizens to be active” as not being one of the 10 EPHS.

Whereas these are results from the post-test (see post-test (partially correct attachment):

- 89.1% correctly identified “Encourage senior citizens to be active” as not being one of the 10 EPHS.
- 90.1% correctly identified “Immunize overseas travelers” as not being one of the 10 EPHS.
- 80.2% correctly identified “Encourage senior citizens to be active” as not being one of the 10 EPHS.

While the 90 percent target for staff correctly identifying all three non-10 EPHS was not achieved, the fact that 86.5 percent of employees, on average, increased some knowledge (getting at least part of the answer correct) of the 10 EPHS was very encouraging. Overall, this QI process lends itself to implementation of in-services of a similar nature, via service unit, in the future. Beforehand, though, the senior management Team may want to conduct a root cause analysis to consider how future trainings could be improved.

Many beneficial discussions ensued with staff, both during and after these in-services. For instance, many suggested future QI project ideas, some asked questions about accreditation and shared insight on how CCHD could communicate better with staff while others took notes on new public health concepts that were being presented to them. Everyone seemed appreciative of the training and it provided a valuable opportunity to get to know staff better, especially face-to-face (which was an unexpected reward).

Lastly, other valuable data was gained through this QI process. For instance, in the original survey to gather baseline data, CCHD learned that half of the staff reported having had some public health training before coming to work at CCHD. Furthermore, nearly 63 percent of staff have taken at least

COCONINO COUNTY HEALTH DEPARTMENT

one class or workshop in public health (or pursued more advanced training) since they began working at CCHD. This suggests that potentially 50 percent of CCHD's workforce has had no public health training beyond on-the-job-training, which can guide the team in shaping future trainings. Additionally, it is great to have a snapshot of the current workforce, via service unit (see attached Service Unit Distribution) and an up-to-date listing of staff e-mails by service unit.

ACT

The senior health planner recommended that CCHD adopt monthly QI in-services at service unit team meetings, beginning in January 2011, based on the success of this effort. It seems that the staff is primed for learning more about public health, PHAB, and national voluntary accreditation. This momentum can be maximized by implementing a new QI structure at the start of the 2011. Longer in-services, to emphasize the content being conveyed, would help to boost future scores, especially since the average length of the trainings in this particular intervention was just 20 minutes.

RESULTS, NEXT STEPS, AND ACCREDITATION

Involvement in the beta test and this QI effort were invaluable in helping CCHD learn that the staff are very interested in learning more about public health and optimal service delivery. Moreover, CCHD staff are more knowledgeable and enthused about this topic than the Senior Management Team had anticipated. Conducting a self assessment, undergoing a site visit, and receiving a detailed report were tremendously helpful to CCHD. CCHD feels confident that they can close up gaps in service provision based on the expertise and guidance that was shared during the beta test experience. CCHD also intends to incorporate "This is Public Health" and related campaigns into the fabric of daily work lives to make these QI ventures fun for staff.

LESSONS LEARNED

- Start well before you think you need to – collect documentation every week.
- Provide context of domains when asking staff for documentation to demonstrate measures.
- Organization and systematic labeling are extremely important when dealing with hundreds of documents because they can be easily misplaced.
- Network with other test sites to learn what worked best for them and discover new time-saving tips.
- Take advantage of available technical assistance from partners such as NACCHO.
- Increase efforts to access health care services apart from your health department.
- Seek client/user involvement in program planning, implementation, and evaluation.
- Secure additional staff to provide core services in outlying areas.
- Refrain from using the same documentation or examples as evidence to demonstrate compliance within multiple measures; rather, use all facets of service delivery to showcase programs and services that could also be used as examples.
- When using screenshots of a system or program as examples of evidence, be sure to provide a link to the entire data system or program.
- If you include a lengthy document of any kind, highlight the relevant sections.
- Approach the domains from a systems perspective that is applicable throughout your entire department (think "theme") rather than just as a process to provide examples of evidence to support documentation of measures.
- Most accreditation processes center on detailed documents as evidence of compliance (e.g., meeting minutes and attendance logs), therefore, it is prudent to take regular minutes and note attendance at meetings and events.

COCONINO COUNTY HEALTH DEPARTMENT

- In data reports, be sure to explain how decisions were made based on data analysis and how any resulting changes impact the community.
- Be mindful to always use examples that are current and span the breadth of your agency.
- Review documentation again and again to be sure you've got the best possible examples.
- Celebrate small successes along the way.
- Prepare a dynamic PowerPoint presentation for your site visit team.
- Be clear about QI project team roles and responsibilities so that no one is solely responsible for an entire project.
- Learn the differences between the various QI tools early on so that you can use them effectively throughout your efforts.

APPENDICES

[Appendix A](#): Storyboard

Additional Appendices:

- Original Survey
- Pre-test (all three correct)
- Pre-test (partially correct)
- Post-test (all three correct)
- Post-test (partially correct)
- (Results of) Prioritization Matrices
- Training Packet Sample – Question 7
- Training Packet Sample – Question 9
- Training Packet Sample – Environmental Services Unit
- PHAB Summary of Proposed Domains and Standards
- Service Unit Distribution