Quality Improvement Process Summary Worksheet

QI Project Name: **Central Michigan District Health Department QI/Accreditation Preparedness Demonstration Project**

QI Team Members

Name	Title, Department or Role
Mary Kushion	Health Officer – Project Lead
Kelly Conley	Dir. Of Personal Health Services Division
Chris Lauckner	Dir. Of Health Education Services Division
Michelle Patton	Dir. Of Environmental Health Services Division
Craig Clingan	Dir. Of Information Tech. Services Division

What were you trying to accomplish?

Develop of an agency strategic quality improvement plan that is based on NACCHO's Operational Definition Self-Assessment results in order to improve capacity and accountability as well as to prepare the agency for national public health accreditation.

1. PLAN: What was the state of affairs when you began?

The Central Michigan District Health Department (CMDHD) is innovative and creative in implementing new ideas and/or finding new approaches to current processes. However, seldom do we take the time and/or effort to determine if these new programs/processes/interventions are actually improvements. We have an agency plan, but it is not data-driven and cannot be measured except by staff perceptions.

The administrative and supervisory staff completed the Operational Definition self-assessment. They reviewed the results and determined we were very good at "Planning" and "Doing", but not so good at "Checking" and "Acting". We do have various ways to measure customer satisfaction as a form of program evaluation. We also noted that in Michigan we have a public health accreditation process that focuses on program outputs, policies and procedures, but less on program and health outcomes. We also have an agency strategic plan to improve agency operations, but it is not focused on community involvement, best practices and data collection/analysis. The administrative team decided to concentrate on Domain IX A. LHD Evaluation Strategy Focuses on Community Outcomes as its primary target area, but wanted to develop strategies that would improve the scores in all of the domains and in all cases would have an emphasis in quality improvement. We believe this approach would lead us to our goal of being able to build capacity to improve performance and health outcomes, while at the same time, preparing us for national accreditation.

We shared the results of the self-assessment at a district-wide meeting that also included an overview of the Plan-Do-Study(Check)-Act PDSA process. Staff was asked to prioritize the domains and to provide input on how to improve the self-assessment scores over then next 3-5 years. They were also led through a "Fishbone Diagram" exercise. Staff was instructed on the components of a Fishbone diagram and through a small group process, developed a total of 12 Fishbone Diagrams for agency programs/processes. The staff was creative and enthusiastic of the process. We received very positive feedback from the staff.

The agency's three service divisions selected a test PDSA project as a sub-component of the project in order to enhance their knowledge and use of the PDSA model, to engage the staff in the QI concept and to test the agency's draft QI policy prior to formal adoption.

We also conducted the Baldrige Criteria for Performance Excellence "Are We Making Progress" survey to determine front-line staff perceptions of the agency in the 7 leadership categories and how they were alike/different from the leadership team. Those results were also included in the quality improvement plan for the agency.

What change could be made that would result in improvement?
It is a new approach to design the plan based on the self-assessment results which made them "data-driven" plans as opposed to the current plan which was originally based on the thoughts and feelings of vocal staff members. We will be able to measure our success and/or improvement as an agency with subsequent self-assessments, surveys and health outcome data rather than subjective opinions.

We conducted three test projects during the grant period. We chose a Personal Health, Health Education and Environmental Health program and had each division director conduct their own rapid cycle improvement process. The three test projects also used data or evaluation results to guide their projects rather than "going with your gut". The data generated and/or new processes implemented have shown improvements in health and/or agency efficiency in two of the three projects.

We also provided training to our entire 118 member staff. At the end of the training we had 12 new fishbone diagrams which we will be using over the course of the next few years for QI projects as well as all of our staff having an overview of QI and why it is important to infuse it into our program plans.

2. DO: How was the test implemented?
With the advice and expertise of our consultant Janan Wunsch-Smith and project leader, Mary Kushion, the staff and leadership team developed an agency quality improvement plan that incorporated the "data" from the self-assessment and Baldrige surveys and the staff input on how to improve the self-assessment scores. Affinity diagrams were used to combine similar ideas and concepts. The group referenced the Michigan QI Guidebook, participated in the TA Extravaganza and the Public Health Foundation Memory Jogger. Two of the test projects utilized fishbone diagrams as well.

The only obstacles we encountered were in terms of life getting in the way of our project. We were not planning on having immediate family members pass away; kids breaking their arms or needing their appendix out, but we did indeed complete the plan and the projects on time in spite of the unexpected absences of many of the project team members throughout the grant project period.

3. CHECK: Did it work?
The current agency plan (35 pages) was "checked" in January 2008 and it was determined at that time that the new plan would need to:

- Be more condensed – tie to the core functions of public health
- Be based on the Operational Definition
- Include strategies that would allow us to show improvements in performance and health status of the community
- Show accountability and readiness for national accreditation

The new (10 page) agency plan was completed, shared with the Central Michigan District Board of Health at its November meeting and shared via a district-wide conference call and PowerPoint presentation with all staff. The plan includes 7 goals that are based on the Operational Definition domains. Each goal has at least two, time-specific objectives and strategies. These will be "checked" at the monthly administrative staff meetings.

The initial response has been nothing but positive. The staff is eager to begin the plan which will begin in January 2009.

The three test projects also had results and are indicated as follows:

Personal Health- Family Planning Inventory System

The expected result is that most if not all family planning supplies will be accurately accounted for on a monthly basis. Not only were supplies more accurately accounted for it also fulfilled the Michigan Department of Community Health (MDCH) requirement for a perpetual inventory log process for all family planning contraceptive supplies. In addition, supply variances went down when staff became more familiar with the new process and were being held accountable for recording all supplies dispensed. Lastly, further quality improvements were made during the course of the project to the inventory process overall and streamlining the tracking process.

Health Education- HIV Continuum of Care drug adherence

100% of HIV+ persons enrolled in the HIV Continuum of Care Program is adhering to their prescribed HIV medications, as directed. Yes, the results matched the expectations.

The new approach was an improvement as it offered an opportunity to reflect on a client's ability to adhere to taking his/her medications, to gauge the outcome based on changes that were implemented, and to have the QI Team develop solutions that will assist client's toward maintaining their adherence levels.

Environmental Health – Serv-Safe class attendance and restaurant inspection scores

There was no correlation made of these attendees and facilities and their rate of critical violation reduction to the facilities with no CMDHD Serv-Safe attendance and their rate of critical violations due to the lack of adequate data as we learned from our study of our current system.

4. ACT: What are the next steps?

The agency's quality improvement plan will be implemented in January 2009. As stated previously, it will be monitored on a monthly basis and revised as necessary, but at least annually. The Baldrige survey and the Operational Definition Self-Assessment will be repeated in May 2010 to measure improvement and to adjust the plan as the data/feedback warrants.

The administrative team will continue to offer quality improvement training opportunities to the staff and will encourage board of health members to do the same.

Once the agency has valid community health assessment data, it will be able to utilize the data to create quality improvement benchmarks as part of the PDSA planning process for agency programs. As stated previously, we have 12 fishbone diagrams already developed by the staff which we will be using as starting points in our QI efforts.

Plan---------------------------->	**Do----------------------------->**	**Check------------------------>**	**Act**
Self-Assessment Data Collection Staff/board input	Implement strategies of plan	Monitor the plan's time lines, accomplishments and barriers analyze health data	Update and revise plan Inform stakeholders staff board

LOCAL HEALTH DEPARTMENT NAME:	Central Michigan District Health Department
ADDRESS:	2012 E. Preston Avenue, Mt. Pleasant, MI 48858
PHONE NUMBER:	(989) 773-5921
SIZE:	190,000
POPULATION SERVED:	Arenac, Clare, Gladwin, Isabella, Osceola, Roscommon Counties
PROJECT TITLE:	Family Planning Inventory Accountability

PLAN
Identify an opportunity and Plan for Improvement

1. Getting Started
CMDHD would like to assure that all family planning supplies that are ordered and dispensed in our clinics are accounted for and accurately billed to insure sufficient reimbursement for the supplies. This was identified as a concern in October 2007 during our Title X Family Planning review and also found true during cycle 3 of the Michigan Public Health Accreditation visit in March 2008. An online inventory tracking system was created and Individual Dispensing Logs for each family planning method were implemented in each county.

2. Assemble the Team
Kelly Conley, Personal Health Director, Debi Harvey, Family Planning Coordinator, Craig Clingan, IT Director, and Carolyn Cardon, Administrative Services Director. Family Planning staff in each county will be responsible for the day to day accountability.

3. Examine the Current Approach
Supplies were ordered through the main office supply clerk and dispensed to our other counties for Family Planning. There was never a tracking mechanism in place to verify that the supplies dispensed to clients were accurately billed to insure sufficient reimbursement for the supplies. There were multiple discrepancies and various supplies unaccounted for in each county.

4. Identify Potential Solutions
Staff needs to be more accountable for supplies dispensed to clients. A billing process needs to be implemented to assure that the products dispensed are billed appropriately and in a timely manner. Each county will be responsible to keep an Individual Product Dispensing Log and record every family planning method dispensed to a client by lot number. At the end of the month they will count the exact number of each supply currently in stock and will record that number on the online perpetual inventory showing a loss/gain of product.

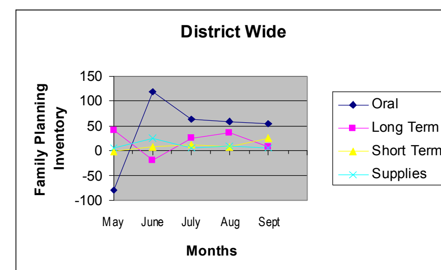
5. Develop an Improvement Theory
By developing both an online inventory logs for all types of contraceptive supplies and individual product dispensing logs, staff will be more accountable for all contraceptives given out in the family planning clinic. The logs were placed online for both staff to use and administrative staff to view and oversee as needed. This improvement also met the MDCH family planning standards for having a perpetual inventory tracking system for all contraceptives issued to clients.

