Accreditation Beta Test Quality Improvement Project: Final Report

MIAMI-DADE COUNTY HEALTH DEPARTMENT

REDUCTION IN PERCENTAGE OF CLIENTS WITH CYCLE TIMES GREATER THAN TWO HOURS IN FAMILY PLANNING CLINIC

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EXECUTIVE SUMMARY

The Miami-Dade County Health Department (MDCHD) is the local branch of the Florida Department of Health, a state public agency. MDCHD, a two-time Governor's Sterling Award Recipient, has approximately 900 employees and an operating budget of $77 million to deliver public health services to the 2.5 million residents and visitors of Miami-Dade County. Participating as a beta site for National Public Health Accreditation, MDCHD was able to validate that it meets many of the standards outlined in the self assessment and it also created an opportunity to identify opportunities to be better prepared to go for accreditation in the near future. The agency is now working on developing a quality improvement plan to be deployed in 2011. The agency chose to address cycle times greater than two hours in one of its clinics. As a result of this quality improvement project, MDCHD was able to reduce the percentage of clients waiting over two hours.

BACKGROUND/INTRODUCTION

MDCHD's primary interest in serving as a beta site was to prepare and strengthen its capacity for national accreditation. As one of the largest county health departments in the nation, serving a diverse urban population, MDCHD is a flagship organization that strives to set an example in public health.

MDCHD follows the Sterling Management Model based on the National Malcolm Baldrige criteria, which uses proven standards of performance excellence to make improvements that generate better operations, customer value, and overall results. MDCHD was the first county department in the state of Florida recognized as a role model in performance excellence as a recipient of the Governor's Sterling Award in 2002 and again in 2006.

Miami-Dade County Health Department believes that the overall approach to maintaining an organizational focus on performance improvement, including organizational learning, is through strategic planning and systematic evaluation and improvement methods. To this end, providing a self assessment to measure agency capacity against the standards and measures of the Public Health Accreditation Board (PHAB), interpreting the results, along with the site visit process would have provided great learning opportunities for the MDCHD. MDCHD feels confident that after having gone through this process, this was accomplished. Furthermore, MDCHD is in a better position to apply quality improvement processes to meeting all the standards in the future.

As an organization, MDCHD always appreciates feedback from other entities on how to become a better organization and help accomplish the agency's vision of being a world class public health system. This was another opportunity to get that feedback.

BETA TEST SELF ASSESSMENT

The self assessment was a major component of the accreditation process. At first, the self assessment at first was seen as a very complex assignment but with good leadership discussions and agreements on how to address it, MDCHD successfully completed it on time.

The approach selected was rather simple. First, a small team put together by the administrator, reviewed the Domains and made recommendations of "domain champions," which would be senior leaders. Then, the senior leaders were presented this information in their weekly meeting to accept or make their own recommendations. Senior leaders then organized their teams within their programs to address their corresponding standards and measures. Multiple planning meetings were scheduled with the senior leaders and their critical staff with the accreditation coordinator. These meetings allowed the groups to get guidance from the Accreditation Coordinator as to how to collect the proper data and documentation for their corresponding domains.

A few approaches were discussed and implemented to collect the data, such as the creation of a SharePoint Site, but it was the use of a shared drive and folders that helped in the end to gather the evidence. A naming convention for the files and instructions on how to save the documents under the respective folder was developed and passed on to the senior leaders. The accreditation coordinator along with the help of a few individuals was able to go through the evidence ensuring the documents submitted were appropriate. It did require some back and forth, but staff managed to provide the documents that were most suitable.

The staff worked enthusiastically for approximately one month to collect the data. Even though the team was able to gather all the information on time, in retrospect, it would have been wise to start much sooner. By starting a month prior to the due date, the staff involved felt overwhelmed and overworked. Researching and collecting the proper documents was no easy task.

MDCHD did have the resources to complete this process in one month, but this could have easily become a lost battle because of the lack of time. For a health department of MDCHD's size, it would have been wise to dedicate at least another month to the collection of evidence. Because of the short timeframe, the team found a few instances with submitted documents that did not really fit with a standard and the team had to go back and try to collect new ones. Some of the team doubted this would happen, but more time would have made those experiences less stressful.

