

# Central MI District Health Department

121 employees  
Main Office located in Mt. Pleasant, MI 48858  
Serving a population of 186,561



## Plan

Identify an Opportunity and Plan for Improvement

### 1. Getting Started

Central Michigan District Health Department (CMDHD) outlined customer satisfaction as a goal in its 2009-2012 Strategic Plan. The MLC-3 Team began their Quality Improvement (QI) efforts by identifying an area for improvement. After much discussion and use of the Nominal Group Technique, Environmental Health (EH) was selected as the Team's primary focus.

During discussion, it was discovered that recent updates had been made to customer satisfaction survey/processes in other service divisions while EH surveys were out-dated, did not provide useful information, and data related to survey distribution and returns was not being sufficiently tracked. In order to focus our QI efforts, various EH programs were discussed with unknown and unmet client needs being highlighted. Two specific EH programs, on-site water and sewage, were targeted for our project.

### 2. Assemble the Team

CMDHD Administrators chose MLC-3 Team members from each service division (Administration, EH, Personal Health, Health Education, and Integrated Technology). Selected Team members provided years of expertise from multiple public health

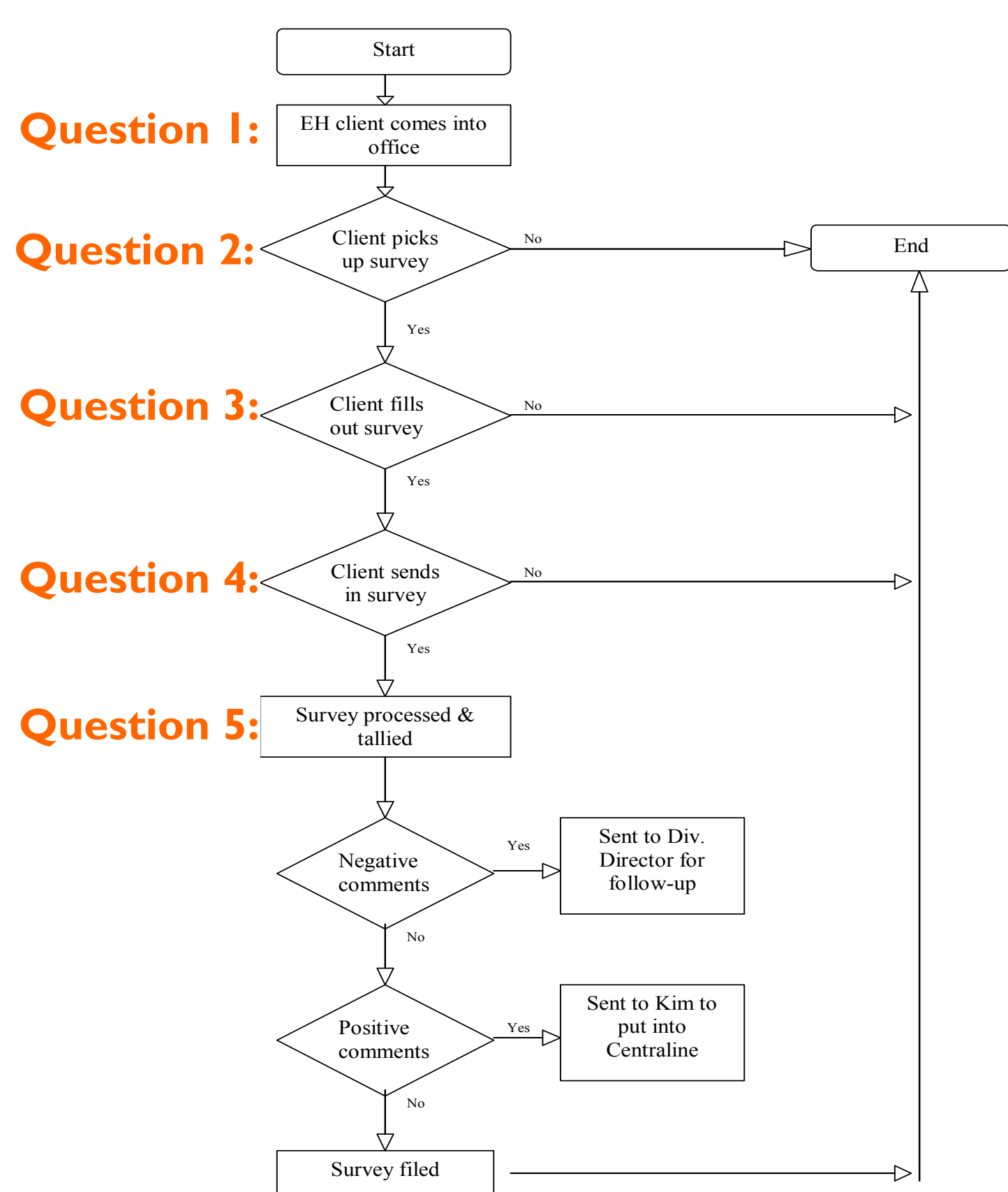
### AIM Statement:

In order to improve customer service, CMDHD seeks to collect more feedback about client satisfaction by increasing participation in client surveys in onsite sewage and water, by 20 percent, by April 2010.

TASK NAME	DATE	Q3 '09			Q4 '09			Q1 '09			Q2 '10			DONE?
		APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	
Step 1: Getting Started- Meet with MPH	04/01/09	X												YES
Step 2: Assemble the team- Initial team meeting	05/26/09	X												YES
Learning Sessions	06/01/09			X										YES
Step 3: Examine the current approach, Planning tools, & AIM statement	06/01/09			X										YES
Look at current survey data					X									YES
Review survey distribution					X									YES
Step 4: Identify possible solutions					X									YES
Decide on QI plan	06/01/09				X									YES
Step 5: Develop an improvement plan					X									YES
Develop proposed tool & proposed policy	06/01/09				X	X	X							YES
Pilot new survey (one county)	07/01/09							X						YES
Implement new survey									X	X	X	X		YES
Step 6: Test the theory					X	X	X	X	X	X	X	X		YES
Track surveys given out and received	07/01/09	X	X	X	X	X	X	X	X	X	X	X		YES
Increase data analysis efforts	08/09/09	X	X	X	X	X	X	X	X	X	X	X		YES
Meet with MPH	08/09/09				X								X	YES
Step 7: Study the results								X	X	X				YES
Step 8: Standardize the improvement								X	X	X				YES
Step 9: Establish future plans									X	X	X			YES

### 3. Examine the Current Approach

In order to understand where to begin the QI project, Team members created a process map to illustrate the current EH on-site water and septic customer satisfaction survey distribution, tracking, and end use procedures. At first glance, the basic procedural process seemed to be sufficient; however, upon further review it was noted that many of the process elements were not adequately outlined or understood. The MLC-3 Team studied each of the current steps in the procedural process to identify areas needing further explanation and improvement.



Questions included in the flowchart correspond to these areas of concern listed below.

**Question 1.** Since land owners, contractors, or well-drillers could all come into apply for the permit there was concern about who would be filling out the survey, when it would be given to them, how it would be returned, and which services would be commented on (in office or field work).

**Question 2.** How does the client pick up the survey? Is it handed to them? Are they asked to fill out the survey? Are the surveys available for the client to pick up if they want to?

**Question 3.** How do we know who the client is? Is it the landowner or someone working on their behalf?

**Question 4.** How are the surveys returned being tracked? What information do we know about who sends in the survey? Can we track the surveys to individuals? Do we know which county, month, and service the survey data refers to?

**Question 5.** How are the surveys processed and tallied? What data have we collected in the past? How can that data be used for QI activities?