DO
Test the Theory for Improvement

6. Test the Theory
Since May 2008, each county has kept an Individual Product Dispensing Log to account for supplies dispensed either to clients, transferred to other counties, or expired product. They have entered the number of products remaining on the online perpetual inventory system, showing the loss/gain of products. Input was obtained from the staff using the forms and the logs were redesigned for easier use in October 2008.

CHECK
Use Data to Study Results of the Test

7. Check the Results
Results showed that staff was much better at tracking inventory when they knew they were accountable for each method. The variance for all contraceptive methods and supplies was closer to zero and staff accountability is much greater. Staff is aware that their supervisor will be tracking how closely their inventories are on a monthly basis.



In the process of studying the results, another ordering log was developed online to make sure that staff is logging in all supplies ordered from our central office. This also is improving our accountability and efficiencies. This will be studied in the upcoming months.

ACT
Standardize the Improvement and Establish Future Plans

8. Standardize the Improvement or Develop New Theory
The new ordering logs will be shared with each supervisor. In addition staff will be given additional training and feedback regarding the accuracy of their individual inventories. There will not be development of a new theory, but rather further improvements to our current new family planning inventory supply process.

9. Establish Future Plans
The new ordering log was implemented in November of 2008, to make sure staff was recording in all supplies that were actually sent to their office. In addition, it is also now planned to study the number of contraceptives issued to clients and compare it to the actual number of contraceptives actually billed for. This process of being more accountable and accurate in regards to our family planning supplies have shown to be both financially rewarding and meets the necessary requirements set in place by both the Federal and Michigan's Family Planning Guidelines.

Quality Improvement Process Summary Worksheet
QI Project Name: Family Supply Inventory Accountability

QI Team Members

Name	Title, Department or Role
Kelly Conley, MS, RD, CLE	Personal Health Director
Debi Harvey, RN	Family Planning Coordinator
Craig Clingan, BS	IT Director

What were you trying to accomplish?
Central Michigan District Health Department (CMDHD) will assure that all family planning supplies that are inventoried and dispensed are accounted for with both our new online inventory tracking system and new product dispensing logs, by November of 2008. The amount of supplies in the current inventory should equal the amounts that were dispensed to individual clients. Therefore, it is our goal to have a monthly variance of zero, to maintain complete accountability. An improvement in the overall variance of supplies by contraceptive type every month in all 6 counties is anticipated, once the new inventory process has been put into place.

1. PLAN: What was the state of affairs when you began?
During October of 2007, during a Federal Title X Family Planning review, CMDHD was identified as not having a perpetual inventory system as is required in the National Family Planning Standards and Guidelines. This was also found to be true during cycle 3 of Michigan Public Health Accreditation site visit to our family planning program. After these two audits, CMDHD implemented both an online tracking system for keeping an accurate inventory for all six branch offices and also an individual product dispensing log for every family planning method to track disbursement. This new process was developed in May of 2008.

What change could be made that would result in improvement?
With the online inventory system, and written perpetual inventory logs in every branch office, it is theorized that all family planning supplies will be accurately accounted for, and therefore result in a decreased loss of supplies and more staff accountability when issuing supplies to clients. Staff is required to inventory all supplies monthly, which then must match the actual products that were dispensed on the individual product dispensing log. The first month of the process, showed that there were multiple discrepancies and various unaccounted for family planning supplies in all six counties. The percent of missing inventory (supplies) upon implementation will be compared on a monthly basis to every month since implementation.

2. DO: How was the test implemented?
Kelly Conley – Oversight of all office staff and supervision. Policy development for the new perpetual inventory process which includes the online inventory tracking process and the individual product dispensing logs.
Debi Harvey – Oversight of the Family Planning staff and overall program accountability, including development, monitoring, and modifications to inventory logs and processes.
Craig Clingan – Implementation of the online family planning supply and inventory forms for staff use.

3. CHECK: Did it work?
Data collected – family planning supplies distributed to every branch office, distribution of supplies to all family planning clients by lot number, monthly inventory counts of all supplies, corresponding online inventory logs, variance of all contraceptive types for difference between the amount used in each office in comparison to the amount accounted for on each individual dispensing log.

Initially, variances ranged from negative 81 cycles to positive 40 cycles in the amount supplies accounted for. In July, 2008, we issued 1377 cycles of oral contraceptives, and the variance was 62 cycles (4.5% off). By the end of the 5 month process, the variances for all 3 contraceptive types were only 53 cycles over for oral contraceptives, and this number continues to be closer to a zero variance.

The expected result is that most if not all family planning supplies will be accurately accounted for on a monthly basis. Not only were supplies more accurately accounted for it also fulfilled the MDCH requirement for a perpetual inventory log process for all family planning contraceptive supplies. In addition, supply variances went down when staff became more familiar with the new process and were being held accountable for recording all supplies dispensed. Lastly, further quality improvements were made during the course of the project to the inventory process overall and streamlining the tracking process.

4. ACT: What are the next steps?
The data collected was analyzed and then compared. The new family planning supply inventory process did assure that there was a great improvement in the total number family planning supplies are accounted for on a monthly basis. In addition, staff now is very cognizant of supplies issued to every family planning client and are making sure that all current supplies in their office are accounted for on a monthly basis. Lastly, the inventory processes and accountabilities have allowed us to take the project another step to start to analyze accurate billing practices which is planned for the next six months.

Family Planning

Decrease the rate of family planning supplies that are unaccounted for or expired before used.

Clinic Issues
- Assure that all clinic supplies are locked
- Only issued by appropriate staff.

Staff Training
- Staff education for using the new logs.

Stakeholders
- Agency Administration
- Family Planning Staff
- MDCH Staff

Policy Development
- Have new policy in place to assure staff is aware of monthly inventory responsibilities.

Updated Logs
- Revisions to update and revise logs throughout QI process.

Have less than 10% of family planning supplies unaccounted for.

HIV STORYBOARD TEMPLATE

LOCAL HEALTH DEPARTMENT NAME:	CENTRAL MICHIGAN DISTRICT HEALTH DEPT.
ADDRESS:	2012 E. PRESTON AVENUE, MT. PLEASANT, MI 48858
PHONE NUMBER:	989-773-5921
SIZE:	190,000
POPULATION SERVED:	Arenac, Clare, Gladwin, Isabella, Osceola, Roscommon counties
PROJECT TITLE:	Adherence to Prescribed HIV Medication Treatment by Continuum of Care Program Clients

PLAN
Identify an opportunity and Plan for Improvement

1. Getting Started
~Improve adherence to prescribed HIV medication treatment by clients enrolled in CMDHD's HIV Continuum of Care Program

2. Assemble the Team
-Chris Lauckner, Director of Health Education Services
-Lorrie Youngs, RN – Supervisor, Health Education Services
-Catrina Weber, Case Manager
-Clinic Personnel [i.e. Dr. Peter Gulick, Linda Williams, RN, and Kati Mora, DT]

3. Examine the Current Approach
~The following steps are in place if HIV Medications are prescribed or changed:
1. Case Manager, in contacting client, will ask for feedback about the current HIV medication regimen – offering suggestions as needed.
2. The client may contact Case Manager and offer an update pertaining to HIV drug regimen.
3. The Clinic Personnel may ask questions concerning the client's prescribed HIV drug therapy when the client is seen in clinic;
4. The Case Manager completes an "Adherence Assessment" tool every 6 months.

With the above noted steps in place, the HIV Continuum of Care Program is currently performing its required task; however, the shortcomings are as follows:

1. The Case Manager / Clinic Personnel are not aware, in a timely manner, that a client is experiencing difficulty with his/her drug regimen;
2. Clinical Protocols do not exist for the Case Manager or Clinic Personnel to contact the client and determine if the prescribed HIV drug regimen is working [based on client input] and to offer any support or to refer the client to Dr.

Based on the shortcomings cited above, these issues cause clients not to adhere to their prescribed HIV medication regimen.

4. Identify Potential Solutions
~ Frequency of completing the "Adherence Assessment Form" – change from every 6 months to 1 x per month.
~Clients are asked "open-ended" questions pertaining to prescribed HIV medications during each clinic visit by clinic staff.
~Clients are encouraged to contact Case Manager or RN with potential drug reaction.

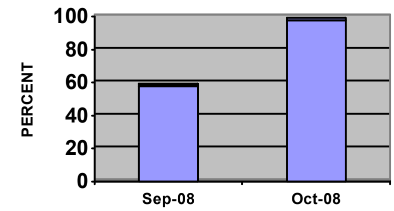
5. Develop an Improvement Theory
~With the identification and use of an "Adherence Assessment" tool utilized once a month, program personnel will have a more accurate means to track a client's medication adherence level and have the ability to formulate open-ended questions pertaining to an individual's adherence regimen and asked in the clinic setting.

DO
Test the Theory for Improvement

6. Test the Theory
~The Case Manager, once a month, contacted clients, especially those having difficulty adhering to their respective medication regimen, utilizing the "Adherence Assessment" tool. Clinic personnel asked open-ended questions, pertaining to a client's adherence levels within the clinic setting.

CHECK
Use Data to Study Results of the Test

7. Check the Results
~Data collected: 1) client input gleaned from both the "Assessment Tool" and medical chart review and 2) CAREWare 4.1 client management system information.