Conducting the self assessment also brought some additional benefits to the organization. It allowed employees to work with each other and enhanced communication cross-programmatically. Satisfaction among employees was clear as they felt they had contributed to the accreditation process of the health department.

Once the self assessment was completed, the team was clearly able to determine what standards the MDCHD was meeting and exceeding. More importantly, the team also identified the standards that needed to be addressed in order to meet them.

The following table has a few examples from the self assessment that showed MDCHD was able to provide the evidence necessary to meet the measures and other examples showing improvement was needed:

Standard/Measure	Standard and Significance
Domain A.1.B	A1.1 B: Maintain policies and procedures regarding agency operations, review policies regularly and make them accessible to staff The documents selected for this measure served as evidence to show that the Miami-Dade County Health Department does have a policy and procedure manual and that the policies are reviewed periodically. The agency also submitted a table of the organization as requested by the self assessment and how staff has access to such policies.
Domain 2.4.B	2.4.3 B: Provide timely communication to local media during public health emergencies The submitted documents showed evidence that our MDCHD conducts press conferences periodically. The agency invites the media to media availability and different local reporters have an opportunity to interview the administrator or other subject matter experts on a particular topic. In this case, the agency showed evidence pertaining to H1N1. MDCHD also publishes fact sheets, flyers, and brochures to educate the public on how to communicate with health officials during public health emergencies
Domain 8.2.B	8.2.2 B: Implement an agency workforce development plan that addresses the training needs of the staff and the development of core competencies Even though MDCHD employees have an individual development plan that accompanies their annual performance appraisal, MDCHD did not have an agency workforce development plan. To consider accreditation, MDCHD will have to develop one in the near future.
Domain 9.2.B	9.2.1 B: Establish a quality improvement plan based on organizational policies and direction MDCHD was not able to provide evidence because the agency did not have a quality improvement plan.

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

PLAN

Assembling the Team/ Identifying the Problem

The cycle time experienced by clients in the Health District Center (HDC) Family Planning Clinic was the problem that was chosen. Team members were identified by having a representative from each clinical program; they were chosen by their respective senior leader of that clinical program. There were no barriers to participation or changes in team composition.

Identify the Problem

The group used techniques such as brainstorming, consensus, multi-voting, process flow charts, Pareto charts, and survey data to identify and focus the problem to address. The team initially focused on the overall results from the 2008 Customer Satisfaction Survey. The data showed clients were dissatisfied primarily with their wait time (see Appendix 2). A Pareto chart revealed the highest dissatisfactions within the clinical areas. The team came to a consensus to focus primarily on the Tuberculosis (TB), Family Planning (FP), and STD programs due to the time frame allotted for the QI Team. The team multi-voted and agreed to target only the health centers although TB, FP, and STD services are also provided at satellite clinics; the health centers represented the highest client count and a center administrator was assigned to these sites.

Upon reviewing the client cycle time data from all three health centers, the Little Haiti Health Center had the highest cycle time by less than one percent. Following further brainstorming, the team came to a consensus to focus on HDC, formerly known as the Family Medical Center, as the client count was three times greater than the other centers. Once HDC was selected, the team agreed that there was a need to narrow the focus to a specific program. After lengthy brainstorming sessions, the group multi-voted and selected the FP program as the final area of focus, although the data showed STD had the largest client cycle time of two hours or greater. The team agreed, due to the complexity of the STD program and the existing contractual agreement for medical staffing, it would be more challenging to implement changes at this time (see Appendices 3 and 4).

Other MDCHD QI problems that were considered, but not selected, were standardizing customer service within MDCHD and restructuring the Refugee Health Clinic billing process. A few factors led to the selection of this problem. According to the Customer Service Satisfaction Survey, the items of greatest dissatisfaction were waiting time and receiving an appointment in a timely manner. Secondly, existing data on client wait/cycle times were reviewed in order to validate the items of greatest dissatisfaction reflected on the Customer Satisfaction Survey responses. When compared with national and state benchmarks, the team determined the cycle time was too long. Lastly, the problem addresses MDCHD Strategic priority Service Excellence, objective 3.6, which is to improve customer satisfaction through standardized service delivery processes.