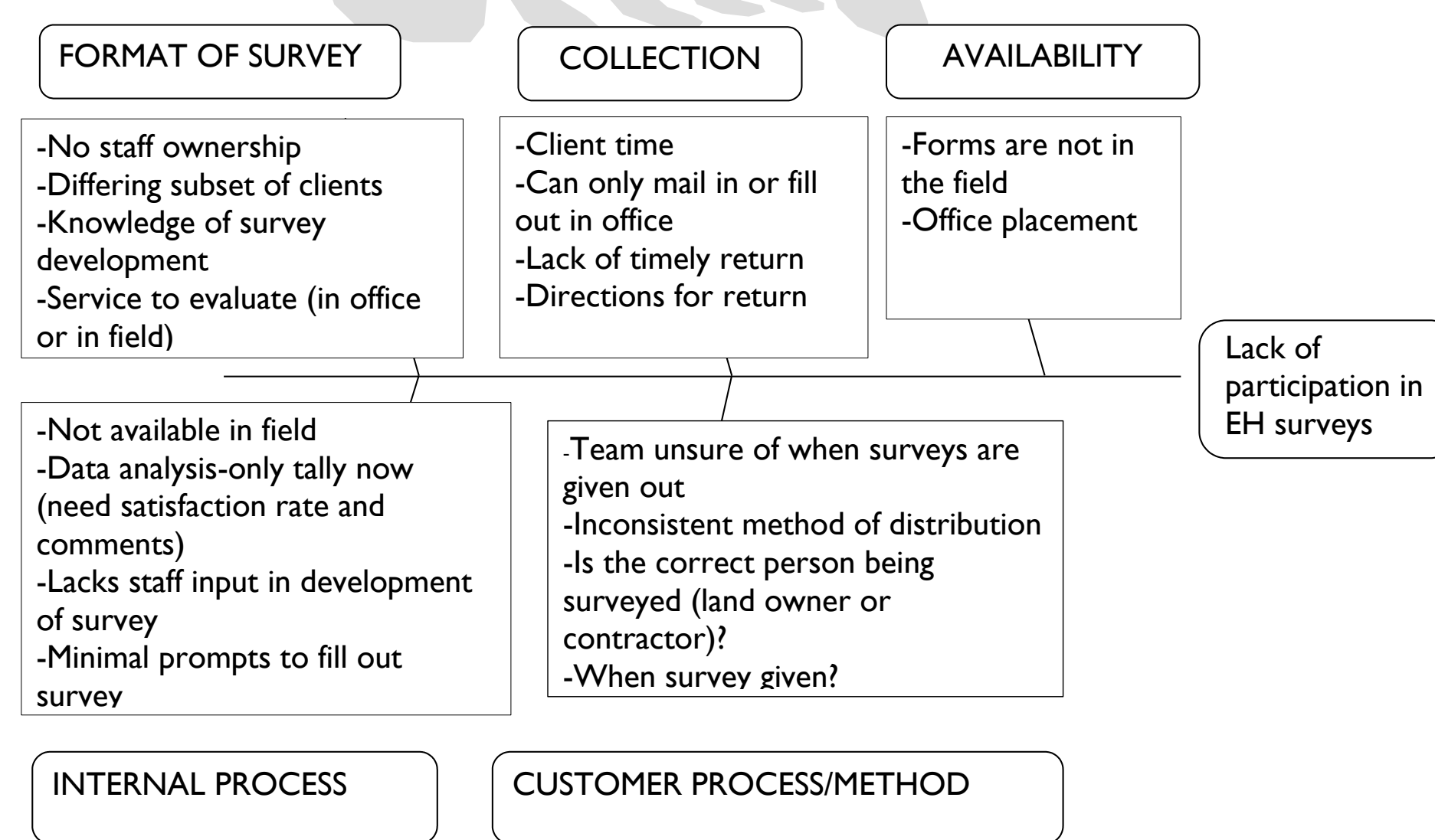
One of the biggest concerns that came out these questions was the discovery that few EH surveys were being returned. That alerted the group to a potential problem related to a lack of participation in the EH surveys. The MLC-3 Team created a Fishbone diagram to identify contributing factors to low EH survey return rates.

