

# Accreditation Beta Test Quality Improvement Project: Final Report

## NORTON COUNTY HEALTH DEPARTMENT

### DISEASE INVESTIGATION

---

This report was completed by: Gina Frack, RN, B.S., Administrator and Accreditation Coordinator

---

#### **EXECUTIVE SUMMARY**

The Norton County Health Department (NCHD) is located in Northwest Kansas and has served a rural-based county since 1975 when the population was approximately 7,250. Depopulation has resulted in a current population of approximately 5,664. Agriculture is only 47 percent of the local economic base, providing diversity that is a rarity rural midwestern counties. NCHD owns and operates a Medicare Certified Home Health Agency, creating two departments within one. There are eight full-time equivalents (FTEs) providing a diversity of programs and services with annual expenditures in calendar year 2009 just under \$500,000. Primary revenues are “fee for service” with only 13–15 percent coming from local tax support.

#### **BACKGROUND/INTRODUCTION**

NCHD was given the opportunity to provide input on the local alpha test of the accreditation self assessment tool and was in a logical position to apply for the beta site stage. The alpha phase of the accreditation self assessment helped NCHD realize the significance of these beta tests in the future of public health. The unique and diverse challenges NCHD faces will continue to increase and the gaps in what residents need compared to what can be provided will continue to widen if the health department does not make changes. NCHD’s current infrastructure is nearly 40 years old and unsustainable. Realizing that changes in public health are a matter of when, not if, is the main reason NCHD wanted to participate in the beta test. This beta test process provides great potential to accomplish the goal of providing a standard of public health that is consistent to all Americans, regardless of where they live, yet focuses on improving public health rather than the process itself. NCHD’s greatest fear was that standards would be too high, leaving rural America unable to meet the expectations and accreditation as a means to an end rather than a tool for improvement. This is what led NCHD to apply.

NCHD’s involvement in the beta test was to assure that a small rural LHD’s perspective would be considered. NCHD knew the beta phase was the last stage in the accreditation timeline at which modifications to the tool and process could be made. The health department also saw this as an opportunity to challenge how public health is delivered in sparsely populated areas. A grandiose hope was and still is that accreditation may help us determine changes that could and/or should be made to infrastructure to better balance funding while also providing the 10 Essential Services of Public Health (ESPH).

#### **BETA TEST SELF ASSESSMENT**

The beta self assessment was completed by NCHD’s LHD administrator, who was also the accreditation coordinator and QI project leader. Since H1N1 was being managed at the same time as the self assessment document collection, there wasn’t time for staff meetings to reach consensus on specific measures. Even after H1N1 subsided, staff workloads were still too significant to allow group discussions. Besides staff workloads, the beta site’s compressed timeline for documentation gathering and uploading was not conducive to a more collaborative process. However, staff was consulted on an as-needed basis to determine if documentation existed and/or which would be best to submit. Staff was consulted based on their respective areas of expertise and/or job description.

## Accreditation Beta Test Quality Improvement Project: Final Report

### NORTON COUNTY HEALTH DEPARTMENT

Many internal and external challenges arose during the self assessment documentation gathering. Internally, NCHD discovered that not all of their policy and procedure manuals were dated and in electronic format. NCHD's statement of intent section, not the self assessment, was a particular challenge. The SOI financial data section that listed revenue sources took weeks to complete, and a collaborative effort between two state-level associations and the Kansas health department was necessary to ensure accuracy. NCHD did not take into account how difficult it would be to anticipate the different funding streams from the state health department.

The accreditation coordinator also working as the administrator had many benefits and barriers. Benefits were consistency, organization, and dedication to and understanding of the overall accreditation process. The most significant barrier was that the lack of involvement by staff could result in less understanding and buy-in due to their limited participation. Since accreditation is an ongoing process, this could be of greater significance as time passes. Another barrier was the bulk of the workload being carried by the LHD administrator. This workload is not realistically sustainable for the accreditation process coming in 2011. NCHD is seriously considering spreading out this workload.

Based on NCHD's self assessment site visit and review of documentation, the predominant areas of improvement are outlined below.