The final aim statement that the team agreed to use was “By Nov. 30, 2010, the percentage of the FP clients at HDC with a cycle time greater than two hours will be reduced 50 percent, from 37 to 19 percent.” The statement was last revised on Oct. 14, 2010. The original aim statement was “to develop a systematic client centered appointment system for the clinical programs within MDCHD that will enable timely, cost effective, and efficient services to clients. “

Current Approach

Currently, there is no systematic MDCHD appointment process. Appendix 5 outlines how each program/unit is managing its clientele using its own approach and not as part of a systematic and consistent process. The appointment process in the FP clinic at HDC is that, although new/annual/return appointments are provided with an appointment day and time, clients are given a number in order of arrival regardless of appointment time. Pregnancy tests clients are walk-in only and receive a different color number in order of arrival up to a maximum 14 per day. Clients are served in number order rather than by appointment time.

Appointments in the health management system (HMS) do not match the daily provider availability and are not adjusted to account for planned absences. Thus, the FP HDC appointment clerk maintains a

manual appointment schedule. Numbers to be seen by appointment type in this manual schedule is adjusted weekly/daily according to the provider's instructions.

A fishbone diagram was the method that was used to do a root cause analysis. The QI Team brainstormed ideas about what the main causes of the effect were. They questioned what the problem was, who was impacted, and how and where it occurred to develop the main branch headers. For each main cause category, they shared ideas about what they thought were related sub-causes that might affect the issue or problem statement. Then the team used the "five whys" technique toward each main cause to drill down further into the details. The results showed that the potential root causes were accountability, process, and leadership. Please refer to the fishbone diagram in Appendix 6.

Identify Potential Improvements

A few improvement theories were explored. First, if a standardized policy and procedure was developed to serve clients in order of appointment time rather than arrival time, staff would be able to decrease the percent of clients with a cycle time greater than two hours. Second, if the HMS appointment scheduler was to reflect workload capacity, staff would match appointment times to provider availability. Lastly, if there was leadership commitment to implement policies and procedures, it would result in the reduction of the percent of FP clients with a cycle time greater than two hours.

The improvement theory that was selected was to develop a client schedule that matched provider availability, update the HMS appointment scheduler to reflect the client schedule, train staff on the HMS scheduler, and develop/implement processes to serve clients based on their appointment time. Consequently, client cycle time would be reduced.

The method that was used to determine the improvements to test was a before and after line graph. The graph illustrated the percentage of clients with a cycle time more than two hours from August 2009 to July 2010. The graph was also used to monitor and track client cycle time from August 2010 to the present (see Appendices 7, 8, 9, and 10). The measurable improvement goal was to decrease the percentage of clients with a cycle time greater than two hours from 37 percent to the target of 19 percent (50%).

Develop an Improvement Theory

If the FP Program in the HDC develops a client schedule that matches provider availability, updates the HMS appointment scheduler, trains staff on HMS scheduler, and develops/implements processes to serve clients based on their appointment time, then the cycle time of clients will decrease. The team would determine if the change resulted in improvement by comparing the cycle time of clients before and after implementation. If the percentage of clients with a cycle time greater than two hours has decreased, then an improvement was made as a result. The team would collect cycle time data weekly to track the status of their efforts. By comparing the prior and after implementation data, the team will be able to determine the effectiveness of their countermeasures (see the Action Plan in Appendix 11).

Team Members

The facilitator was Roderick Parker who served as the technical expert on QI story, provided training, guided workgroup in process steps, maintained QI story steps, and obtained data and created graphs, fishbone format. One member from STD, TB, Women's Health (WH)/FP, and Immunization were appointed. They represented individual program interests on the team, serves as program expert, obtained needed information for the workgroup on their particular program, informed the program's senior leader on workgroup activities and assignments, facilitated workgroup assignments for their particular program, and attended/participated in workgroup trainings and meetings and decisions. They

were also assigned a specific workgroup task based on skill.

