Kane County Health Department

KANE COUNTY HEALTH DEPARTMENT
QUALITY IMPROVEMENT SUMMARY REPORT
Calendar Year 2011

I. Overview

During 2011, the Kane County Health Department's (KCHD) Quality Improvement (QI) initiatives have focused on fostering a QI culture among all staff through the following initiatives:

1. Creation of KCHD's QI framework, including the development and implementation of a QI Policy, QI Plan, and QI Committee, and Committee Charter.
2. Training on and practice of QI tools through monthly All Hands meetings and monthly team meetings.
3. Implementation of section-level Plan-Do-Check-Act (PDCA) projects.
4. Development of QI Committee skills relative to facilitating use of QI tools within sections.
5. Integration of QI tools (independent of PDCA) through use in section/division/workteam meetings.
6. Completion of section-level PDCA projects, including documentation via storyboard, and dissemination of results to internal and external stakeholders.

II. Activity Summary

1. Governance of QI

An overview of the framework for QI was shared with the Kane County Health Advisory Committee in January 2011, and in March 2011, the Committee was surveyed regarding their opinions and views regarding the agency's pursuit of voluntary Public Health accreditation. Feedback and comments made by the Committee were used in development of QI activities and QI planning in this period. This Committee also provided consultation regarding the development of an agency performance management system. Updates were provided to this committee at least every other month.

2. Policy Development

A review was completed of the draft QI policy developed in 2010, and modifications were made based on the reorganized KCHD structure. This revised policy was reviewed and approved by the Assistant Director for Community Health Resources (CHR) and the QI Committee, the Leadership Team, and was approved by the Executive Director on August 12, 2011.

A policy on Performance Management was drafted in 2011, and following review by the Assistant Director of CHR, the QI Committee, the Leadership Team and the Executive Director, it was approved on August 12, 2011.

3. QI Plan

A draft QI Plan for 2011 was developed by the Health Data and Quality Coordinator (HDQC) in early April 2011 and shared with the Assistant Director for Community Health Resources and the Health Planner in the Office of Community Health Resources in mid-April. Following that review, modifications were made, and the document was then sent for review to the QI Committee and the Executive Director. The plan was approved and signed by the Executive Director on June 13, 2011. During the June All Hands staff meeting, the plan was shared with all staff and placed on the agency's shared network drive for view by all staff. This QI Plan provides a framework for QI activities and training through the end of 2011.

In December 2011, the QI Committee began an evaluation process of the 2011 QI Plan, assessing the success in meeting stated goals and identifying other unintended outcomes of the plan. This evaluation was completed in January 2012, and suggestions from these evaluation meetings will guide the development of the 2012 QI Plan. The outcomes of the goals for the plan are identified in detail in sections IV and V of this document, but it is important to note that, with minor exceptions, the goals and objectives of this plan were met.

4. QI Committee

In March 2011, the QI Committee held its first meeting since the agency reorganization in November 2010. The QI Committee is now comprised of 9 members, 3 from each division/office and includes 1 member of Leadership and 2 staff positions from each division/office. Committee members were selected based on their interest and request to participate, and represent their section workgroup on the section's PDCA project. The committee has worked with the HDQC (who serves as the committee chair) to evaluate and plan All Hands meeting agendas, discuss the role of the Committee in Public Health Accreditation preparation, and to review and finalize a draft QI policy. The group additionally developed a Team Charter, which was approved by the Executive Director on June 13, 2011. This Committee most recently completed PDCA storyboards for their respective projects, which were presented during the June 2011 All Hands staff meeting.

In the second half of 2011, the QI Committee's focus was on completing "Train-the-Trainer" modules on QI tools, and then work within their respective sections to complete these tools independently of PDCA projects. In addition, QI Committee members continued to serve as their section's committee representative regarding PDCA projects.

Utilizing the Meeting Effectiveness Survey developed by KCHD as a result of their work in the Multi-State Learning Collaborative project, the QI Committee evaluated meeting effectiveness monthly from July to December in six areas:

- **Commitment to Group**: To what extent was I committed to helping achieve the group's goals for this meeting?
- **Clear Goals**: To what extent were the goals clear for this meeting?
- **Communication**: To what extent was the discussion open, with sharing of diverse ideas and perspectives?
- **Participation**: To what extent did I say or contribute what I thought was important to achieving our goals for this meeting?
- **Effectiveness**: Overall, how effective was the group in meeting its goals during this meeting?

- **Value**: How valuable were this meeting's goals compared to other things that we need to accomplish?

The areas were not only measured over time, but in December 2011, the committee meetings were also evaluated from an annual perspective, and those results were compared with the average of responses from each meeting.