#### Highlights from Self Assessment Results

Standard/ Measure	Standard and Significance
Domain 3.2.4B	<p>Provision of accurate/current information in formats appropriate to demographics and in a variety of formats</p> <ul style="list-style-type: none"><li>• This was an area of repeated weakness in Domain 3. NCHD has begun talking with the Kansas health department (SHD) because this is a universal shortcoming, meaning this gap exists for most of the LHDs in Kansas. Ideally, NCHD would like to see a SHD-run, centralized health education source, This source would allow LHDs access to media in various formats that could be copied/pasted at the local level, providing consistency of messaging, increasing provision of such materials, and reducing duplicative efforts.</li></ul>
Domain 2	<p>Investigate health problems and environmental public health hazards</p> <ul style="list-style-type: none"><li>• Scored low here primarily due to the fact that the majority of this domain is provided by SHD and other external agencies. NCHD has nothing in hand to show who is doing what. Working with SHD and state association of county and city health officials to determine how this can best be shown for the accreditation and site visit process. Again, this is a universal issue for LHDs in Kansas.</li></ul>
Domain 4 and Domain 5 (Indirectly, several others)	<p>Engage with the community to identify and address health problems. Develop public health policies and plans to support individual and community health.</p> <ul style="list-style-type: none"><li>• Having a community health assessment (CHA), community health improvement plan (CHIP) and strategic plan is a prerequisite to apply for accreditation, but a CHA is not required for Kansas LHDs. NCHD did not</li></ul>

## Accreditation Beta Test Quality Improvement Project: Final Report

### NORTON COUNTY HEALTH DEPARTMENT

	<p>complete a CHA. NCHD is looking into how the SHD can assist LHDs in completing this important piece of accreditation. Hopefully, by working on this together, Kansas will promote consistency in methodology. LHDs are suggesting to the SHD to create a “base model” CHA that is applicable to rural/small LHDs. From this base model, those LHDs with more capabilities and resources can add options to their CHA as needed. Regardless of accreditation, moving all LHDs and the SHD into doing a CHA will improve public health in Kansas.</p>
Domain 6	<p>Enforce public health laws</p> <p>This was NCHD’s lowest scoring domain.</p> <ul style="list-style-type: none"><li>• LHDs in Kansas need something that not only states “who does what” at the local level as mentioned in Domain 2, but separation of duties also needs to be made clear. If someone else is doing the work, the LHD should not be held accountable for how the work is getting done. For example, the SHD provides a trained surveyor for Childcare Licensing and Regulation in our NCHD’s county; this is done by the SHD and memorandums of understanding or contracts do not exist at the local level. The state employed surveyor is the enforcer. For these instances, the accreditation process should not extend any further into this program/service since the LHD does not do or have the responsibility to oversee how the enforcement is done. The scoring on the tool has to accommodate this variable so those LHDs that do not perform the service or show a contract for the service are not penalized.</li></ul>
Domain 8.1.4 and Domain 10	<p>Domain 8: Working with schools of public health to promote the development of public health workforce</p> <p>Domain 10: Contribute to and apply evidence-based public health practice</p> <p>NCHD scored poorly here due to lack of consistent connection to and awareness with academia and best practices.</p> <ul style="list-style-type: none"><li>• This could be accomplished through creating a central point of contact by which all Kansas colleges and research agencies can connect to LHDs and vice versa. Findings of public health projects could then be shared across the state.</li></ul>

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

#### PLAN

Because NCHD employs less than eight FTEs and operates an LHD and Medicare certified home health agency within the same department, the selection of staff was determined based on job duties. The majority of staff were those who work in the office providing typical LHD programs/services. One exception was NCHD’s home health coordinator. The home health coordinator’s primary responsibilities are managing the home health agency, but she is cross-trained for some of the LHD programs/services. She will often help in the LHD during times of surge and/or disaster response.