Multi-State Learning Collaborative 3 - Funded by the Robert Wood Johnson Foundation.

### Team Members:

- Shelli Wolfe - Health Promotion & Preparedness Grant Writer
- Allison Bradac - Administrative Assistant
- Steve King - Environmental Health Supervisor
- Sue Presnell - Personal Health Nurse
- Jason Howard - IT Support

Fishbone Diagram for Lack of Participation in EH Surveys



To further explore root causes for the low number of surveys returned, the MLC-3 Team participated in a "5 Whys" exercise.

### CMDHD Five Whys of EH Survey Availability

Issue: Lack of participation in EH satisfaction surveys.

- Why 1: Lack of client awareness of survey availability.
- Why 2: Lack of prompts to fill out the survey.
- Why 3: Lack of staff buy in to prompt for surveys.
- Why 4: Fear of negative ramifications for employee.
- Why 5: Due to the regulatory nature of EH.

Upon completion of the "Five Whys" exercise, a MLC-3 EH representative volunteered to informally discuss survey distribution with secretarial staff in each county. Results from that discussion are listed below.

Informal discussion with staff demonstrated an inconsistency across counties related to the format of survey being used and its distribution method. Counties were distributing either the general health department services or the EH services survey. Surveys were being distributed by being set out for clients to pick up, handed to the client, available upon request, or sent with final inspection reports.

After acknowledging that our initial beliefs from the "Five Whys" exercise were off base, we reviewed secretarial responses to inquire and found that there was a lack of consistency related to which EH survey was used and a lack of consistency in the survey distribution process. In order for the QI Team to work on improving EH customer service for onsite water and sewage, the process needed to be stabilized.

### 4. Identify Potential Solutions

There was MLC-3 Team discussion which resulted in a list of potential solutions being developed and prioritized.

- Develop a new plan for survey distribution and tracking so that we know how many surveys are given out by county and how many are returned.
- Discuss what information is wanted and needed on the survey tool so that meaningful QI information can be obtained.
- Revise the survey tool with help from MPH and survey experts.

### 5. Develop an Improvement Theory

Predictions:

- If we standardize the survey distribution process, we will know how many surveys are being given out each month by county (denominator) and how many surveys are being returned each month by county (numerator). This will lead to a stabilized and improved survey tracking system.
- If we improve the survey tool, it will be more user friendly and clients will be more likely to return the survey. Data collected (quantitative and qualitative) will be useful in assessing customer satisfaction and improving EH services.

## Do

Test the Theory for Improvement

### 6. Test the Theory

Several tools were developed to test CMDHD's theories:

- Electronic data tracking document
- Data tracking procedures including: secretaries telling how surveys sent out each month and CMDHD's Administrative Assistant tracking the number of surveys returned by county by month.
- Initial survey distribution procedures to stabilize the project numbers.
- Educational tools for training and collecting input from EH staff about the project (e.g., email correspondence, phone calls, PowerPoint Presentation, Survey Monkey, and one-on-one interviews).
- A new EH Onsite Water and Sewage survey tool and cover sheet.
- Revised survey distribution procedures to be used with the new survey tool.
- A Rapid Cycle Improvement Plan was used to study the effects of use of the new survey tool in Clare County during November of 2009.

