Accreditation Preparation & Quality Improvement Demonstration Sites Project

Final Report

Prepared for NACCHO by the Valley City-County Health District, ND

November 2008



Brief Summary Statement

City-County Health District is a small, single county, public health unit located in Eastern North Dakota. We serve a rural population of approximately 10,775. Using the NACCHO LHD Self- Assessment Tool for Accreditation Preparation and a quality improvement process, we noted that in almost all areas that dealt with data, we scored low. Without an electronic data management system, we know that progress in this area is difficult and will continue to be less accurate, but we felt that we could improve the current health unit log by increasing the program specific data (how many in office visits were for what specific service). As a result, we have developed an improved logging system that will allow us to track office visits and phone calls on a week to week and month to month basis, making annual program evaluations much quicker and more time efficient. We have also started tracking in-office service payments on a week to week basis, thus decreasing time required to prepare annual program evaluations which look at revenue versus costs for each program as well as numbers served by each program.

Background

City-County Health District is a small, single county, public health unit located in Eastern North Dakota. We have 22 employees with varying hours, totalling 12.4 FTE's. We have many part-time employees who work basically on an "as needed" basis which, at times, adds complexity to any change, including QI. Due to many years of level public health funding and increasing costs, we have been required to make some staffing changes, adding additional responsibilities for some staff and eliminating hours for others. Even with these changes, we have been able to maintain a wide variety of public health services including: daily in-office RN for rapid inspections, immunizations, student illness/injury visits, etc., a very active, policy/advocacy minded tobacco prevention/cessation program, a full-time Safe Communities program, WIC, Health Tracks, frequent community wellness screening clinics, jail health, newborn home visiting, breastfeeding consultations, a foot care program and a home visiting program. We also operate a Medicare Certified Home Care Agency which provides additional revenue to support public health services and allows us to more cost effectively provide public health home visits as we are able to dovetail visits/staff. Our health unit is governed by a health board which consists of 5 members: our health officer, a school board member, a community member appointed by the county commission, a county commissioner and a city commissioner. Our public health funding comes from a county mill levy, city funds, school funds, certified home care revenue, fees for services, donations and grants.

Quality improvement is of tremendous importance within our small health unit. We have very dedicated, caring health care workers (as well as a health board who strives to provide the services needed within our community) who want to be assured that the services we are providing are of high quality. Due to limited funding, our QI has been limited to what might be accomplished within our current budgeted hours. Throughout this process, we realized that our health unit is accomplishing a great deal with a small amount of resources, compared to many very large units, in services provided.

We have a great amount of data within our office but have had no organized means of maintaining, retrieving and analyzing data. In 2008, when the director did annual program evaluations, it took approximately 40 hours to retrieve the data necessary. With this project we hoped to develop a log system that would decrease the amount of time that it will take for annual program evaluation preparation in 2009. The Health Board reviews this information

annually, as a part of strategic planning, discussing which programs are most utilized, which programs produce revenue and which programs utilize our mill levy funds.

Goals and Objectives

Goal: To create a data reporting system that would improve client services and program planning as well as reduce administrative time for annual program evaluations.

AIM statement: Create a data reporting system to improve client services and program planning. Reduce administrative time for reporting systems 90% within 2 months.

Objectives: Improve the current service log, log all incoming phone calls, educate staff regarding use of log and reasons for the changes.

Self-Assessment

Five of the 20 staff members employed at CCHD completed the self assessment tool. These staff members were chosen based on program involvement and years of service so that we had staff who were in key positions, various programs and years of service varying from 4 years to 23 years. We began the process with the assessment tool, each taking it on their own and then discussing the results, coming to a consensus for a group rating in each area. The group discussion took us about 5 hours. We had no areas in which there was no consensus reached. There was much discussion in several areas, but we were able to come to consensus in the end.