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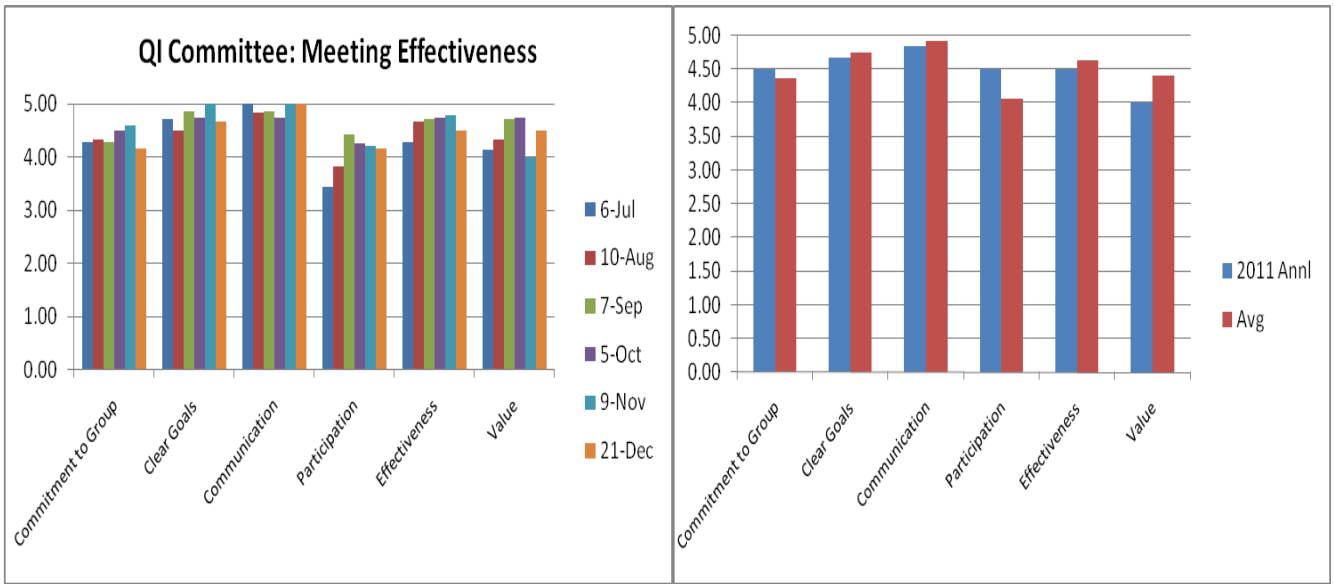


Not only did committee members rate the meeting as effective in all areas (scores above 3), but in many areas, the ratings increased over time.

5. Employee QI Training

Based on needs identified by staff in January 2011, the HDQC provided training on a number of QI tools (PDCA, Aim Statements, Flowcharts, Cause & Effect Diagrams, Force Field Analysis, Storyboards, Pareto Charts, Pie/Bar/Run Charts, and Check Sheets) during All Hands and section/division meetings. Training materials were developed utilizing the resources of the Public Health Foundation's Public Health Memory Jogger, the Michigan Quality Improvement Guidebook, and the American Society for Quality's Public Health Quality Improvement Handbook. For each tool, a PowerPoint training presentation and one-page handout was developed. Time was set aside in both monthly All Hands meetings and monthly section and/or division meetings to learn about and practice QI tools.

A series of "Train-the-Trainer" modules was also developed on each of the QI tools listed above, for purposes of training QI Committee members in order to allow their facilitation of these tools within their respective sections. A number of these were completed with the QI Committee, who then completed the tools with their sections. More information regarding employee training can be found in Section III of this document.

6. Implementation of PDCA Projects

Each KCHD section completed a brainstorming process to select an improvement project in January 2011. Aligned with the training completed at All Hands and division/section meetings,

each section selected a project, set an Aim Statement, looked at or collected baseline data and completed a root cause analysis. The Aim Statements are listed below:

Community Health Resources
AIM STATEMENT: By the end of March 2011, 95% of KCHD staff will acknowledge each Code Red call.

Public Health Nursing (HRIF) Section
AIM STATEMENT: Between 2/1/11 and 12/31/11, 80% of HRIF clients will receive an initial Home Visit within 14 days of receiving the Infant Discharge Record from the last hospital of care.

Administrative Section
AIM STATEMENT: By July 15, 2011, 100% of grant owners (3) will be approached by Finance to develop a schedule for mandatory grant meetings for the next 12 months.

Environmental Health Section
AIM STATEMENT: The Environmental Health Section will decrease the average number of violation #3 by 20% in one year for category 1, 2, and 3 food service establishments.

Community Health Section
AIM STATEMENT: By July 1, 2011, the Community Health Section will increase from 60% to 100% both the knowledge of meetings and the knowledge of the purpose of the meetings for three selected partnerships.

Communicable Disease Section
AIM STATEMENT: By July 1, 2011, accuracy of vaccine accountability for the Immunization Program will increase from 92% to 98%.

Public Health Nursing (Immunizations) Section
AIM STATEMENT: By 7/1/11 the rate of KCHD PHN's that have reached competency as described in the "Clinical Competencies for Public Health Nurses" will increase from baseline to 100%.