### Barriers

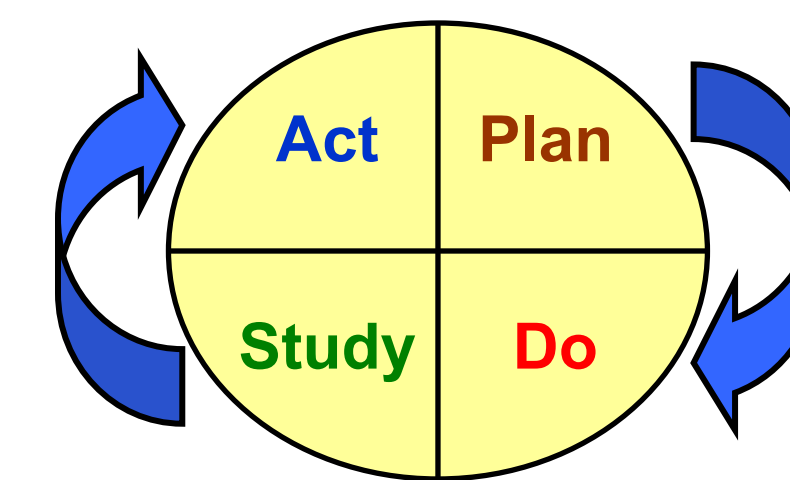
- Varied levels of effective communication, understanding, and buy-in related to the project between MLC-3 Team members and EH staff across six counties.
- Seasonal fluctuation in on-site water and septic inspection requests complicated our study results. To get a better idea of the effectiveness of the changes made, expanding the research to a 24 month period is suggested.

### Unanticipated results

- Increased understanding of the need for development of and adherence to district-wide written policies and procedures.