ACT
Standardize the Improvement and Establish Future Plans

8. Standardize the Improvement or Develop New Theory
~The "Adherence Assessment" tool will be utilized once a month as a means of tracking the adherence levels of clients who have been prescribed HIV medications and enrolled in the HIV Continuum of Care Program.

9. Establish Future Plans
~Develop specific open-ended questions for various disciplines [i.e. physician, nurse, case manager, nutrition technician] involved in the case management/medical care of clients enrolled in the HIV Continuum of Care Program in order to offer a comprehensive approach to, both, the understanding and importance of having client's adhere to their prescribed HIV drug regimen.

Quality Improvement Process Summary Worksheet

QI Project Name: *Adherence to HIV Treatment by persons enrolled in the HIV Continuum of Care Program*

QI Team Members

Name	Title, Department or Role
Chris Lauckner	Director of Health Ed. Services
Lorrie Youngs, RN	Supervisor, Health Ed. Services
Catrina Weber	Case Manager

What were you trying to accomplish?

Increase the adherence of taking prescribed HIV medications by HIV+ individuals enrolled in CMDHD's HIV Continuum of Care Program.

1. PLAN: What was the state of affairs when you began?

-The area of improvement was identified by the Case Manager of the HIV Continuum of Care Program who was aware that some clients were not adhering to their HIV drug regimen.
-A review of client charts was performed; notations assisted in identifying individuals who were not compliant in taking their medications as prescribed.
-The current process consists of: 1) HIV Continuum of Care personnel making a notation in the client's chart referencing the client's drug adherence practices and 2) performing an "Adherence Assessment" every 6 months.

What change could be made that would result in improvement?

-Two improvement theories were identified by the QI Team: 1.) Examine two "Adherence Assessment" design formats, select one, and use the selected assessment as a way to gauge a client's medication adherence level. 2.) Utilize the selected "Adherence Assessment" format once a month as contact was made with each client that was identified as not adhering to his/her HIV medication regimen.
-Improvement was determined and documented through reviewing appropriate medical documentation found in the client's medical chart and through the CAREWare 4.1 client records management system at the end of the study period.

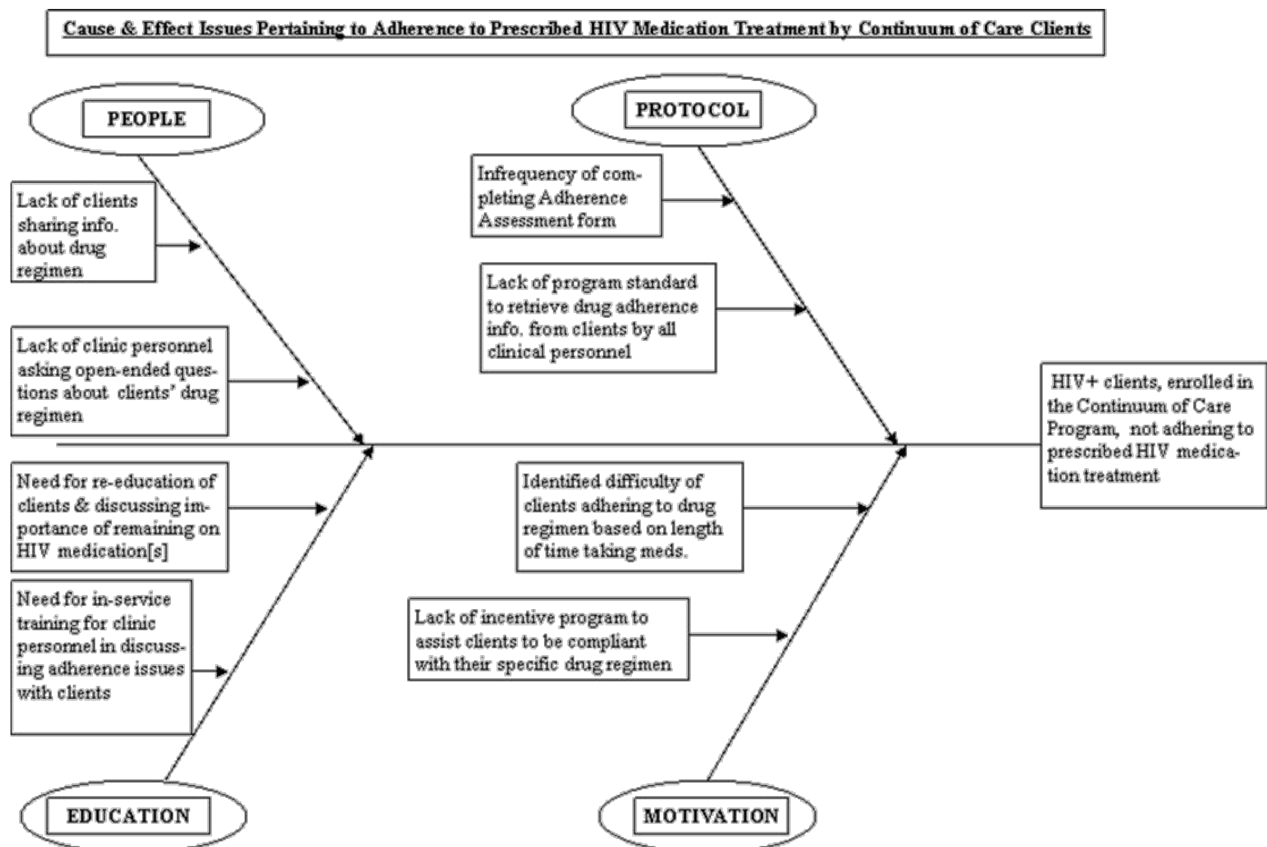
2. DO: How was the test implemented?

-An "Adherence Assessment" tool was selected and utilized; clients enrolled in the HIV Continuum of Care program were contacted a minimum of once a month.
-The Case Manager, once a month, contacted persons having difficulty adhering to their respective medication regimen and utilized the "Adherence Assessment" tool.
-The Case Manager, Health Education Supervisor, and Health Education Director met once a month to discuss the improvement theory and findings of the initiated process. The meeting also allowed for time to continue to problem solve ways in which clients could become adherent about taking their respective HIV medications, as directed.

-Along with the utilization of the "Adherence Assessment" tool, clients having clinic appointments were asked "open ended questions" regarding their adherence and offered an opportunity to ask questions pertaining to their respective HIV medication regimen as a way to highlight the medical importance of adhering to a prescribed HIV drug regimen; responses were documented in the client chart.

3. CHECK: Did it work?
-The data collected: client commentary pertaining to prescribed HIV drug regimen and the review of CAREWare 4.1 client management system information.
-100% of HIV+ persons enrolled in the HIV Continuum of Care Program is adhering to their prescribed HIV medications, as directed. Yes, the results matched the expectations.
-The new approach was an improvement as it offered an opportunity to reflect on a client's ability to adhere to taking his/her medications, to gauge the outcome based on changes that were implemented, and to have the QI Team develop solutions that will assist client's toward maintaining their adherence levels.

4. ACT: What are the next steps?
Yes, the process will be implemented.
A "next step" for improvement is to develop specific open-ended questions to be asked by the various disciplines [i.e. physician, nurse, case manager, nutrition technician] involved in the case management/ medical care of clients enrolled in the HIV Continuum of Care Program. Upon each client contact, program personnel would ask clients a few open-ended questions. This process would enhance communications between client and program personnel, increase level of patient understanding regarding their HIV drug regimen, assist clinicians in creating a more client-centered approach toward discussing a given client's prescribed HIV drug regimen. This "next step" would assist in addressing the cause and effect issues relating to HIV+ persons and their self-administering prescribed HIV medication.



Environmental health storyboard template

Local Health Department Name:	Central Michigan District Health Department
Address:	2012 E. Preston Avenue, Mt. Pleasant, MI 48858
Phone Number:	989-773-5921
Size:	190,000
Population served:	Arenac, Clare, Gladwin, Isabella, Osceola, Roscommon Counties
Project Title:	Reducing critical violations through food manager training program

PLAN
Identify an opportunity and Plan for Improvement

1. Getting Started
-Discussion of possible areas/opportunities to study for improvement of food safety in the food service program.
-Narrow down list to focus on specific program area. Manager training programs for food safety at licensed food facilities.

2. Assemble the Team
Michelle Patton-Team Leader
Director of Environmental Health Services
Steve King, Program Supervisor for food services.
Dan Swab, Environmental Health Sanitarian, charged with running Serv-Safe Food Manager Training classes.
Craig Clingan, Director of IT division.

3. Examine the Current Approach
Organize and promote Serv-Safe food training classes to managers of licensed food-service facilities.

4. Identify Potential Solutions
Reducing the number of critical food violations which has a direct correlation to food borne illness.

5. Develop an Improvement Theory
By recording the dates of Serv-Safe attendance and looking at reduction of critical violations following, this will help emphasize to the licensed food facility the cost benefit to attending the Serv-Safe manager training class.

DO
Test the Theory for Improvement

6. Test the Theory
-Record facility location data for all Serv-Safe attendees
-Compare this to computer inspection records prior to and following class attendance and compare this to NON Serv-Safe attendees.

CHECK
Use Data to Study Results of the Test

7. Check the Results
Compare critical violations in serv-safe attendees vs. non-attendees. Determine if the percentage of critical violations decrease in attendees

ACT
Standardize the Improvement and Establish Future Plans

8. Standardize the Improvement or Develop New Theory

Review class content, teaching tools, techniques, time flow. Look for areas to improve.