A summary of these projects and their results can be found in Section VII of this document.

7. Communication

An initial QI overview, describing PDCA as the process being implemented at the agency, was distributed in the agency's Health Matters newsletter in December 2010. In addition, PDCA updates have been provided by the QI Committee representative for each section at monthly All Hands meetings, sharing the progress of the project, as well as any challenges or successes experienced. PDCA workgroups shared storyboards for their respective projects at the June 2011 All Hands meeting, with plans for a final version to be displayed in agency offices. With approval of the QI Plan complete, this plan was shared with all staff and made available on the agency's shared drive. During 2011, two QI-focused articles were developed and shared in the agency's "Health Matters" newsletter.

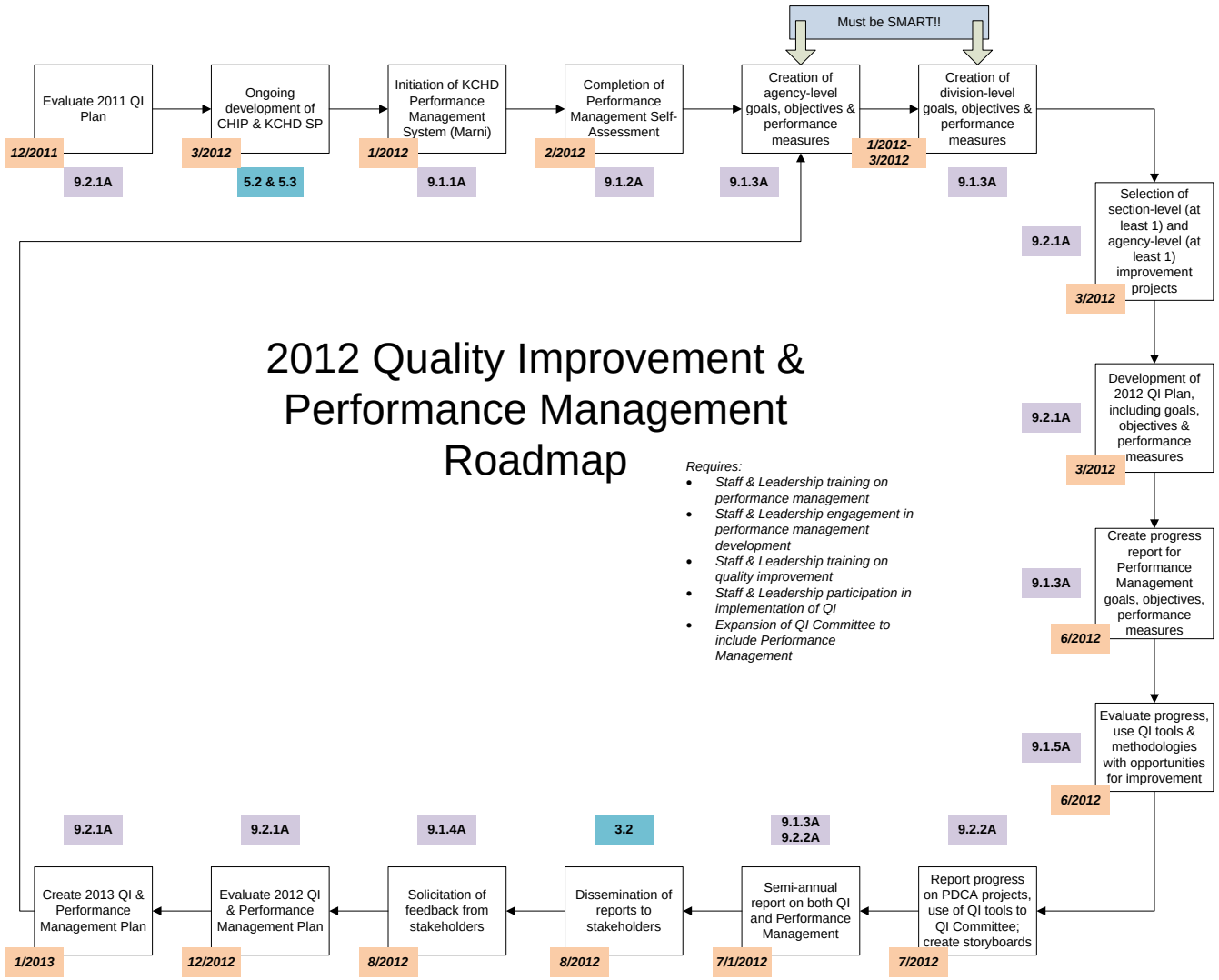
In addition, KCHD worked directly with the National Association of County and City Health Officials (NACCHO) to develop a "QI Story from the Field", which shared the progress made by KCHD in 2011 to implement a QI program. Three of the completed PDCA storyboards were also submitted to NACCHO and included in their "Stories of Measureable Improvement" database. Both the Executive Director and HDQC have been invited to present this process via webinar and in-person meetings.