## Accreditation Beta Test Quality Improvement Project: Final Report

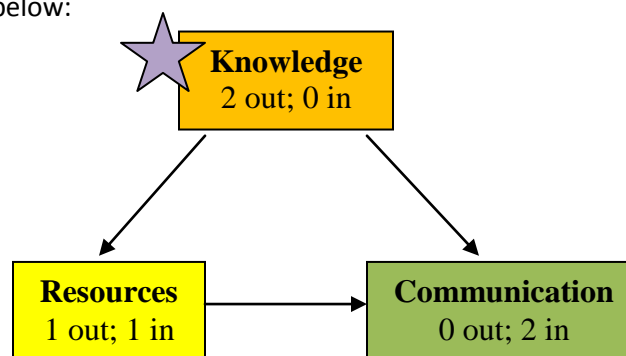
### NORTON COUNTY HEALTH DEPARTMENT

The biggest challenge regarding staff participation was lack of knowledge regarding the QI process. NCHD had practiced some QI after attending the beta test site QI training in May 2010. NCHD staff are all familiar with evaluation (often misunderstood as being QI), but have never dealt with true QI internally. Informational QI handouts were given to corresponding staff before the staff. The initial meeting began with a PowerPoint, provided by NACCHO, that covered the basics. Select tools from the Public Health Memory Jogger II were discussed (brainstorming, affinity, and fishbone). After the training, NCHD staff started using these tools as they worked together to select our problem.

Another challenge in bringing this team together was trying to find time to meet that worked for everyone. The office had to be closed to make this happen. It was a last resort, but it was necessary in order to provide uninterrupted time for optimal involvement. Even though NCHD had to close their office to work on QI, it was easy to select the team and the team remained unchanged throughout the process.

NCHD selected the problem of staff not being able to independently conduct disease investigation. The team initially had three different possible projects in mind based on the findings of the self assessment. The team prioritized disease surveillance above the other two options because not addressing it was potentially more devastating to NCHD's jurisdiction than the other two consumer satisfaction-based problems. This was done in a prioritization matrix comparing time and impact of each problem. The team's initial and final Aim statement was to "Increase nursing staff's knowledge and understanding of performing disease investigation of Kansas reportable disease(s) from \_\_\_\_ percent to \_\_\_\_ percent by Nov. 15, 2010".

After unanimously selecting disease investigation, the team started further defining the problem by brainstorming all the things that contribute to why staff cannot perform disease investigation independently. The brainstorming resulted in sticky notes that were organized into categories using the affinity process. These categories were used to name the bones of the fish in the fish bone diagram. The staff quickly noticed that most of the contributors to the problem statement were related to the knowledge category. To ensure this perception was valid, the team used the interrelationship diagram (ID), which yielded the same outcome. Knowledge, or rather the lack thereof, was the root cause. Results of the ID tool are below:



Staff uniformly said the knowledge they needed was regarding who was doing what when and what/where their resources were on a 24/7 basis. They felt they would better understand the disease investigation process and feel more confident in performing one independently with this knowledge. The team also determined that the current disease investigation process left them out of the loop in regard to what was going on in the jurisdiction. To stay in the loop, the team requested ongoing disease surveillance updates at a minimum during NCHD's bi-monthly staff meetings. Since the focus was knowledge, the corresponding staff (three nurses) took a pre-test. The average score was 71 percent.

## Accreditation Beta Test Quality Improvement Project: Final Report

### NORTON COUNTY HEALTH DEPARTMENT

The perceived skill rating averaged 2 on a 1–5 scale with 5 being very confident. This became the baseline measure to determine effectiveness of the team’s interventions in the next step, doing.

The LHD administrator was the facilitator during the use of all the QI tools. The Public Health Memory Jogger II helped to keep everyone on track while using QI. The LHD administrator was also the person that performed disease investigation 98 percent of the time at the local level. The three staff that took the pre-test were those who help out during times when the LHD administrator was unavailable or during an outbreak, which both occur infrequently. Because of this infrequency, the team determined that the resources had to be flexible enough to respond to any reportable disease and accurate by providing who to call and where to get the detailed answers rather than knowing/retaining a lot of information themselves. Thus, the need to create a flowchart became evident and was requested by staff.

#### **DO**

The training consisted of handouts that were given to the team a couple days before the face-to-face training. The LHD administrator used a PowerPoint presentation from the SHD medical investigator in the region. A flowchart depicting the process of investigating a reportable disease was also shown. Staff instantly caught a couple of mistakes regarding the “yes” or “no” decisions. These were corrected as a group.

#### **CHECK**

The team scored 100 percent in their knowledge on the post-test, and the average confidence of skill rating rose to 4.3. The data collected in the post-test proved that staff’s knowledge of how to conduct a disease investigation improved from 71 percent to 100 percent, and subjectively they voiced more confidence.