9. Establish Future Plans
Set up the system to automatically query the database for information to assess the efficacy of the serve-safe program and review results annually by the Team for changes needed to program content

Quality Improvement Process Summary Worksheet

QI Team Members

Name	Title, Department or Role
Michelle Patton	Director of Environmental Health, Team Leader
Steve King	Supervisor of Food Program
Dan Swab	Sanitarian in charge of Serv-Safe program
Craig Clingan	Director of Information Technology

What were you trying to accomplish?

By October 31, 2008, CMDHD will analyze the two food service inspection scores from facilities whose managers/owners have attended the Serv-Safe classes both prior to and following attendance to determine if critical violations are reduced."

1. PLAN: What was the state of affairs when you began?

We knew we wanted to determine the efficacy of our food service manager certification program (FSMCP-serv-safe). We chose the team and then brainstormed to look for ways to quantify this. The idea of checking the food facility scores prior to and following attendance of the FSMCP and comparing these to scores of facilities who did NOT attend the FSMCP was presented and we decided on this strategy. Prior to this approach, we simply required each attendee to complete a questionnaire to determine their impressions of the FSMCP and offer suggestions for improvement or change. With this new approach each team member has a role in the evaluation of this AIM.

What change could be made that would result in improvement?

Even though we have data on the attendees impressions of the class (using a written evaluation form), we felt this was subjective whereas looking at it from this new approach of comparing actual food facility critical violation scores prior to and following the serv-safe class was more concrete. We intend to take all the spreadsheets from the attendees of the FSMCP and compare their places of employment (food facilities) with the critical violations and do a before and after graph. Improvement will be shown IF the critical violations were reduced or none were found following their completion of the FSMCP and this will be compared to the control group of those facilities where no one attended and their critical violations.

2. DO: How was the test implemented?

Roles and Responsibilities of the team members:

- The team leader assigned tasks and completed the reporting.
- The Food Supervisor advised on technical assistance (defining critical violations and assuring the data was accurate).
- The Sanitarian responsible for the FSMCP provided the data on attendees and facilities they were assigned to.
- The Director of IT provided the electronic data and assisted with the graphic representation of the AIM.

Testing of Ideas and theories:

- We have electronic data available of the number of facilities and attendees of CMDHD sponsored serv-safe classes.
- We began comparison of the rate of critical violations prior to and following attendance at CMDHD serv-safe classes.

Obstacles to our test:

- We only have written inspection files where facilities are interviewed as to whether managers are "certified" in one of the approved MDA trainings and not through CMDHD sponsored serv-safe classes but these records are not electronically recorded.
- We could not determine the number of criticals for "non" serv-safe attendees (if they attended other trainings) or correlate this to the CMDHD serv-safe attendees.
- Electronic data was unavailable for the number of non CMDHD serv-safe attendees as we had never collected this data electronically or manually.
- Also, we learned that since we never listed uniformly the facilities where managers or persons-in-charge of the facility attended other sponsored serv-safe trainings or other approved MDA certified food manager trainings (such as NEHA's course) we could not draw any comparisons to our serv-safe attended facilities critical inspection scores.

3. CHECK: Did it work?

Data collected:

- Electronic data was collected of the number of CMDHD serv-safe attendees since 2005.
- Electronic data was collected of the number of critical violations in the facilities with CMDHD serv-safe certified managers from 2005.

Data results:

- There were 269 CMDHD serv-safe attendees from 69 different food facilities in our district.
- There was no correlation made of these attendees and facilities and their rate of critical violation reduction to the facilities with no CMDHD serv-safe attendance and their rate of criticals due to the lack of adequate data as we learned from our study of our current system.

Will the new process or approach be an improvement?

- We hope to electronically track all certified manager trainings for each food facility.
- This way we can compare the critical violations for ALL facilities whether the managers are trained by CMDHD or other approved training programs to determine if there is a correlation in the type of training and the number of critical violations.
- We can also track and verify that every facility has a certified manager with current certification as required by new law (effective January, 2009).

Did the results match expectations?

- We learned that our data system is not reporting the information to make an accurate determination of the reduction in critical violations currently.
- We now have a plan to work towards an efficient tracking system that should improve our expectations. This involves cooperation with our MDA agency to make a state-wide database available to electronically track all facets of the food program including certified managers.

4. ACT: What are the next steps?

Implementation of the new approach:

- CMDHD is on the steering committee to implement and make available a statewide database.
- CMDHD is on the committee to implement certified manager training requirements as required by changes in the food code.
- These new processes will allow us to improve our ability to determine reduction in food facilities critical violation rates.
- The team can annually review the rates and if critical rates are not significantly reduced, changes to the teaching methods, tools and program content will by addressed for new approaches.

Central Michigan District Health Department

Quality Improvement Strategic Plan

2009 ~ 2013

Developed by Central Michigan District Health Department management and staff
Summer/Fall 2008.

Assisted by:
Janan Wunsch-Smith, Consultant
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Introduction

A strategic plan is viewed as a direction, a viable ongoing process. It is an approach which focuses on linking resources and actions together to attain targeted goals. The Central Michigan District Health Department (CMDHD) completed this strategic planning process and plan in preparation for meeting the ongoing public health needs of the people of Central Michigan who live in Arenac, Clare, Gladwin, Isabella, Osceola, and Roscommon Counties. ***The goal of the quality improvement plan is to have strategies designed to build capacity/infrastructure which will enable CMDHD to improve performance and health outcomes.***

The public health needs of the populations it serves are based on the Ten Essential Services of Public Health. The needs addressed in this plan were determined by completing an internal capacity assessment. The assessment was designed to measure the capacity of the health department to provide the Ten Essential Services. This assessment was completed as part of a joint Robert Wood Johnson, National Association of County and City Health Officials (NACCHO) grant project. Based on the assessment results and input from management and staff, the strategic plan was crafted to build capacity in the areas that demonstrated gaps in the provision of services to the public. This quality improvement strategic planning process provided direction in finding the answers to the following questions for CMDHD: "What are we doing well and what areas of the department activities and services need increased capacity?".

The assessment tool was based on the NACCHO "Operational Definition of a Functional Local Public Health Department Metrics". The tool is now being used as one of the sources of information by the National Public Health Accreditation Board in developing the standards for national accreditation of state and local health departments targeted for implementation in 2011. Use of the tool and its results as a baseline assessment, will position the CMDHD well in its preparatory efforts for participation in the national voluntary accreditation process.

Strengths

The assessment results demonstrated that CMDHD has many areas of strength to build upon as it moves forward into the future. CMDHD's results showed strong capacity in the areas of internal strategic planning, laboratory, legal review, preparedness, regulatory authority, and surveillance.

In Need of Improvement

The capacity assessment results indicated the following topics areas are in need of increased capacity: access to care, best practices, community health assessment and community health plan, data, program/outcome evaluation, quality improvement, culturally appropriate health education, maintaining a competent workforce, legislative process, policy development, and research.

Goal and Strategy Development

Facilitated discussions were held with the entire CMDHD staff to review the assessment results as well as to determine if additional concerns/processes needed to be addressed. Enhanced internal and external communication plans were identified as a cross cutting issue and therefore communication objectives were included in the plan. The staff prioritized the top areas needing improvement as 1) maintaining a competent public health workforce, 2) helping people receive health services, 3) protecting people from health problems and health hazards, 4) giving people

information they need to make healthy choices, and 5) monitoring health status and understanding health issues facing the community. As a follow-up to the district-wide discussion, the management team met to further clarify the issues raised and to offer potential strategies to address the identified improvement areas. A proposed plan provided by consultant Janan Wunsch-Smith was reviewed and revised by management to further reflect the needs and actions of the department. The plan was presented the Central Michigan District Board of Health for endorsement as well as to the staff, district-wide, in order to offer input into the plan and to receive staff support.

Guiding principals

The development of the quality improvement plan was based on the concept of Total Quality Improvement. Necessary components of the Total Quality Improvement (Plan, Do, Study, Act) process are included in the plan. Components of planning, "Plan," include completing a community health assessment and a community health plan, and planning activities for all programs and public health services. Implementation "Do" is included in improving access to care, implementing programs, providing culturally competent public health education and materials, and ongoing advocacy efforts. The goals in the plan that provide the "Study" are data collection and analysis, evaluation/quality improvement process, and updating and repeating the full community health assessment on a regular basis. The "Act" involves updating the programs and community health plans based on data collection, analysis and health assessment. It is the intent that all planning and public health activities will use best practices when available. Strategies identified in the plan will have a companion planning grid developed with identification of the responsible person (champion), a timeline for specific tasks, reporting frequency and to whom, and identification of the measure or activity that will indicate the task has been completed. Every goal area incorporates the quality improvement elements of Deming's Plan-Do-Study-Act process.

Another guiding principle of the plan is the commitment to include all of the domains associated with NACCHO's *Operational Definition of a Functional Health Department* - a total of 7 goal statements were developed. During the plan development, in some of the goal statements, the domains were merged in order to reduce redundancy and to streamline the strategies. As an example, Goal VII reads "CMDHD will develop public health policies and plans to facilitate the enforcement of public health laws and regulations". It combines domains Operational Definition Domain 5 (Develop public health policies and plans) with Domain 6 (Enforce public health laws and regulations). Domains 2 and 3 were also merged to form Goal III "CMDHD will distribute public health information and educational materials to protect people from health problems and health hazards".

Correlation of assessment results and staff priorities

The correlation between the needed area for improvement from the assessment results and the top five priorities service areas staff believed were most important to address in a quality improvement strategic plan was significant. Management used the capacity assessment results, as well as the Baldrige Criteria for Performance Excellence ("Are we making progress") assessment results, staff priorities and board of health input in identifying the seven goal areas for the plan.

The following table provides the correlation from the assessment, staff and goals for the strategic plan.