8. Links to Public Health Accreditation

The HDQC currently serves as the domain lead for accreditation domain 9 (Evaluate and continuously improve processes, programs and interventions), and the QI Committee has been identified as the support team for accreditation preparation. A gap analysis of domain 9 was been completed, and a plan created to remedy the gaps. In 2011, gap areas were resolved with the development of a committee charter, finalization of a QI policy and QI plan.

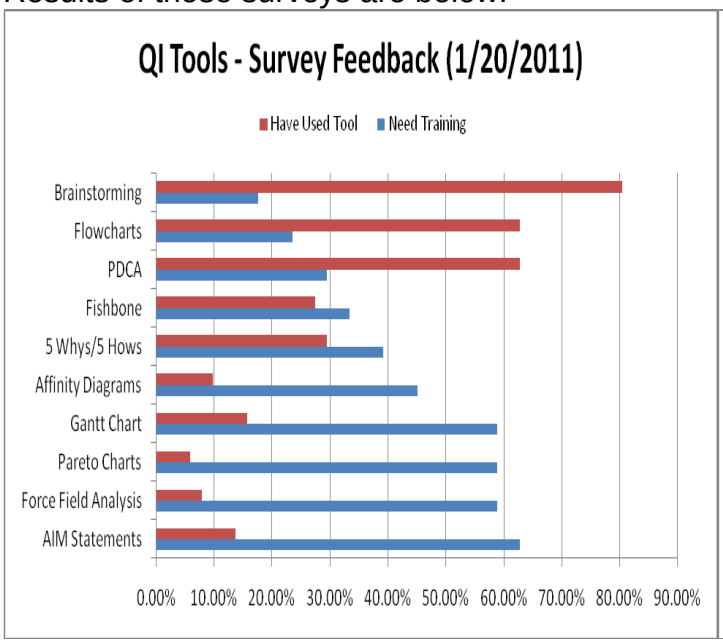
KCHD selected the Turning Point: Collaborating for New Century in Public Health model designed by the Public Health Foundation and Robert Wood Johnson Foundation as its model for performance management, and secured funding in 2011 to bring a recognized expert to KCHD to develop goals, objectives and performance measures that tie-in to the agency's strategic plan and the Community Health Improvement Plan. Staff received initial training on performance management in September 2011.

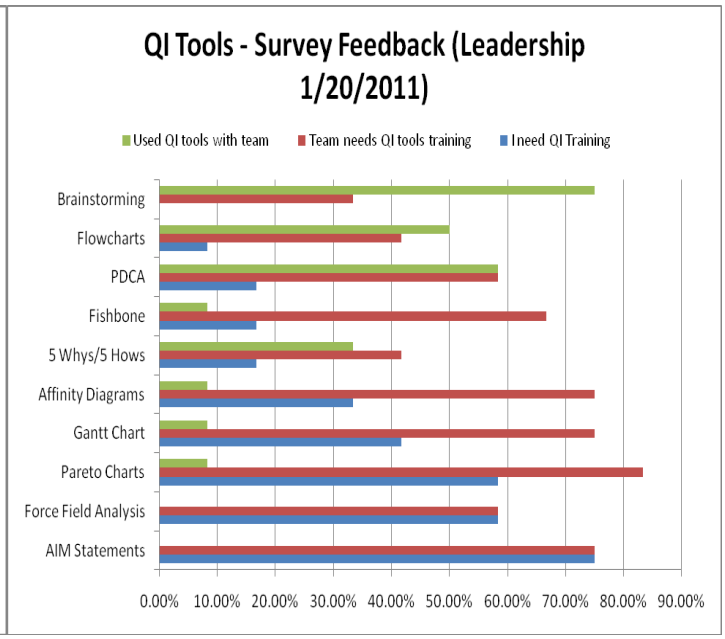
A roadmap for implementation of the performance management system, including tie-ins to QI and the plan for applying to PHAB at the end of 2012, was developed at the end of 2011, and is included below.


Must be SMART!!
Evaluate 2011 QI Plan
12/2011
9.2.1A
Ongoing development of CHIP & KCHD SP
3/2012
5.2 & 5.3
Initiation of KCHD Performance Management System (Marni)
1/2012
9.1.1A
Completion of Performance Management Self-Assessment
2/2012
9.1.2A
Creation of agency-level goals, objectives & performance measures
9.1.3A
Creation of division-level goals, objectives & performance measures
1/2012-3/2012
9.1.3A
Selection of section-level (at least 1) and agency-level (at least 1) improvement projects
9.2.1A
3/2012
Development of 2012 QI Plan, including goals, objectives & performance measures
9.2.1A
3/2012
Create progress report for Performance Management goals, objectives, performance measures
9.1.3A
6/2012
Evaluate progress, use QI tools & methodologies with opportunities for improvement
9.1.5A
6/2012
Report progress on PDCA projects, use of QI tools to QI Committee; create storyboards
9.2.2A
7/2012
Semi-annual report on both QI and Performance Management
9.1.3A 9.2.2A
7/1/2012
Dissemination of reports to stakeholders
3.2
8/2012
Solicitation of feedback from stakeholders
9.1.4A
8/2012
Evaluate 2012 QI & Performance Management Plan
9.2.1A
12/2012
Create 2013 QI & Performance Management Plan
9.2.1A
1/2013
2012 Quality Improvement & Performance Management Roadmap
Requires:
Staff & Leadership training on performance management
Staff & Leadership engagement in performance management development
Staff & Leadership training on quality improvement
Staff & Leadership participation in implementation of QI
Expansion of QI Committee to include Performance Management