Gracie Reyes represented WH/FP (served as workgroup chair, set meeting dates, and agendas), drafted FP appointment policy and procedures, updated client schedules to match provider availability, trained staff, oversight of implementation, completed PDCA with FP providers, and supported the staff supervisor. Dyna Voltaire represented Immunizations. Martha Velazquez represented STD (assisted with entering data collected and providing data in meaningful formats). Jessica Cruz represented TB.

Sheryll Lee was the center administrator-at-large. Valerie Cromartie was the clinic administrative support services (CASS) supervisor. They represented the interests of center administrators and the CASS supervisors over clerical staff providing support services to the program clinics obtains needed information for the work group, facilitated workgroup assignments for their particular Center, and attended/participated in workgroup trainings and meetings and decisions. Ms. Lee ensured implementation of the countermeasures by the clerical support staff to the FP clinic. She gave appointments appropriately, processed clients in order of appointment time, and completed PDCA for the process. Valerie Cromartie served as the workgroup vice chair and maintained workgroup minutes.

Juan Morejon was the HMS representative. HMS is the department's operations and data collection system. He obtained needed information for the workgroup (i.e., indicators and statistical data) and formatted the data into graphs. He also attended/participated in workgroup trainings, meetings, and decisions. Lastly, he served as a technical expert on QI teams.

Denise West was the senior leader and facilitator from the Clinic Redesign Workgroup. This leadership workgroup identified an issue of client appointments and chartered a workgroup to implement a systematic client centered appointment system across the agency's programs and centers. Ms. West guided and ensured workgroup remained on-track, attended/participated in workgroup trainings and meetings, and decisions. She also communicated activities and exerted influence to MDCHD senior leadership to support workgroup activities, complete assignments, and implement workgroup countermeasures. David Rodriquez represented the Refugee Health Assessment Program. He provided expertise in obtaining data from the HMS system. Lastly, Gina Bispham represented the TB Program and provided her clinical expertise.

DO

The improvement process did not proceed as initially planned (see the Project Planning Worksheet in Appendix 12). The team planned on starting the countermeasures in August 2010. However, because all HDC clinical programs and staff moved into a new building the final week of August, staff time was diverted to adjusting services and client flow within the new facility. Implementation occurred in November 2010 and followed the Action Plan (see Appendix 11).

The QI team collected cycle time data to determine the effectiveness of their efforts. There were no issues encountered in the collection of these data. They were able to collect the data that was identified in the plan step. During the do phase, data was collected weekly to track progress and PDCA with the implementers weekly (see Appendix 9).

CHECK

The first two weeks resulted in an unfavorable increase in the percentage of client cycle time greater than two hours. A PDCA identified staff confusion on processing clients in order of appointment time and the proper sequencing of walk-in clients and the need to revise the client check in sheet. A

secondary issue was the broken dumbwaiter for sending medical records to the clinical, resulting in provider delays in serving some clients. Adjustments and re-training occurred.

The third week reversed the negative trend. A PDCA of the data revealed that although cycle time was 36 percent, slightly below the original average of 37 percent, the same number of clients were served but with fewer provider hours. Therefore, the number of clients remained the same, client cycle time decreased, staffing decreased, and productivity increased. No changes were made.

During the fourth week, the client cycle time greater than two hours dropped to 24 percent. At the end of the fourth week, Nov. 30, there was not been sufficient time to study the data as a team and PDCA results before the NACCHO final report due date of Dec. 4. However, it appeared that the implemented countermeasures had the intended results of decreasing the client cycle time.

Four weeks of implementation and data collection is insufficient to conclude that the counter measures have been effective (see Appendix 9). Next steps will be to continue to collect weekly data through February 2011 to analyze if the trend in reducing the client cycle time continues and to fine tune the processes with staff using the PDCA method.

ACT

Once the improvement process has been validated with sufficient data, the process will be applied to other programs and locations, using client cycle time to track results.