Key topic areas needing improvement from capacity assessment	Top priority areas from staff planning session in descending order	Goal areas included in strategic plan
Internal workforce	Competent public health workforce	CMDHD will have an internal communication plan. CMDHD will have a staff development plan. CMDHD will increase employee job satisfaction by 8%.
Access to care	Help people receive health services	CMDHD will assess the needs of the community related to accessing preventive health services. CMDHD will develop a plan for the ongoing identification and sharing of information about available community resources and referral methods.
Culturally appropriate health education	Protecting people from health problems Giving people information they need to make healthy choices	CMDHD will develop a policy and procedure for development, distribution, and evaluation of health materials that are culturally appropriate. CMDHD will develop an "external" communication and marketing plan to promote health education and public health services throughout the district.
Community health assessment and health improvement plan	Monitor health status and understand health issues facing the community Engage the community to identify and solve health problems	CMDHD will complete a CHA and CHIP for the District.
Data and data analysis Best practices/research	Contribute to and apply the evidence base of public health	CMDHD will have GIS data available for use in program planning and analysis. CMDHD will engage in research activities that benefit the health of the community.
Evaluation and Quality Improvement	Evaluate and improve programs and interventions	CMDHD will establish a process for evaluation and QI of public health programs.
Legislative process and policy development	Develop Public Health Policies and Plans Enforce Public Health Laws and Regulations	CMDHD will develop public health policies and plans to facilitate the enforcement of public health laws and regulations.

CENTRAL MICHIGAN DISTRICT HEALTH DEPARTMENT
STRATEGIC QUALITY IMPROVEMENT PLAN
2009-2013

Goal I: CMDHD will maintain a competent public health workforce.

Objective 1: By June 2009, CMDHD will have an internal communication plan.
Champion: Helen Lee

Strategies

a. Create an internal communication team (multi-discipline)
b. Develop internal communication plan with consideration for:
   - Increasing multi-discipline communication/activities to better understand the roles and responsibilities of all staff.
   - Enhancing communication between departments at the county level
c. When possible, involve staff in more decisions and/or make them aware when decisions have been made.

Objective 2: By March 2010, CMDHD will have a staff development plan.
Champion: Carolyn Cardon

Strategies

a. Create a process and protocol for staff training including:
   - personal accountability for accessing required trainings,
   - protected time to study during working hours
   - possible offering of university classes to staff in exchange for presentations and other services at universities/colleges.
   - a master annual training calendar (each division develop own calendar and have administrative assistant combine into one master.)
   - select training topics using the results of the staff assessment of training needs, required training, and management selections.
   - Possible topics
     - ✓ Data collection and analysis
     - ✓ Cultural competency and sensitivity
     - ✓ Customer service/Phone Training
     - ✓ Ongoing QI training
     - ✓ Time management
     - ✓ Leadership Development
b. Complete a time study for all employees (management and staff)
   - Based on the time study, develop a staff use plan
c. Identify ways for utilizing staff expertise to its fullest
d. Cross train staff to assist other staff when work loads increase, someone is ill, on vacation, or while hiring replacements.

Objective 3: By June 2012 will increase employee job satisfaction by 8% (Baseline 82%)
Champion: Carolyn Cardon

Strategies:
a. Recruit and retain a diverse staff
b. Provide the staff with adequate resources to do their jobs
c. Provide competitive wages and benefit plan

Goal II: **Help people receive health services.**

Objective 1: By December 2009, assess the needs of the community related to accessing preventive health services.
Champion: Michele Wolfe

Strategies
a. Include access questions as a portion of CHA survey.
b. Assess customer satisfaction through the use of surveys.
c. Review hours of operation and scheduling procedures
d. Reduce transportation barriers [potential donation of van(s)]

Objective 2: By June 2009, develop a plan for the ongoing identification and sharing of information about available community resources and referral methods.
Champion: Melissa DeRoche

Strategies
a. Establish a community task force to organize a health care coalition
    - Engage private and public health system partners and community stakeholders for promoting the health of the community. (A decision would need to be made whether there will be a coalition in each county that meets quarterly and then an annual district meeting or if there would be one district-wide coalition.)
    - Coalition may meet quarterly to share information on available services/resources and needs and to update and share community data.
    - Hold annual community health care summit to provide updated information on the health of the communities. It would also provide an opportunity to review the Community Health Plan and make any necessary changes based on emerging health issues, discuss access issues and collectively find solutions.
b. Develop an organized system to keep record of available services, how to contact and referral methods.
c. Review available resources on a regular basis and after annual summit to assure public health is not duplicating services and training on topics that can be accessed by all people from other sources. i.e. nutrition counseling
d. An internal resource and referral information system will be developed
    - Information brought back from meetings is recorded in the resource and referral system, for all health department employees to access
    - Share new information at staff meetings

e. Coordinate with 211 service provider(s) in all counties to ascertain availability of the service and to provide staff with updates as new information becomes available.

Goal III: CMDHD will distribute public health information and educational materials to protect people from health problems and health hazards.

Objective 1: By June 2009, develop a policy and procedure for development, distribution, and evaluation of health promotion/educational materials.
Champion: Kelly Conley

Strategies

a. Create a health education/health promotion task force with representation from all disciplines.
   - Consider having some of the meetings via Web-based or conference call to same time and cost of travel
b. Develop policy and procedures that will assure public health education materials and all communication with the public is culturally competent and linguistically appropriate
   - Include target populations in the development of educational material
   - Determine from target populations the best types of materials and where and how to market them.
   - Be creative in types of education and methods of distribution
   - Use results of client surveys to improve client education
   - Identify best practices that have been proven to work

Objective 2: By October 2009, CMDHD will have an "external" communication and marketing plan to promote public health education, health promotion and public health services across the district.
Champion: Melissa DeRoche

Strategies

a. Create a jurisdictional external communication and marketing committee
b. Write department policy and process for external communication
   - Identify how the department should be identified to the public (branding)
   - Engage potential community partners for advertising.
   - Include questions on customer surveys and CHA to identify the best types and venues for marketing to various populations
c. Include targeted locations and venues for communication and marketing in the policy/process documents i.e.
   - Schools
   - Webcast
   - Web page
   - Newsletters
   - Newspaper
   - Signs with scrolling messages
   - Grocery stores
   - Laundromats
   - Faith community

- Senior centers/housing

d. Compare the community health data with other similar communities and share with public as part of marketing public health
e. Use marketing expertise from universities
f. Market public health's expertise
h. When developing messages, make sure they are culturally appropriate and use health literacy guidelines

Goal IV: **Complete a Community Health Assessment (CHA) and Community Health Plan (CHP) every five (5) years**

Objective 1: By December 2009, complete a Community Health Assessment for the jurisdiction.
Champion: Chris Lauckner

Strategies

a. Create a task force to lead the CHA process
b. Identify local public health data set/ indicators
c. Identify partners/stakeholders to bring to the table. If possible, combine CHA efforts with other entities community health assessments
d. Survey CMDHD staff regarding their participation in local community groups identify additional potential survey participants
e. Select CHA process and survey
   - Assure survey includes questions regarding access to preventive health services.
   - Add optional questions specific to counties/populations where needed.
   - Develop innovative ways to accomplish CHA i.e. put survey out in other mailings, public locations in the community with drop box sites for returns, 4-H groups etc. Use existing groups for focus groups, i.e. senior center, Rotary, existing coalitions, faith community.
   - Target special population(s) or community at large for additional open focus groups
   - Create a plan to secure funds for CHA
   - Utilize college/university students/faculty for survey data analysis
   - Utilize internal client surveys as source of data
   - Utilize staff and regional epidemiologists for training in data collection and analysis

Objective 2: By May 2010, complete CMDHD Health Plan for district.
Champion: Chris Lauckner

Strategies

a. Create a planning coalition from partners who have participated in the Community Health Assessment
b. Use standard strategic planning process including identification of the issues based on the assessment, prioritization of the issues based on coalition input; establish goal, objectives and strategies.
c. Where appropriate, include coalition members to be the responsible party(ies) for implementing strategies in the plan to save financial and staffing resources.

Goal V: Contribute to and apply the evidence base of public health (Improved data collection and analysis)

Objective 1: By December 2010, CMDHD will have GIS data available for use in program planning and analysis.
Champion: Craig Clingan

Strategies

a. Establish a steering committee for planning and implementing GIS use in the department
b. Identify and partner with community entities who already use GIS to avoid duplicating what is already being done and if possible use their technology
c. Identify hardware and software needs to link to the department
d. Develop internal process for educating, accessing and using GIS data

Objective 2: By December 2011, have a plan that includes state of the art technology for better document handling and a process for a more paperless system.
Champion: Michelle Patton

Strategies

a. Establish a technology task force to complete a technology plan. Activities may include
   - Research document imaging equipment and cost
   - Determine data collection and analysis needs for the department
   - Research programs/software for data collection and analysis that can be used across the department
   - Identify what capacity is needed on lap tops for field staff, research what is available and cost.
   - Write a technology plan that includes, needs, types of equipment and software, projected cost, timeline and plan for funding.

Objective 3: By March 2010, engage in research activities that benefit the health of the community.
Champion: Robert Graham

Strategies:

a. Identify appropriate populations, geographic areas, and partners
b. Work with researchers to actively involve the community in all phases of research.
c. Provide data and expertise to support research;
d. Facilitate their efforts to share research findings with the community, governing bodies, and policymakers.