We assembled an interdisciplinary team of key staff members within the health unit with experience in a wide variety of public health programs, varying longevity within the health unit and varying responsibility levels. Members included Theresa Will, RN, Executive Director; Angie Martin, Office Manage;, Betty Olson, Patient Services Coordinator for Home Care; Rebecca Kratz, Accountant; and Paula Thomsen, RN, Home Care Coordinator. The self assessment was completed by each individual team member. The five team members met together for approximately 5 hours to discuss each item individually and were able to come to a consensus in all areas. After completing the self assessment and obtaining the scores, we looked at the areas that were a "2" or lower to see what areas were most in need of improvement, what areas would most likely be areas that we could show improvement in within a relatively short period of time, and what areas most affected the populations that we serve. We chose to work on data management/analysis improvement as we had low scores in most areas that related to data. We worked with Dr. William Riley as our QI consultant. He was able to help us formulate a specific Aim Statement which would have measureable outcomes. We reviewed and discussed the current process, voiced concerns and shortfalls of the current system and then "brainstormed" possible strategies to improve our process. At this point we added a sixth member, Laurel Thompson, RN, Immunization Coordinator, who was not able to complete the self assessment but who has a key position within the public health office on a day-to-day basis and we felt she would have significant input regarding the data management within the office.

Highlights from Self-Assessment Results

Standard/	Standard and Significance
Indicator #	
I.A.1	Data Collection, Processing and Maintenance
	 This was an area of weakness for CCHD, as identified through the self- assessment. After discussion, CCHD felt this standard would be the best one to address through our QI process.
IV.AM. 1	Community Planning Process Engaging Systems Partners
	 This was also an area of lower scoring, but we felt that this would be a

	Ionger term goal, so we will be working toward this in the future. There is discussion statewide in North Dakota at this time regarding community assessments and planning, so this is in our long-range plan.
IV.DM.1	Develop Partnerships to support Public Health

Quality Improvement Process

AIM Statement: Create a data reporting system to improve client services and program planning. Reduce administrative time for reporting systems 90% within 2 months.

PLAN: Our process prior to beginning this improvement project lacked a comprehensive log by which client services could be tallied and tracked. Data regarding client services was inaccurate and haphazard and compiling annual evaluations for each program was very time consuming since data was not compiled throughout the year. Our QI team met by conference call with Dr. Bill Riley to brainstorm areas for improvement, discuss ways to improve data management and to formulate our AIM statement. We decided to add details to our incomplete office log which would allow us to gather data for each program, log office phone calls, and would eventually be used for annual program evaluations, thus decreasing the administrative time required to prepare these annual reports used to justify costs/services offered within our county.

Theory for Improvement: A more complete data reporting system would decrease time needed to complete "annual program evaluations" and would give a more complete/accurate picture of total services provided in each program area. At the point that we began we felt it would be easy to know there was an improvement since there was very little data that was analyzed and tallied. We were able to show improvement as far as remembering to fill in the service log during each PDSA cycle.

DO: Our test of theory was completed through three rapid-cycle PDCAs after changes were made to the process. The initial test was for 1 week (7/14-7/18). At this point, we realized that changes were needed. We added additional columns (for head lice, home care, jail and a refer out column) within our log form and provided additional education to staff regarding use of the log. With 20 possible employees who might answer the phone, everyone needed to be utilizing the log form in the same manner. The first test of change was done from 7/28-8/8. Again, after this test, we were concerned about compliance with utilizing the log. As our office becomes busier with students and immunizations, there is a greater possibility of forgetting to log the phone calls. The staff having the most difficulty attached a log form to their desks right under the phone in hopes that this would be a visual trigger to complete the log. The final test of change was completed 8/25 through 9/25. The log form has been put into daily use within our front office, after the two revisions (PDCA cycles) mentioned above. Staff initially didn't seem to realize the importance of the log, so additional education was provided. After the initial week, we noted that we needed to add columns for head lice, home care, jail and an area for referrals. It was difficult to remember to fill in the log at our office when it became busier with school and flu season. After each test period, the team (along with Bill Riley) met to discuss and formulate a new plan.

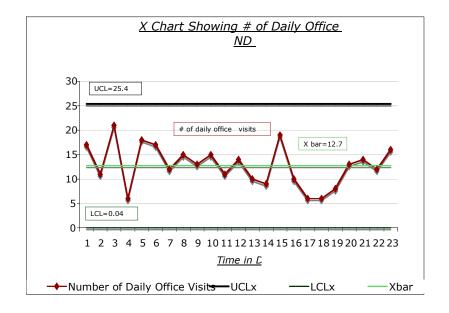
CHECK: Since there was little data in this area kept and analyzed on a week-to-week basis, it is difficult to see a measurable change, however, if you look at "no data" (when we started our QI project) compared to the current data available we would show a 100% improvement!