# Quality Improvement Story Board

Environmental Health  
Customer Satisfaction Project



## Study

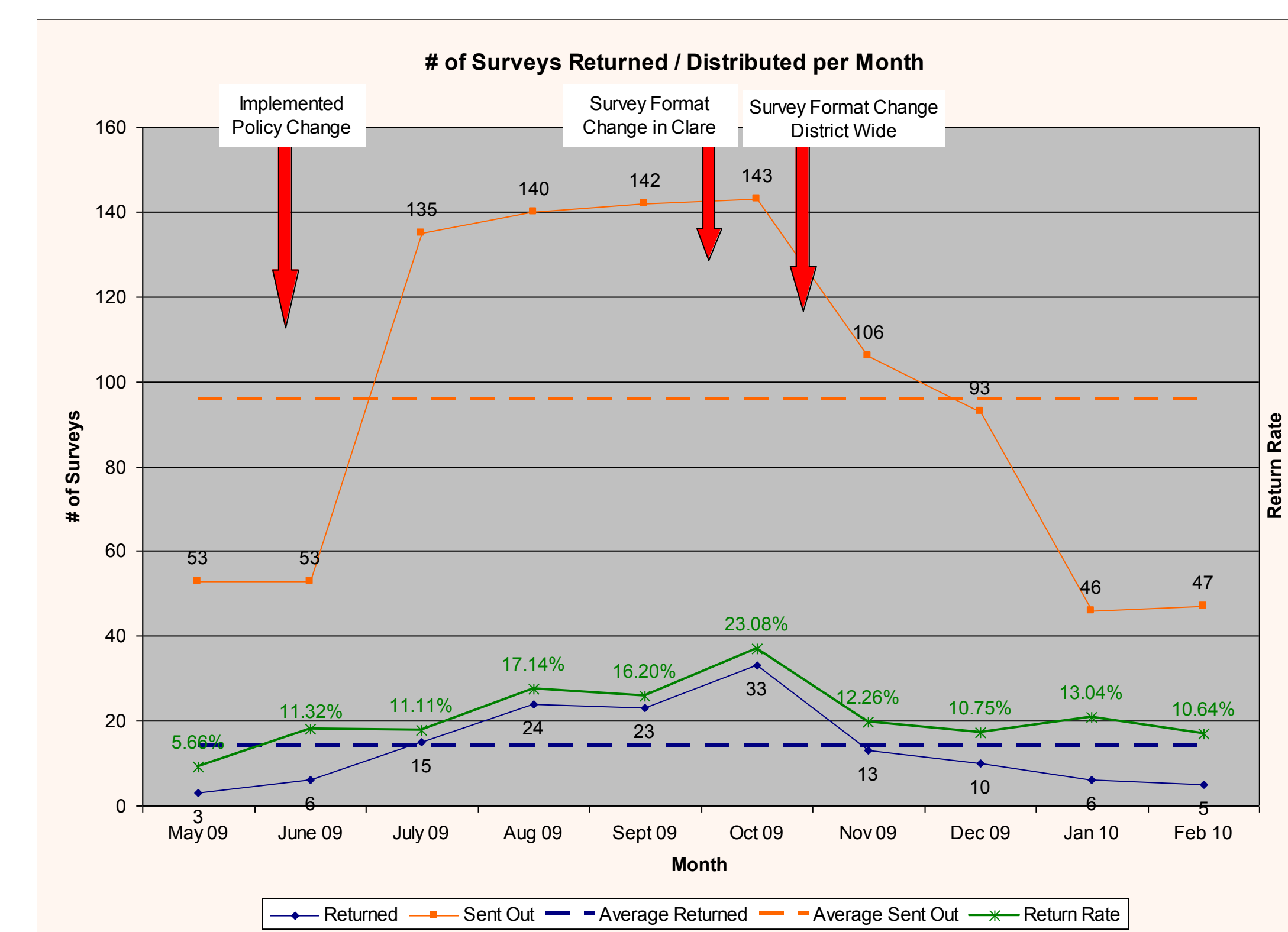
Use Data to Study Results of the Test

### 7. Study the Results

Development of a formal survey distribution policy and improved data tracking documented the stabilization of the number of surveys given out and the number of surveys returned. Survey return rates increased from 6% to 12% in the 3-month period after the new distribution and tracking policy were implemented. Feedback from Clare County staff, following the Rapid Cycle Improvement Plan, was used to finalize the survey distribution process prior to the new survey use being expanded to all six counties (December 2009). From May 2009 to February 2010, the overall survey return rate increased over 75%. Return rates ranged from 6% to 23.08% during the study period. Results from CMDHD's MLC-3 project are outlined in the Survey Distribution and Return Rate chart below.

EH Total	May 2009	June 2009	July 2009	Aug 2009	Sept 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010
Sent*	53	53	135	140	142	143	106	93	46	47
Returned	3	6	15	24	23	33	13	10	6	5
% Returned	6%	11%	11%	17%	16%	23%	12%	11%	13%	11%

The chart below illustrates changes after implementation of the new survey distribution policy, initial survey format change, and district-wide survey format change; seasonal service number variations are also noted.