Goal VI: **Evaluate and improve programs and interventions.**

Objective 1: By March 2009, establish a written process for evaluation and QI of public health programs.
Champion: Mary Kushion

Strategies

a. Establish a department-wide evaluation and QI oversight committee to write process and protocols that include
   - Engaging stakeholders in identification of areas needing improvement
   - Utilizing the results of the CHA and CHP as one basis for identification of areas needing QI
   - Selecting programmatic benchmarks/health outcome indicators
   - Identifying what data exists, ease of reporting and what is needed
   - Developing a method for identifying and institutionalizing change that makes an improvement (PDSA)

b. Establish ongoing staff education on evaluation and QI.

Goal VII: CMDHD will develop public health policies and plans to facilitate the enforcement of public health laws and regulations.

Objective 1: By December 2010, CMDHD will have a process to assist in public health policy development including policy related to funding of public health activities.
Champion: Mary Kushion

Strategies

a. Establish an inter-disciplinary advocacy committee
   - ID opportunities to network with legislators
   - Share public health's story with words and pictures
   - Learn legislators' areas of interest
   - Schedule legislative meetings in the district
   - Utilize agency DVD for advocacy purposes

Notes:

1. Dates are calculated based on January 1, 2009 as a start date for implementation of this quality improvement plan.
2. Each Champion will report on their objectives during the monthly CMDHD Administrative staff meetings beginning in January 2009. The minutes will be posted for staff on the CMDHD Intranet site and quarterly updates will be given to the Central Michigan District Board of Health and other stakeholders.

CENTRAL MICHIGAN DISTRICT HEALTH DEPARTMENT

STRATEGIC QUALITY IMPROVEMENT PLANNING GRIDS

2009-2013

THE PLANNING GRIDS SERVE AS THE ADMINISTRATIVE STAFF MONTHLY TRACKING TOOL AS WELL AS THE STAKEHOLDER QUARTERLY STATUS REPORT.

GOAL I: CMDHD WILL MAINTAIN A COMPETENT PUBLIC HEALTH WORKFORCE				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
By June 2009, CMDHD will have an internal communication plan.	-Create an internal communication team (multi-discipline) -Develop internal communication plan with consideration for: • Increasing multi discipline communication or activities to better understand the roles and responsibilities of all staff. • Enhancing communication between departments at the county level -When possible involve staff in more decisions and/or make them aware when decisions have been made			Helen Lee
By March 2010, CMDHD will have a staff development plan.	-Create a process and protocol for staff training including: • Personal accountability for accessing required			Carolyn Cardon

GOAL I: CMDHD WILL MAINTAIN A COMPETENT PUBLIC HEALTH WORKFORCE				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	trainings. • Protected time to study during work hours • Possible offering of university classes to staff in exchange for presentations and other services at universities or colleges. • A master annual training calendar (each division develop own calendar and have administrative assistant combine into one master.) • Select training topics using the results of the staff assessment of training needs, required training, and management selections. • Possible Topics: ✓ Data Collection and analysis ✓ Cultural competency and sensitivity			

GOAL I: CMDHD WILL MAINTAIN A COMPETENT PUBLIC HEALTH WORKFORCE				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	✓ Customer service/Phone training ✓ Ongoing QI Training ✓ Time Management ✓ Leadership Development -Complete a time study for all employees (management and staff) • Based on the time study, develop a staff use plan -Identify ways for utilizing staff expertise to its fullest -Cross train staff to assist other staff when work loads increase, someone is ill, on vacation, or while hiring replacements.			
By June 2012, will increase employee job satisfaction by	-Recruit and retain a diverse staff			Carolyn Cardon

GOAL I: CMDHD WILL MAINTAIN A COMPETENT PUBLIC HEALTH WORKFORCE				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
8% (baseline 82%)	-Provide the staff with adequate resources to do their jobs -Provide competitive wages and benefit plan			

GOAL II: HELP PEOPLE RECEIVE HEALTH SERVICES				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
By December 2009, assess the needs of the community related to accessing preventive health services.	-Include access questions as a portion of CHA survey -Assess customer satisfaction through the use of surveys -Review hours of operation and scheduling procedures -Reduce transportation barriers (potential donation of van (s).			Michelle Wolfe
By June 2009, develop a plan for the ongoing identification and sharing of information about available community resources and referral methods.	-Establish a community task force to organize a health care coalition • Engage private and public health of the community. (A decision would need to be made whether there will be a coalition in each county that meets quarterly and then annual district wide meeting or if there would be one district wide coalition. • Coalition may meet quarterly to share information on			Melissa DeRoche

GOAL II: HELP PEOPLE RECEIVE HEALTH SERVICES				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	available services/resources and needs and to update and share community data. • Hold annual community health care summit to provide updated information on the health of the communities. It would also provide an opportunity to review the Community Health Plan and make any necessary changes based on emerging health issues, discuss access issues, and collectively find solutions. -Develop an organized system to keep record of available services, how to contact and referral methods. -Review available resources on a regular basis and after annual summit to assure public health			

GOAL II: HELP PEOPLE RECEIVE HEALTH SERVICES				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	is not duplicating services and training on topics that can be accessed by all people from other sources, i.e. nutrition counseling. -An internal resource and referral information system will be developed. • Information brought back from meetings is recorded in the resource and referral system, for all health department employees to access. • Share new information at staff meetings. -Research information on status of the 211 service in all counties.			

GOAL III: CMDHD WILL DISTRIBUTE PUBLIC HEALTH INFORMATION AND EDUCATIONAL MATERIALS TO PROTECT PEOPLE FROM HEALTH PROBLEMS AND HEALTH HAZARDS				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
By June 2009, develop a policy and procedure for development, distribution, and evaluation of health promotion/educational materials.	-Create a health education/health promotion task force with representation from all disciplines. • Consider having some of the meetings via Web-based or conference call to save time and cost of travel. -Develop policy and procedures that will assure public health education materials and all communication with the public is culturally competent and linguistically appropriate. • Include target populations in the development of educational material • Determine from target populations the best types of materials and where and how to market them • Be creative in types of			Kelly Conley

GOAL III: CMDHD WILL DISTRIBUTE PUBLIC HEALTH INFORMATION AND EDUCATIONAL MATERIALS TO PROTECT PEOPLE FROM HEALTH PROBLEMS AND HEALTH HAZARDS				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	education and methods of distribution • Use results of client surveys to improve client education • Identify best practices that have been proven to work			
By October 2009, CMDHD will have an "external" communication and marketing plan to promote public health education, health promotion, and public health services across the district.	-Create a jurisdictional external communication and marketing committee. -Write department policy and process for external communication • Identify how the department should be identified to the public (branding) • Engage potential community partners for advertising • Include questions on customer surveys and CHA to identify the best types and venues for marketing to various			Melissa DeRoche

GOAL III: CMDHD WILL DISTRIBUTE PUBLIC HEALTH INFORMATION AND EDUCATIONAL MATERIALS TO PROTECT PEOPLE FROM HEALTH PROBLEMS AND HEALTH HAZARDS				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	populations -Include targeting locations and venues for communication and marketing in the policy/process documents, i.e. • Schools • Webcast • Web page • Newsletters • Newspaper • Signs with scrolling messages • Grocery stores • Laundromats • Faith community • Senior centers/housing -Compare the community health data with other similar communities and share with public as part of marketing public health -Use marketing expertise from universities			

GOAL III: CMDHD WILL DISTRIBUTE PUBLIC HEALTH INFORMATION AND EDUCATIONAL MATERIALS TO PROTECT PEOPLE FROM HEALTH PROBLEMS AND HEALTH HAZARDS				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	-Market public health's expertise -When developing messages, make sure they are culturally appropriate and use health literacy guidelines			

GOAL IV: COMPLETE A COMMUNITY HEALTH ASSESSMENT (CHA) AND COMMUNITY HEALTH PLAN (CHP) EVERY FIVE (5) YEARS				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
By December 2009, complete a Community Health Assessment for the jurisdiction.	-Create a task force to lead the CHA process -Identify local public health data set/indicators -Identify partners/stakeholders to bring to the table. If possible, combine CHA efforts with other entities community health assessments -Survey CMDHD staff regarding their participation in local community groups to identify additional potential survey participants -Select CHA process and survey • Assure survey includes questions regarding access to preventive health services • Add optional questions specific to counties/populations			Chris Lauckner

GOAL IV: COMPLETE A COMMUNITY HEALTH ASSESSMENT (CHA) AND COMMUNITY HEALTH PLAN (CHP) EVERY FIVE (5) YEARS				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	where needed • Develop innovative ways to accomplish CHA, i.e. put survey out in other mailings, public locations in the community with drop box sites for returns, 4H groups, etc. Use existing groups for focus groups, i.e. senior center, Rotary, existing coalitions, faith communities. -Target special population(s) or community at large for additional open focus groups -Create a plan to secure funds for CHA -Utilize college/university students/faculty for survey data analysis -Utilize internal client surveys as source of data			

GOAL IV: COMPLETE A COMMUNITY HEALTH ASSESSMENT (CHA) AND COMMUNITY HEALTH PLAN (CHP) EVERY FIVE (5) YEARS				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	-Utilize staff and regional epidemiologists for training in data collection and analysis			
By May 2010, complete CMDHD Health Plan for the district.	-Create a planning coalition from partners who have participated in the Community Health Assessment -Use standard strategic planning process including identification of the issues based on the assessment, prioritization of the issues based on the coalition input; establish goal, objectives and strategies -Where appropriate, include coalition members to be the responsible party(ies) for implementing strategies in the plan to save financial and staffing resources			Chris Lauckner