Our team (along with Bill Riley) met after the first week to discuss the week's results, share possible needed changes and modify the original form. We revised our log and gave staff additional education regarding its use and importance. The final log format is included in our appendices. Initially we tried to log all phone calls as well as clients served. This has proven to be very inaccurate, so after testing the process twice we dropped that piece. We will continue using the improved log. We have been surprised and pleased with the number of clients served, particularly after the final test of change (during flu season our numbers have dramatically increased, and during the holiday season the numbers decrease again, which isn't surprising). The numbers of clients seen for each individual service over a period of time will be helpful for staffing, etc. We were surprised by the number of individuals receiving assistance with medications through our office (many come into the office several times a week so are counted each time they come into the office instead of as one client). Much time is spent in this area.

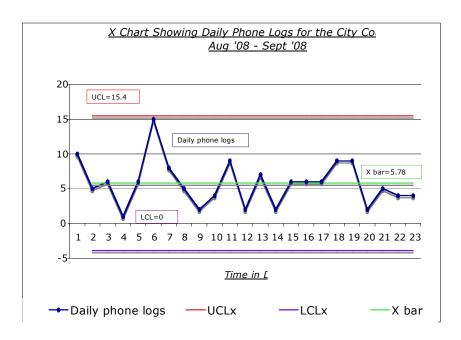
ACT: Initially, after the first week, we met as a group to review the data and realized that there wasn't enough columns to successfully capture all of the data, so we revised the format, tested the new format x 2 weeks, made some changes in location of the log to hopefully improve compliance, and have now worked this into our daily office routine. Adopting this new log has not increased staff time within the office, but has helped us capture meaningful data. We continue to use our new log to keep data regarding in-office client services. We are very hopeful that after 2009, when the data has been maintained for a full year, that it will dramatically decrease the time that the director will spend preparing program reports for the health board and county commission. We have decided that keeping a log of all of the phone calls coming into the health unit served no specific/useful purpose, so this part of the log was stopped.

Results

We are currently using the in-office service log which is tallied at the end of each day, week and month. We will be able to look at services provided, varying staffing needs, etc. as we gather a full year of data. We plan to expand the data collected to include revenue collected for each service to more accurately complete individual program evaluations (comparing cost vs. revenue for each program) which are used to provide information to the health board and the county commission.



The chart above shows the number of daily public health office visits throughout our PDCA cycles. We will be running a similar chart noting the increase in office visits, particularly in the flu season. This information will be very useful when discussing staffing concerns within the public health office.



Lessons Learned

Quality Improvement does not have to be an overwhelming task. The QI process works very well when taken step by step. It was difficult fitting additional meetings into schedules that are already full, but as staff realized that this process was not overly time consuming and that there was good reason for the changes in process, time was made and it began to be more of a priority and to take on more meaning. Management needs to maintain a very positive attitude about QI to portray this to other staff. We liked the method of individually completing the self assessment and then discussing it as a group. As a small unit, this worked very well. The ability to utilize a QI consultant to help us work through this QI process was extremely helpful.

Next Steps

We will continue to utilize the in-office log. We are hoping to analyze revenue per program at the end of each week, which will be compared with the number of clients seen for each program. We have always wanted to improve our services, but we just hadn't taken the time to really look at what the process was or how we might improve. We will continue to use the tools that we have been given to do ongoing QI which will assist us in being ready for voluntary accreditation in 2011.

Conclusions

Although we will not know if we have reached our exact goal of 90% reduction in time for preparing the program evaluations until after the end of the year (we do program evaluations annually between January and May), we are confident that the time will be dramatically reduced, since the time is captured per program on a day-to-day basis and will be tallied each week and each month.

Executive reporting will be less time consuming utilizing the new log system which will analyze data more accurately and in increments. The full potential of this change will not be realized until an entire fiscal year of data can be obtained, although program evaluations will take significantly less time for 2008 since data for 5 of the 12 months will already be tallied.

Appendices

Appendix A: QI Storyboard