III. Training Summary

Based on survey results from January 2011, a plan for staff training relative to QI was developed. Results of those surveys are below.





Utilizing 1 ½ - 2 hours of each monthly All Hands meeting and time at Division/Section meetings each month from January to June, the Health Data and Quality Coordinator, with the support of the Leadership Team and QI Committee, provided training topics that included:

- QI & Accreditation Overview
- PDCA and Aim Statements
- Flowcharts, Cause & Effect Diagrams
- 5 Why's
- Gantt Charts
- Force Field Analysis
- Brainstorming & Affinity Diagrams
- Storyboard Development
- Data Collection, Analysis & Management (including information on check sheets, run charts, pie charts, bar charts & Pareto diagrams)

The training sessions included a PowerPoint presentation outlining the QI tool(s), examples relative to public health, break-out sessions in PDCA workgroups to develop the tool specific to their respective PDCA project, a reporting of what was created in the breakout session, and a quiz to check comprehension of the new material learned. Material was designed to not only build on earlier learning, but also was done in conjunction with the process for PDCA.

Following each training session, staff were surveyed regarding their level of perceived understanding of the new material, as well as their level of interest/buy-in for quality improvement. The interest level in QI increased from 5 (out of 10) in March 2011 to nearly 7 (of 10) by June 2011.

Evaluation results were compiled following each meeting, and results were used to improve the format, agenda and activities of subsequent meetings through consultation with the QI Committee. This process was simplified by the use of an electronic audience polling system in March, where quiz results were immediately shared; in April, this expanded to include the meeting evaluation. Staff response to the use of the polling devices was overwhelmingly positive, both for the interaction that they allowed and the immediate feedback provided through their use. The final QI All Hands meeting, held in June 2011, included a summary of the training, a 10-question final quiz on all training topics, and an opportunity to evaluate both the last meeting and the entire 6-month training series.

Following the June 2011 All Hands meeting, staff were asked to again complete the QI Training Needs Survey that was a part of the first All Hands meeting in January 2011. The results of these surveys were compared to see if 1) staff perceived need for QI tools training had decreased, 2) staff reported increased use of QI tools, and 3) Leadership reported increased use of QI tools (without the support of the HDQC). Additionally, questions were asked regarding staff understanding of QI in the agency, interest in QI Committee participation, and desire to integrate QI methods into daily work.

The training methods used in the first six months of 2011 were successful in decreasing staff need for training, increasing the use of QI tools (both on an individual level and on a team level by Leadership), and increase in responses to the broad questions regarding QI. As a result of these evaluations, training then focused on increasing the skills of the QI Committee through completion of "train-the-trainer" modules on QI tools. QI Committee members then facilitated use of these tools within their sections, reporting back outcomes at committee meetings.

IV. Progress on Agency Goals

A. QI Workgroups
   1. Each QI Committee member, with the support of their Section's Leadership Team and the Health Data and Quality Coordinator, will facilitate the development of a project-level PDCA cycle at the Section level.
   2. All KCHD staff will participate in a PDCA workgroup in 2011.
   3. PDCA workgroups will report updates on project progress at least monthly at All Hands meetings and through the development of PDCA Storyboards.

All staff were assigned to participate in a section-level PDCA project during 2011. Project updates were provided by the QI Committee member representing that section at All Hands meetings. In addition, storyboards were developed by the QI Committee member and presented at the June 2011 All Staff meeting in a poster presentation format, where all staff were given opportunity to ask questions and provide feedback. Completed storyboards were posted in the KCHD offices, and one was presented at the national American Nursing Association conference. The two Environmental Health QI Committee members worked collaboratively on their project, and the HDQC provided support to all projects, but did not facilitate a separate project. In all, 7 PDCA projects were developed.

B. QI Projects
   1. All KCHD Sections will complete at least one PDCA cycle during 2011.

2. PDCA projects will be documented and maintained in an electronic format on KCHD's shared computer drive (S Drive).
3. A final Storyboard will be completed by all PDCA workgroups to indicate what changes will be made based on project results.