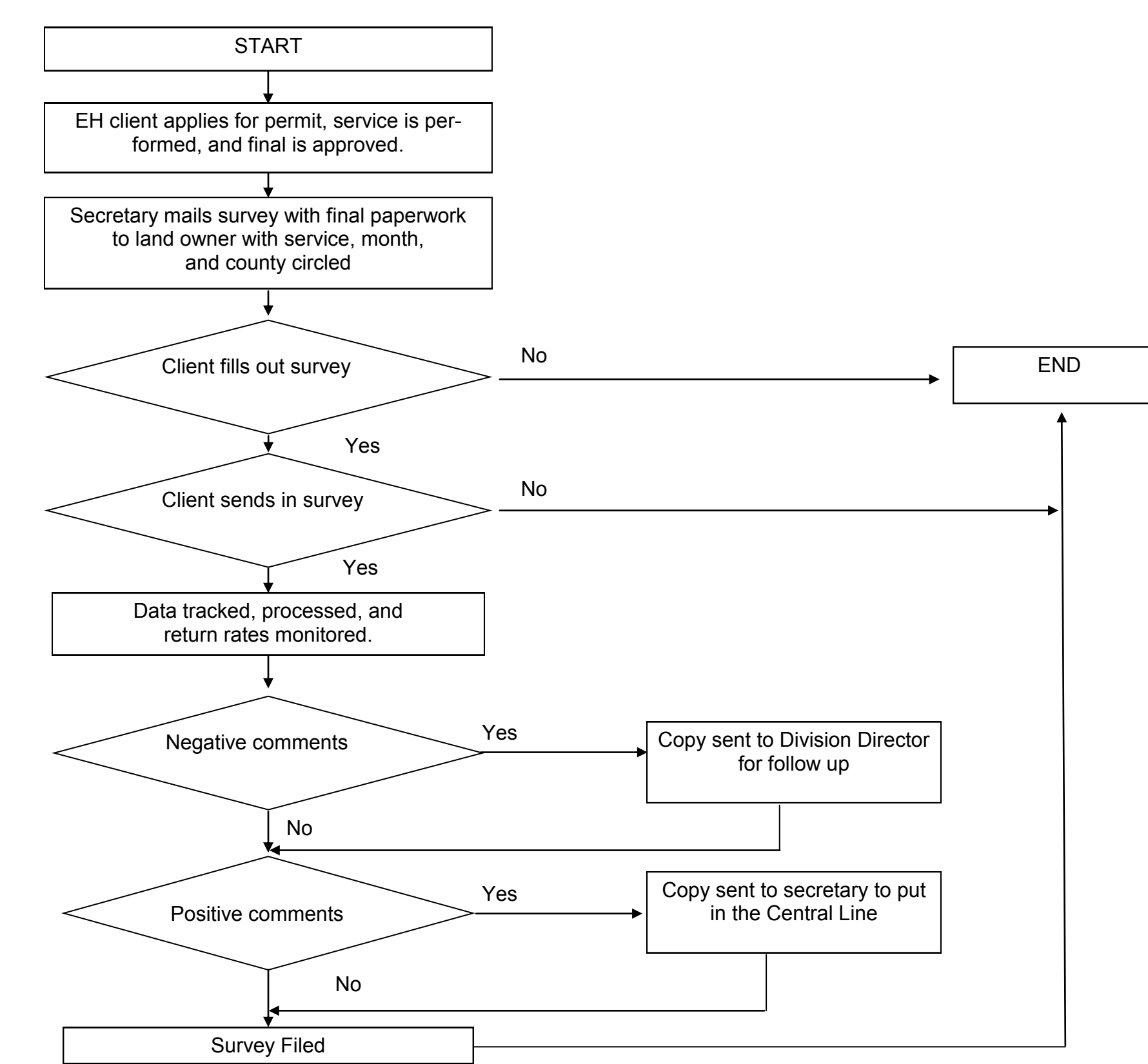


## Act

Standardize the Improvement and Establish Future Plans

### 8. Standardize the Improvement

Upon completion of the CMDHD MLC-3 QI project, a revised flowchart was developed for use in training staff in the survey distribution process.



### 9. Establish Future Plans

- A plan for analysis and use of newly collected EH survey data will be developed.
- Data quality from the old versus new EH survey format will be compared.
- Due to the varied levels of training needed to change behavior, the use of flowcharts for training will be explored.
- An official EH Survey Distribution policy will be adopted by June 2010.
- The new EH survey return rates will be studied for at least another twelve months to insure the level of return stays at or above the current level.
- The MLC-3 team will meet, fall 2010, to review new data since February 2010.
- Other survey distribution options will be explored including a computer-based, on-line survey tool.
- Use of the Rapid Cycle Improvement technique and nine step QI process will be explored for use with priority issues identified in the agency's 2009-2013 Strategic Plan.
- Lessons learned and project accomplishments will be reported at a monthly CMDHD Board of Health meeting where the press is invited to attend.
- Lessons learned through the MLC-3 project, will be shared with all staff during a district-wide meeting.
- Project successes will be forwarded to the district's larger newspapers, posted on our agency internet site, and made available in other public health meetings.