GOAL V: CONTRIBUTE TO AND APPLY THE EVIDENCE BASE OF PUBLIC HEALTH (IMPROVED DATA COLLECTION AND ANALYSIS)				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
By December 2010, CMDHD will have GIS data available for use in program planning and analysis.	-Establish a steering committee for planning and implementing GIS use in the department. -Identify and partner with community entities who already use GIS to avoid duplicating what is already being done and if possible, use their technology. -Identify hardware and software needs to link to the department. -Develop internal process for educating, accessing, and using GIS data.			Craig Clingan
By December 2011, have a plan that includes state of the art technology for better document handling and a process for a more paperless system.	-Establish a technology task force to complete a technology plan. Activities may include: • Research document imaging equipment and cost • Determine data collection and analysis needs for the			Michelle Patton

GOAL V: CONTRIBUTE TO AND APPLY THE EVIDENCE BASE OF PUBLIC HEALTH (IMPROVED DATA COLLECTION AND ANALYSIS)				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	department • Research programs/software for data collection and analysis that can be used across the department • Identify what capacity is needed on lap tops for the field staff, research what is available and cost • Write a technology plan that includes, needs, types of equipment and software, projected cost, timeline and plan for funding			
By March 2010, engage in research activities that benefit the health of the community.	-Identify appropriate populations, geographic areas and partners -Work with researchers to actively involve the community in all phases of research			Robert Graham

GOAL V: CONTRIBUTE TO AND APPLY THE EVIDENCE BASE OF PUBLIC HEALTH (IMPROVED DATA COLLECTION AND ANALYSIS)				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
	-Provide data and expertise to support research -Facilitate their efforts to share research findings with the community, governing bodies, and policy makers			

GOAL VI: EVALUATE AND IMPROVE PROGRAMS AND INTERVENTIONS				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
By March 2009, establish a written process for evaluation and QI of public health programs.	-Establish a department-wide evaluation and QI oversight committee to write process and protocols that include: • Engaging stakeholders in identification of areas needing improvement • Utilizing the results of the CHA and CHP as one basis for identification of areas needing QI • Selecting programmatic benchmarks/health outcome indicators • Identifying what data exists, ease of reporting and what is needed • Developing a method for identifying and institutionalizing change that makes an improvement (PDSA) -Establish ongoing staff education on evaluation and QI			Mary Kushion

GOAL VII: CMDHD WILL DEVELOP PUBLIC HEALTH POLICIES AND PLANS TO FACILITATE THE ENFORCEMENT OF PUBLIC HEALTH LAWS AND REGULATIONS				
OBJECTIVE (PLAN)	STRATEGY (DO)	OUTCOME (CHECK)	REVISIONS (ACT)	CHAMP
By December 2010, CMDHD will have a process to assist in public health policy development including policy related to funding of public health activities.	-Establish an inter-disciplinary advocacy committee • ID opportunities to network with legislators • Share public health's story with words and pictures • Learn legislators' area of interest • Schedule legislative meetings in the district • Utilize agency DVD for advocacy purpose • Prioritize (on-going) programs			Mary Kushion

<table>
<tr><td rowspan="4">Central Michigan District Health Department

CMDHD</td><td>DEPARTMENT PROGRAM POLICY</td><td></td></tr>
<tr><td>Program:
Subject: Quality Improvement</td><td></td></tr>
<tr><td>Supersedes No.: All prior Documents
Revised:</td><td>Page 1 of 10</td></tr>
<tr><td>Approved by: Mary Kushion, MSA Health Officer</td><td>Effective Date</td></tr>
</table>

Policy: CMDHD strives to have a Total Quality Improvement (TQI) plan to build capacity and infrastructure within the agency. The elements of the plan will include data collection and analysis, program planning and evaluation, development of culturally competent and linguistically appropriate health education and prevention programs and improved access to quality health services for the populations served. This will be accomplished through the use of best practices in making ongoing program improvements.

Purpose: To outline the procedures needed to monitor CMDHD's strategic plan through the Plan-Do-Study-Act (PDSA) quality improvement process. The procedures will also be utilized and applied to other individual agency programs and processes for ongoing quality improvement.

Procedures:

1. The division director, in consultation with his/her staff will identify the area, problem, or opportunity for improvement within a particular program or process.

2. Once an opportunity for improvement is identified, the division director will assemble team members who may include but are not limited to staff, customers and stakeholders.

3. The team members will establish:
   a. An initial timeline and meeting schedule.
   b. An Aim Statement which is measurable and time specific.

4. The PDSA process* will include, but is not limited to:
   a. Obtaining baseline data, or create and execute a data collection plan to assess the current program/process/plan.
   b. Identifying external stakeholders.
   c. Obtaining input from customers and/or stakeholders.
   d. Identifying potential solutions.
   e. Identifying the barriers.
   f. Reviewing model or best practices to identify potential improvements.
   g. Developing written work plan/objectives to monitor the Aim Statement and related outcomes. Objectives should be created in the S.M.A.R.T. format. This means they need to be specific, measureable, achievable, realistic and time specific.
   h. Collecting, charting and displaying data to determine effectiveness of the work plan.

   i. Documenting problems, unexpected observations and unintended consequences.
   j. Setting a deadline for completion of the improvement process.
   k. Conducting an evaluation of the intervention.

5. At the end of the project period (as defined in the Aim Statement), the team will compare the results against the baseline data and the measures of success stated in the Aim Statement.

6. The team will provide a written report that will contain the following information:
   a. Did the results match the theory/prediction?
   b. Were there unintended side effects?
   c. Is there an improvement?
   d. If there was not an improvement, what are the plans developed to test a new theory?
   e. Does the test need to be more widely tested/explored?
   f. Other important lessons learned.
   g. Recommendations for the future.

7. The team will celebrate its success of the Quality Improvement Project by communicating its accomplishments to internal and external customers which may include:
   a. Central Michigan District Board of Health
   b. CMDHD staff
   c. CMDHD legislators
   d. NACCHO
   e. Local media
   f. State and local public health colleagues
   g. Stakeholders/Community
   h. Professional journal articles
   i. Presentations to local, state and national audiences

8. The PDSA process continues with revisions to the initial program/process/plan as well as additional programs/processes by following the procedures in steps 1-7 as outlined in this policy.

*Further information and resources on PDSA are available in the attached document developed by Janan Wunsch-Smith for CMDHD, as well as the Embracing Quality in Local Public Health: Michigan's Quality Improvement Guidebook and the *Public Health Memory Jogger II:* A Pocket Guide of Tools for Continuous Improvement and Effective Planning. (2007).

Guidelines for Local Public Health Quality Improvement Process

Introduction

As public health moves toward accreditation, local public health organizational capacity is being assessed to determine what gaps exist in the activities necessary to perform the Ten Essential Services. The gaps in the performance of the essential services often include gaps in data collection and analysis, program evaluation (both process and outcome), quality improvement, and community health assessment and health improvement planning. These gaps in the basic infrastructure of local health departments create barriers to the effective implementation of quality improvement processes.

Building the infrastructure to fill gaps in local public health capacity is critical to the ongoing success of public health quality improvement. Quality improvement is often associated with program activities; however, it is also necessary to apply the quality improvement process to the organization of public health that provides the capacity to perform the ten essential services.

Quality Improvement (QI) processes provide opportunities for deciding what public health activities need improvement in order to attain desired outcomes. The QI process includes determining what the new goal (Aim) will be for the program/project/activity, developing a hypothesis (theory) of what change will occur, creation of a plan and implementation of the plan to create that change, and evaluation of whether the new goal (Aim) was met. If the predicted change occurs, it will be necessary to determine a method for institutionalizing the new activity as a best practice to assure continued outcomes. If the outcomes did not match the expected change, a new plan will need to be created and implemented and the cycle of "Plan, Do, Study, Act" repeated. Public health activities both programmatic and systemic should be evaluated on a regular basis to assure the desired outcomes are being achieved, or if QI processes need to be implemented.

To implement a QI process, activities and capacity of a local public health department the community needs to be assessed/evaluated. Therefore this document will provide the steps to basic evaluation and QI. In addition, the use of a formal community assessment process to identify the public health issues is critical to the ongoing development of programs and public health capacity. Status quo is never acceptable in the dynamic ever changing environment in which public health work is performed.

Basic Evaluation

Definitions

"Program" is any activity necessary to carry out the Ten Essential Services. This includes activities related to direct service, laboratory services, communication, culturally competent health education, community assessment, planning processes, maintaining a competent public health workforce, internal strategic planning, data

collection, analysis, and integration, program evaluation and planning, public health policy development, working with the legislative process, linking clients to health care, providing regulatory efforts, engaging stakeholders in public health activities, surveillance, emergency planning, and fiscal and administrative services. "Evaluation" is the collection of information about the process and outcomes of programs for use in determining the effectiveness or lack there of programmatic and public health system activity and for providing the basis for ongoing quality improvement.

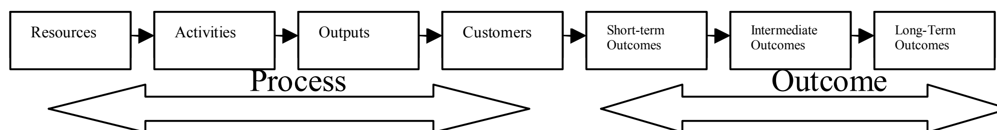
"Process Evaluation" measures whether the program was implemented according to the plan and if the objectives have been met. Process evaluation describes how much, how many and what was done, who performed the activities, who received the services and if projected program process outcomes were met. Process evaluation helps determine whether there were barriers to the process, whether change is needed, and if those receiving the services were satisfied. Process evaluation is often measured by the number of "something being done", i.e. the number of children receiving immunizations.