Each KCHD section selected and developed at least 1 PDCA project; the only exception was the Public Health Nursing section, who developed two separate projects. Copies of all documents were maintained on the agency's shared network drive by the HDQC, who also kept copies on her own computer. The QI Committee representative for each PDCA project, with the support of the HDQC, developed a PDCA storyboard, the final version of which was shared with all KCHD staff at the June 2011 All Hands meeting. While some projects were not complete at the time of the June 2011 All Hands meeting, the storyboards were created to be as complete as possible. Once the project was complete, the storyboard was finalized. All completed storyboards have been maintained in the network shared drive, as well as in PDF version on the KCHD website.

C. Training
1. KCHD staff will receive QI training during 2011 on the following topics:
    a. QI and Accreditation Overview
    b. PDCA and project selection
    c. Aim Statements
    d. Flowcharts
    e. Root Cause Analysis (5 Why's, Cause & Effect Diagrams, Force Field Analysis)
    f. Development of storyboards
    g. Data collection, Analysis and Display (including run charts, Pareto charts, and check sheets)
    h. Brainstorming and Affinity Diagrams

    Training has been completed, and summary information can be found in Section III of this document.
2. Following the development of KCHD's Community Health Assessment (CHA), Community Health Improvement Plan (CHIP) and Strategic Plan, 100% of the KCHD Leadership Team and QI Committee will receive training on development of goals, objectives and performance measures.

    Due to an unforeseen delay in the completion of the CHA, CHIP and Strategic Plan, the KCHD Leadership Team and QI Committee did not receive specific training on performance management until January 26, 2012. A high-level training session on Performance Management was completed for all KCHD staff in September 2011, during which staff were surveyed using focus groups to determine their feedback and suggestions on implementation of a Performance Management system.

D. Recognition
1. KCHD's Executive Director will recognize high-performing staff, Programs/Sections, and Divisions for advancing QI at KCHD.

    In June 2011, all staff were recognized at the All Hands meeting for their efforts in implementing and integrating QI tools and practices within their work through presentation of a Certificate of Appreciation. It is the plan that for 2012, the recognition will expand to individual staff, programs or workgroups that embody implementation of QI at KCHD.

E. Promotion

1. The Health Data and Quality Coordinator will work with the Leadership Team to identify opportunities to present KCHD QI efforts and projects at conferences and in publications.

In order to promote the QI efforts at KCHD, a QI page on the KCHD website was launched in Fall 2011. On that page is the current QI Plan, the QI Policy, links to QI resources, and copies of completed storyboards. In addition, completed storyboards have been submitted to NACCHO's "Stories of Measureable Improvement in Public Health" database, where they have been accepted and placed on the NACCHO website. KCHD's QI efforts were also profiled by NACCHO in a "QI Stories from the Field" issue in Fall of 2011. Internally, KCHD also promoted QI efforts through two separate issues of the KCHD's newsletter, Health Matters, which is distributed to both internal and external stakeholders. KCHD has also applied to be recognized as a NACCHO Model Practice site because of the work done in QI in 2011, and several KCHD staff have participated in webinars and in-person meetings and conferences to share QI efforts.

F. Long-term Goals

1. As a part of the development of CHA, CHIP and Strategic Plan, the Health Data and Quality Coordinator will work with those involved to develop Quality Improvement goals and objectives that are quantifiable and time-bound, with specific performance measures that are monitored and evaluated at least quarterly, and that goals and objectives are created both at the agency level (10-15) and at the Division level (10-20 per Division).
2. By the end of 2012, develop Leadership Team and QI Committee members such that PDCA projects can be facilitated independently.
3. By the end of 2012, have in place a functional "Big QI" strategy and Performance Management system at KCHD.

Initial training on Performance Management was completed with all staff in Fall 2011, and training specific to the Leadership Team and QI Committee was completed 1/26/2012. It is anticipated that these goals will be an area of focus in the 2012 plan, once the CHA, CHIP and Strategic Plan are completed.

V. Progress on Quality Improvement Goals

National Benchmark/Objective (based on PHAB, Guide to Standards and Measures, Standard 9.2): Implement Quality Improvement of Public Health Processes, Programs and Interventions.

Goal 1: Establish a quality improvement plan based on organizational policies and direction.

Objective:	Develop an annual agency QI Plan that seeks to increase staff knowledge of quality improvement and supports development of PDCA implementation, and considers importance of PHAB accreditation requirements moving forward.
Measure:	Signed and documented 2011 KCHD QI Plan.
Key Strategies:	1. Creation of draft QI plan by the Health Data and Quality Coordinator. 2. Review of QI plan by Assistant Director for Community Health Resources, QI Committee, and Executive Director. 3. 2011 KCHD QI Plan approved by KCHD Executive Director.

As of 6/13/2011, the 2011 agency QI Plan was approved by the Executive Director. An overview of this plan was provided to staff during the June 2011 All Hands staff meeting, and a signed copy of the document has been placed on the agency's network shared drive for view by all staff. This document was evaluated by the QI Committee in December 2012.