#### **ACT**

At the staff’s request, the team decided to test the flowchart with a real-life scenario. Because reportable diseases are infrequent in NCHD, the team waited for one to occur. Using the flow chart, an RN figured out that the case reported (MRSA) was not a reportable disease. She found that she wanted to jump ahead of the flowchart, making assumptions rather than following along step-by-step. The process proved that the flowchart has be used in sequence in order to be effective.

The team decided to adopt the flowchart and bookmarked certain websites from the flowchart to the three nurses’ computers. The SHD positions including 24/7 accessibility were included in each of their contacts in Outlook. However, because the flowchart was only tested on one real reportable disease, the team plans to continue refining the tool with more cases as they emerge. Staff wanted to keep the flowchart because they only need to know where to find the answers rather than retaining the knowledge themselves.

By continuing to challenge the flowchart with actual reportable disease cases, NCHD will not only improve the tool, but keep staff familiar with the process. This will also be reinforced with the bi-monthly staff meetings, which now include time for disease investigation updates.

## Accreditation Beta Test Quality Improvement Project: Final Report

### NORTON COUNTY HEALTH DEPARTMENT

#### RESULTS, NEXT STEPS, AND ACCREDITATION

This QI project brought NCHD staff together by using tools and resources fairly new to us everyone. The outcome of this project has been beyond what was intended and/or expected. NCHD learned more about their lacking internal disease investigation process. NCHD increased their knowledge of how to conduct a disease investigation and as a result, increased their capacity for this activity. The staff unfamiliar with disease investigation now feels more confident in their investigation abilities with the training and tools created in our QI project. This is a great result for both NCHD staff and the jurisdiction they server. However, what was of most significance in this QI effort was the opportunity for NCHD staff to participate in a legitimate QI experience totally driven from within the LHD. The staff chose what they wanted to work on and how to measure it. This empowering experience provides fuel to move NCHD staff into their next project about consumer satisfaction in either the family planning program or immunization clinic.

How this project can be used as a bridge from an isolated QI projects to continuous QI has yet to be determined. Public health from federal to state to local levels needs to become infected with QI for it to become a chronic condition.

#### LESSONS LEARNED

NCHD's recommendations regarding accreditation and quality improvement in general begins with a lot of training and education. The first focus needs to be on the 10 ESPH. Many of those in the field still view public health rather in vertical or siloed structure as opposed to a horizontal or cross-cutting structure illustrated by the 10 EPHS. Since the 10 EPHS framework is the backbone of the accreditation tool, it is most logical to start here with QI and accreditation preparation efforts. Next, is the need for QI training to get staff started and support to maintain efforts. How each LHD and/or SHD decides to provide this will be unique to each respective department; however, this step is pivotal for both levels of public health in order to move beyond isolated QI projects to a culture of continuous QI. This culture change of QI and accreditation needs to be intertwined in all levels of public health hierarchy.

QI provided NCHD staff a chance to be the driver of change. This was refreshing for a group of people accustomed to recording numbers for external partners without being able to really use the data for improving programs, processes, or services for themselves and/or those they serve. Another wonderful benefit of QI is that it focuses on the problem and not the people. It provided a platform for group discussion that was enlightening, productive, and even humorous at times for all involved. Sustaining QI is something NCHD staff have yet to figure out. What they do know is that for it to be sustainable, it needs to be a collaborative effort between the state and local health department. External support for QI is also essential for sustainability. This needs to come from national level associations such as NACCHO, the National Association of Local Boards of Health, and the Association of State and Territorial Health Officials. We know cultural change is evolutionary, not revolutionary, so NCHD expects it to be quite some time before QI becomes commonplace to public health, but accreditation provides a great starting point for small and large health departments alike.

In summation, what needs to remain unchanged as accreditation officially rolls out is the flexibility in meeting standards and measures including those pertaining to QI. As long as the process remains about improving public health and focuses on what is being done rather than how, everyone stands to reap great things in public health, and as a result, so do the people served by local public health.

**Accreditation Beta Test Quality Improvement Project: Final Report**

**NORTON COUNTY HEALTH DEPARTMENT**

**APPENDICES**

[Appendix 1: Storyboard](#)

[Appendix 2: Flowchart](#)