"Outcome evaluation" measures whether the program has made an improvement on a predetermined outcome indicator. Outcome evaluation will tell if there is a change in attitudes, behaviors, change in policy, enforcement of regulations, or trends in mortality and morbidity. Outcome evaluation measures the amount of improvement or change. This change may be percentage of increase or decrease, improved efficiencies such as time and cost, change in attitude or behavior, environmental changes or changes in overall morbidity and mortality. Outcome evaluation projections are often set as short-term, intermediate, and long-term outcomes.

Steps of Basic Evaluation

1. Establishing project objectives: For each goal or Aim statement in a project, there will need to be one or more objective. These objectives describe what you want to accomplish through your program implementation efforts. Objectives should be created in the S.M.A.R.T. format. This means they need to be specific, measurable, achievable, realistic, and time specific.

2. A logic model is one way to visualize the relationship between activities and both process and outcome measures. The following are the components of a logic model.



a. Resources: Includes information such as financial, staff, community support and targeted audience.
b. Activities: These are the tasks or methodology you will use to meet the objectives and reach the project goals

c. Output: includes the units (numbers) produced by the program activities i.e. the number of clients services, policies developed, number of inspections. (Process Evaluation)
d. The last three sections of a logic model include short, intermediate and long-term outcomes. These measure the change or impact (outcome evaluation) made i.e. percentage of change, a demonstrated improvement or worsening of a health outcome such as a 5% increase in teen pregnancy.

3. In the evaluation process there are questions that need to be answered to successfully determine what and how you will evaluate the program's process and outcomes.

a. What will be evaluated?
The answer to this question will describe what will be measured.

b. What aspects of the program will be considered when determining if program performance has been satisfactory?
The answer will describe how you can evaluate the objectives in your program plan. This may be a measurement of increase in the number served, effectiveness of education, or increased understanding of participants. What is being evaluated will determine the method of evaluation.

c. What are the standards that must be reached for the program to be considered successful?
When planning your program evaluation, you will determine the level of performance or change you consider adequate for success. Prior to determining this, existing data or best practices should be reviewed to determine what you are measuring against and to determine a realistic attainable outcome.

d. What evidence will be used to indicate how the program has worked?
This information will include looking at the inputs, activities, and the outputs of the process. All of this will need to be taken into consideration to determine if the program was a success. Methods for gathering the appropriate information will need to be selected, i.e. surveys, questionnaires, interviews, written documentation and observation.

e. What conclusions regarding program performance are justified by comparing the available evidence to the selected standards?
Does the evidence/data demonstrate that you have met your objectives? Take into consideration the timeline. Outcomes that are delayed may indicate a need for revision in the process. Increased time may require additional resources that are not available and therefore may be a reason to restructure a program.

f. How will the lessons learned from the evaluation be used to improve public health effectiveness?

Results indicating a successful program may provide the basis for establishing the effort as a best practice and replicating it for the same desired outcome in the future. However, if there are portions of the program that did not meet expectations, there will be a need for using that information for repeating the Quality Improvement process.

Quality Improvement Process

According to *Embracing Quality in Local Public Health: Michigan's Quality Improvement Guidebook,* QI may be used "to improve the quality of any public health process, program, organizational capacity, or systems effort." The following QI process is based on the Deming model of Plan, Do, Study (Study), Act.

The following elements are essential to a successful QI process.

1. Data and identified outcomes: The data generated in the evaluation of programs/activities, ongoing assessment of local public health capacity, and community needs is the basis for local public health Quality Improvement. Data can be statistical or observational.
2. Leadership commitment,
3. Focus must be on the consumer,
4. Involve the entire organization and, where appropriate, community partners and stakeholders,
5. QI must be a continuous process. The cycles of plan, do, Study, act must be repeated to continually improve process, outcomes, and organizational capacity.

Implementing the "Plan, Do, Study, Act" QI Process

Step I: Plan

1. Getting started

Who will be impacted by your plan?
Identify your customers/clients/stakeholders in the planning process. Remember the customers can be internal i.e. staff or other departments within the health department structure. External customers may be the population being served, organizations, or license holders. It is essential to know who you will be targeting to establish an effective plan for change.

What do you want to improve?
Using data/information from evaluations and assessments (measurements or observations) you will identify a need for improvement/change. Areas for improvement may be process outcomes such as an increased number of customers served, improving customer satisfaction, improving time management, reducing financial commitment, reducing incidence of disease and injury, increasing capacity within the health department. The accurate use of data both in gathering and analysis is a critical component to successful QI. According to Michigan's Quality

Improvement Guidebook, "If you can observe an event (or even its effects) you can measure it. If you can measure it, you can improve it."

2. Assemble the Team

Who will work on the plan?

Once a targeted area for improvement has been identified, a team will need to be identified to work on the QI process. The team members should have information or a vested interest in the issue. Remember, it may be important to include customers, both external and internal, as well as stakeholders.

What will be the Aim/goal of the QI effort?

The Aim statement will describe what you want to achieve. As your process evolves, you will identify not only what you want to accomplish, but also how you will know that change has occurred, that it is an improvement, and what additional change may result in improvement. Remember, the change that is accomplished in the QI effort may not be an improvement and after evaluating the results, it may be necessary to implement another plan to move closer to an improvement.

3. Examine the Current Approach

What is currently being done?

Working through this question will provide a snapshot of not only what is being done, who is involved, roles of participants or participating entities, what is being done well and what could be done better.

Using QI tools such as a flow chart or process map may be beneficial to more systematically view the current process. Other QI tools such as the *fishbone diagram* for cause and effect, *Five Whys?* to determine the root cause of a problem or situation will help direct the process and keep focused on the issues being addressed. (QI tools can be found in *Michigan's*
Quality Improvement Guidebook and *The Public Health Memory Jogger II.*

4. Identify Potential Solutions

What solution are you going to implement?

Based on the outcomes of identifying the root causes, brainstorm all possible solutions to the cause of the issue/problem. If available, include evidenced-based best practices in your selection of solutions. Narrow your choice of solutions to those that are within the team's sphere of control. Once a solution has been selected, the Aim statement needs to be expanded to include measurable results, a timeline, and who will be affected.

5. Develop an Improvement Theory

What outcomes do you want or anticipate will occur from implementing the solutions?
It may be useful to us an "If….then" approach when describing what you think will occur as a result of implementing your plan.

What strategy will be used to test your theory?
You will need to develop your methodology for testing and proving or disproving your theory. Be specific as to when the test will occur, who will be responsible, and who will get the results.

Step II: Do: Carry Out the Plan for Improvement

6. Test the Theory for Improvement

How did implementation of the plan for change/improvement work?
During this step, you will implement the plan to test your theory. You will need to collect and record data to determine the effectiveness of the improved activity. Remember to document barriers, unintended consequences, and other observations/lessons learned. These will be important in the final evaluation of whether the change was an improvement.

Step III: Study: Use Data to Study (Study) the Results of Testing the Plan

7. Study the Results

Was your test successful, producing the intended outcomes?
To Study the success of your activity, you will need to compare the data you collected from you test against the baseline data, your plan, and the measurable outcomes in your Aim Statement. Other questions that will help you reach your conclusion are 1) Did the results match the theory? 2) What did the data show and are there any trends? 3) Did you have unintended consequences? 4) Is there an improvement and if so, should this improvement be tested using a different situation to assure it will be effective in multiple settings?

Careful documentation of all steps in implementation, the data collected, and lessons learned through the improvement process will be necessary in the development of the next Plan, Do, Study, Act cycle.

Step IV: Act - Standardization and Future Planning

8. Standardize the Improvement and Establish Future Plans

Should your plan be institutionalized or does it need to be revised and retested?
When you look at what you have learned from the implementation of your plan and the analysis of the results, you may discover your results have provided a successful improvement with promise of continued positive outcomes with institutionalization of the improved process. To institutionalize positive change, you will need to determine if it will take formal policy change, change in process, protocols, or procedures or what else will be necessary to keep using the new process.

If there was only a small pilot test, it may be necessary to implement a wider scale test to assure the change will provide an effective level of improvement in the future.

If your change was not an improvement, you will need to develop a new theory and start from the beginning creating a new plan with new interventions, testing the new theory, Studying the results and acting to standardize or continue planning.

9. Establish Future Plans

What are you going to do to assure that the improvement is ongoing and that other issues are addressed?
Remember, public health is dynamic and ever changing. Once successful change has been institutionalized, your work is not done. Make plans for additional review of data to identify areas of needed improvement. A regular schedule for review will assure the improvement changes continue and that other areas needing improvement are identified and the QI process implemented. The more often the Plan, Do, Study, Act cycle is implemented, the more efficient the process will become. It will also provide ongoing data/information and education about public health programs and the public health system, making sure public health is meeting the needs of the populations being served in the most efficient and cost effective way.

Conclusion

Implementation of the QI process provides a win-win situation for the internal and external customers of public health. It assures that programs and internal capacity are established based on data and best practices and that the outcomes demonstrate improvement of the health and well being of all customers of the department.

As the QI process is repeated in an ongoing effort for improvement, it is important to celebrate all successes along the way, both large and small. It is only through the ongoing dedication to improvement that health outcomes will improve for the public.

Resources:

Embracing Quality in local Public Health: Michigan's Quality Improvement Guidebook
http://www.accreditation.localhealth.net/MLC-2%20website/Michigans_QI_Guidebook.pdf

The Public Health Memory Jogger II: A Pocket Guide of Tools for Continuous Improvement and Effective Planning. (2007). Salem, NH: GOAL/QPC.

This summary was prepared by Janan Wunsch-Smith, Consultant, for the Central Michigan District Health Department's Quality Improvement Process as part of a National Association of County and City Health Officials (NACCHO) grant project.

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