Goal 2: Implement quality improvement efforts

Objective: Based on the framework of the KCHD QI Plan, implement PDCA as a QI strategy at KCHD.

Measure: Achieve 100% compliance with development and completion of PDCA projects.

Key Strategies:
1. Health Data and Quality Coordinator will meet with each PDCA workgroup or representative at least twice monthly to provide training, technical assistance and support of PDCA project.
2. Health Data and Quality Coordinator will maintain an electronic database of PDCA project work for each workgroup and assure that it is available on the KCHD shared computer drive (S Drive) for review by all KCHD staff.
3. Health Data and Quality Coordinator will provide at least monthly updates to the Assistant Director for Community Health Resources on progress of PDCA projects.

As of 6/21/2011, the HDQC has maintained monthly meetings with all of the PDCA workgroups through All Hands, Division/Section meetings, and the QI Committee. The progress for each group is maintained electronically in the computer of the HDQC and in the PDCA folder on the agency's shared network drive. At least twice-monthly updates are provided to the Assistant Director for Community Health Resources, as well as to the Executive Director at least once every other month.

Goal 3: Demonstrate staff participation in quality improvement methods and tools training

Objective: Provide an adequate level of QI training to all KCHD staff.

Measure: Train 100% of KCHD staff on QI Tools and QI processes as outlined in QI plan.

Key Strategies:
1. Health Data and Quality Coordinator will create and maintain a training log of staff that have participated in QI Training.
2. All staff will participate in a quiz of the material following training, as well as completing an evaluation of the effectiveness of the training/presentation.
3. Health Data and Quality Coordinator will work with Assistant Director for Administration to assure that new employees receive QI training within six months of date of hire.

Staff received training on QI tools as outlined in the Training section of this report. Each training session included a PowerPoint presentation of the tool and its use, an example, opportunities for staff to practice and report back results, a quiz, and an evaluation for the presenter. In addition, a one-page handout for each tool has been developed and is used in conjunction with the PowerPoint presentation. Hard-copy sign-in sheets, as well as an electronic database, are being used to maintain a log of training. Copies of the training presentations have also been made available on the agency's network shared drive. In addition, a series of Train-the-Trainer modules have been created and piloted with the QI Committee, who have used the learning to facilitate the use of the QI tools within their respective sections, reporting back results at QI Committee meetings.

Utilizing the QI 101 training module framework developed by NACCHO, the HDQC facilitated training on QI with new employees in December 2011. In order to simplify the process, the HDQC used this framework to create a web-based training module for new employees, which was implemented at the end of December 2011. This training is also being offered to all KCHD interns, and a shortened version will be developed for use with nursing students.

VI. Progress on Quality Improvement Projects (PDCA)

- Office of Community Health Resources, Community Health Resources Section: Improve response rates of employee call-down drills
  This section completed several iterations of PDCA, working to remedy all of the root causes. Staff received retraining on the Code Red employee call-down system, were provided updated contact information, and have been provided feedback following each drill. As a result, the section has realized that utilizing Code Red as the recording/reporting system for employee response was not as effective as planned, and staff now call back to the Emergency Response Coordinator to record their response to the drill. In Fall 2011, as the response rate maintained stability, a minimum threshold of a 75% response rate was set and the project transitioned into a monitoring phase. As of January 2012, the response rate to the employee call-down drill reached 96%, having increased in a year from the baseline of 36%. While this project is no longer a PDCA, monthly drills and monitoring of results will continue in order to assure that the 75% response threshold is maintained.

- Office of Community Health Resources, Administration Section: Improve structured spending of grant money
  This section completed a current state flowchart, a root cause analysis and collection of several sets of baseline data. Despite thorough exploration of the data, it was determined that the data did not indicate a problem, and it was more likely that this project was in need of quality planning instead of a PDCA cycle. With the hiring of a new Finance Manager in late-2011, the section has been working to develop new practices within the section, utilizing tools such as flowcharting, SWOT analysis, and cause and effect diagrams to assure that processes in this section are as efficient as possible. Though a PDCA was not completed, this group has indicated the importance of data collection moving forward, and utilizing data to determine where problems arise.

- Division of Disease Prevention, Public Health Nursing Section (High-Risk Infant Follow-up Program): Improve rates of initial home visit completed within 14 days of referral receipt
  Based on a root cause analysis, the section theorized that a lack of communication to families on the part of the hospital regarding the HRIF program impedes the progress of engagement/enrollment on the part of KCHD, which delays program initiation past the 14 day requirement. To that end, the workgroup has theorized that developing messaging regarding the program and providing that education to NICU/L&D units of the 5 Kane County hospitals will improve communication between KCHD and hospitals, as well as inform families of the program. Despite plans to implement the strategies identified in this PDCA project, a significant change in the structure and function of the High-Risk Infant Follow-up Program,

decreasing caseload and number of staff involved, led to the early termination of this PDCA project. This program is currently in a process of program redesign.