RESULTS, NEXT STEPS, AND ACCREDITATION

MDCHD feels that having the opportunity of being a beta test site has allowed them to grow as an organization and the agency feels better prepared to apply for accreditation in the near future. The agency has managed to awaken the quality culture it once had several years back. It has also reminded the agency that it must invest in its employees because they are the most important resource. MDCHD will continue to provide trainings on QI and will also develop and implement a quality improvement plan. Furthermore, MDCHD will develop a workforce development plan. By addressing these different items, the agency feels confident that it will continue to grow as an organization and that it will be ready to see national accreditation.

Now that employees are being trained on QI, the team will work with their supervisors to begin establishing teams to address problems in the organization. Employees will now have the right tools and knowledge to identify problems and fix them.

PRACTICES WORTH SHARING

In order to promote accreditation, the MDCHD administrator, Lillian Rivera, created and lead a promotional/awareness campaign called PHAB by 2013. The goal of this campaign was to raise awareness and give the health department the challenge of becoming accredited by their seventieth anniversary. The goal is to apply as early as 2011. The logo developed for the campaign is part of standardized screen saver on staff computers reminding employees of this goal (see Appendix 13).

One week prior to the site visit, the agency had a spirit week during which staff was able to participate in different activities reminding everyone the site visit was coming. Because the accreditation process did not involve every staff member, the spirit week allowed everyone to feel they were a part of something.

LESSONS LEARNED

Having gone through the Accreditation experience, MDCHD has been able to identify multiple lessons learned. These lessons have been broken down into several categories:

Self Assessment/Evidence Collection

- The time dedicated to the self assessment is extremely important. It is best to start early and have enough time to review the documentation collected.
- All documents submitted must have a title, date, and signature (when needed). Do not use documents in draft if a final version already exists.
- The self assessment requires a lot of coordination.
- Individuals must be involved from the beginning of the whole process so when they come to work on the self assessment, they understand what they are expected to do and why they are doing it.

QI Project

- Understand the QI project is as important as the self assessment. More emphasis was placed on the self assessment as an organization
- The QI Team learned that more time is needed between when the midterm report is approved and when the final report is due. This will enable the team to gather sufficient data to draw logical conclusions. The team also became more aware just how vital communication and data is to an organization.
- Setting realistic goals was another lesson learned. More time to train the employees that would be taking part in the improvement process and sustaining it was a luxury the team wish was a reality.
- It would have been better to involve the key players earlier on in the improvement process. The idea for the QI project was selected too late in the process. Because of this reason, time was lost and that is why the group felt they did not have enough time to go through the whole PDCA cycle.
- The QI Team did not get an opportunity to be trained as the accreditation coordinator did. It would have been a tremendous help if the group had been exposed to the same concepts the accreditation coordinator had been exposed to. The QI project group felt they did not get the proper training and/or guidance to successfully complete the QI project.

Other

- Selection of the accreditation coordinator selected is key. The work an accreditation coordinator does is not difficult, however, if the person selected is already involved in many other initiatives, projects and complex day to day duties and responsibilities, the organization may miss out on successfully going through all the requirements of accreditation.
- Organizational skills are extremely essential. If not the accreditation coordinator, someone in the team must be able to collect and track information, people, and resources to succeed.
- Invest in quality training. MDCHD health department started late on this. MDCHD is currently providing trainings in the QI control story. It would have been helpful to conduct these trainings simultaneously with our accreditation efforts. With staff being trained, it would have made it much easier to identify a problem to work on and with a list of problems to choose from. The team struggled to find a good problem to address in their QI project.

APPENDICES

Appendix 1: Storyboard

Additional Appendices:

Appendix 2: 2008 customer dissatisfaction survey results
Appendix 3: Cycle time more than two hours by site Pareto chart
Appendix 4: Health district center Pareto chart
Appendix 5: Current situation
Appendix 6: Fishbone Diagram
Appendix 7: Health district center GAP
Appendix 8: Health district center moved
Appendix 9: Health district center post-implementation weekly results
Appendix 10: Health district center post-implementation monthly results
Appendix 11: Action plan
Appendix 12: Project planning worksheet
Appendix 13: PHAB campaign logo