- Division of Disease Prevention, Public Health Nursing Section (All PHNs): Improve rate of immunization competence for Public Health Nurses
  Borrowing from a structure utilized during H1N1, this section, after gathering baseline data and exploring root causes, developed a model of learning immunizations where the nurses were assigned to immunization clinic based on level of competence (as described by the Benner Stages of Clinical Competence). By creating a "pod-within-a-pod" in the immunization clinic, nurses of different competency levels worked collaboratively to assess immunization records and determine a plan of action. Where the previous model, which was based primarily on self-study, had led to limited increase in competence, the intervention tested within the PDCA increased the percentage of nurses deemed "competent" from 25% to 80% within 5 months; a separate improvement strategy was implemented for the remainder of the nurses that had not yet reached competence, which achieved success within 2 months. The results of this project were shared in a poster presentation at the American Nursing Association national conference in January 2012.

- Division of Disease Prevention, Communicable Disease Section: Improve collection and reporting of immunization data
  After data and root cause analysis, the section realized that a duplication of systems was not the problem, but the "fix" implemented to try to correct inaccuracies in vaccine accountability. The initial aim statement was modified to focus on improving vaccine accountability, developing a new system of inventory tracking and accounting for doses checked-out and used. As a result, accuracy of vaccine accountability for the Immunization program increased from 92% to 100%. Additionally, a significant decrease in duplication of data tracking for statistics was noted, as was the amount of staff resources needed to complete the monthly stats. As a result of the project, the strategies and lessons learned were implemented to the process of completing cases in the STD program, which has begun to show significant decreases in the amount of time needed to close cases.

- Division of Health Promotion, Environmental Health Section: Decrease the number of critical food inspection violation #3 (temperature violation)
  While this section had some baseline data regarding the number of critical violations for #3 on an annual basis, the group determined that a short survey, provided to all food establishments visited in the month of May 2011, would gather more information and allow a more specific intervention to be created. Results of that survey were analyzed and the information used to begin brainstorming potential solutions. The section decided to develop a poster about safe temperatures, as well as a standard temperature log form, which were sent to all establishments with their annual certificate renewals. It is the plan that KCHD EH staff will evaluate the results of their intervention as food establishment inspections are completed in 2012. This project also correlated directly with the change in requirement that all food workers complete food worker training. It is hoped that the combination of these efforts will lead to a significant decrease in critical food inspection violations, not limited just to #3.

- Division of Health Promotion, Community Health Section: Improve pre and post meeting communication in Community Health Section
  This project was selected as the Community Health Section has responsibility for participation in and facilitation of a number of community-based partnerships. The newly formed team identified communication and information sharing as a barrier to their success, but had no baseline data to support this issue. The group created a survey to evaluate communication that occurred among the team, using 3 partnerships as a pilot test from January to May. Based on the results of that survey, the group modified their Aim Statement to focus on improving their knowledge of the partnerships and when the meetings are held. Through their solution brainstorming, they selected and implemented a test strategy, to use a reformatted "Stall Street Journal" to share information about partnerships. This initial strategy was successful, and has since been expanded so that all partnerships will be profiled in this format. In addition, the team has begun to use large calendars in their office to identify when meetings occur. Finally, in December 2011, this project expanded further, and the section now holds daily "stand-up" meetings, a 5-minute session to share information about partnerships. As a result of these interventions, the rates of knowledge about partnerships and their purpose, awareness of meetings, contribution to meetings that individuals do not participate in, and receipt of meeting minutes have all demonstrated increases. While the original Aim Statement has been met for this project, the section has committed to continuing the work to make improvements across all partnerships.

VII. Conclusion & Next Steps

During 2011, the Kane County Health Department made significant strides forward in implementation and acculturation of quality improvement, reaching from an agency level down to the staff level. A number of PDCA projects were implemented along with multiple hours of training on QI tools and strategies. Several of the PDCA projects resulted in reaching or exceeding the Aim Statements, and even in the cases of projects that were terminated or shifted, significant learning was documented. Workgroups have not only worked diligently on PDCA projects, but have begun to use QI tools in problem solving daily challenges. The QI Committee has been pivotal in encouraging the use of QI tools (outside of PDCA projects) within their respective sections, and Leadership members have used the tools as well in Division or Section meetings. In addition, staff have begun to identify ways that the tools can be used in their daily work.

The creation of the agency's first QI Plan, a QI Policy and QI Committee charter also provided a framework for the agency moving forward, and provide evidence for Public Health accreditation preparation. Goals for the next year will be to continue to develop the culture of QI within the agency, as well as to bring QI efforts in to a larger Performance Management structure, where goals and objectives at the division and agency level will be tied directly to the newly-created CHIP and Strategic Plan. In 2012, PDCA projects will be implemented specifically to assist with the improvement of these goals and objectives, which will rely heavily on a system of performance measurement that is currently in development.