

# REDUCTION IN PAPERWORK (REAL ESTATE)

## MAHONING COUNTY DISTRICT BOARD OF HEALTH, MCDBOH (OH)

### 14 FULL TIME EMPLOYEES



### PLAN

#### Identify an opportunity and Plan for Improvement

#### 1. Getting Started

In the 4th quarter of 2017 and into the 1st quarter of 2018, the MCDBOH environmental division received external complaints from real estate agents, title agencies, and homeowners that were selling or buying a home with a well or septic system. The complaints revealed that required paperwork was not being received by these parties in time for property sale closing dates and that the PWS letters were written in language that was confusing to the average resident. An internal survey of the sewage sanitarians and clerical staff indicated that 66% of the staff was unsatisfied with number of forms required to complete the reports and the number of questions (phone calls) produced after reports were received by the applicants.

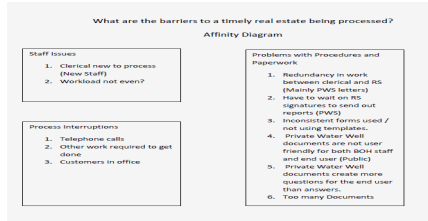
#### 2. Assemble the Team

The QI Council Chair formed at team based on the revised 2018 QI participation objectives as 8 employees representing various divisions were selected; Environmental Health Division (6 staff), Finance and Human Resource Division (1 staff), Women, Infant and Children Division (1 Staff). The team initially met for one full day and used a variety of QI tools to identify the main issues of why the PWS forms/letters were delaying the process to ensure the consumer receives a timely (within 24 hours) and complete report that is easy to comprehend.

#### 3. Examine the Current Approach

The affinity diagram was first used as this allowed the team to creatively generate a significant amount of ideas and issues surrounding the cause as to why the PWS letters were taking time to process. Each team member wrote their ideas on post-it notes and then they were placed on the wall. The ideas were grouped into the following three categories based upon similarity or focus of idea presented; (1) Staffing issues, (2) Process Interruptions, (3) Problems with Procedures and Paperwork. The category identified with the largest amount of issues (6 issues) that would require breakthrough solutions was grouping number three, Problems with Procedures and Paperwork. The following six problems are listed as:

1. Redundancy in work between clerical and Registered sanitarians ( Mainly Private Water Well Letters)
2. Clerical having to wait on Registered Sanitarian signatures before sending out reports.
3. Inconsistent forms used/ not using templates
4. Private Water Well documents are not user friendly for both MCDBOH staff and end user (Public)
5. Private Water Well Documents Create More Questions



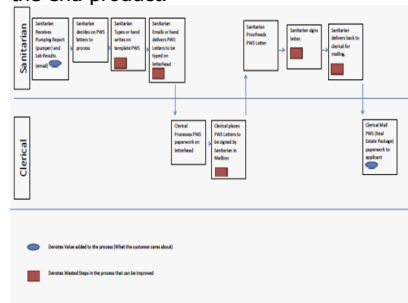
#### AIM Statement(s)

The QI Team developed the following set of goals based on the needs from internal and external information received:

1. Reduce PWS forms/letters being processed by 50% by 6/1/18.
2. Revise PWS language to be easily understood by the general public by 6/1/2018.
3. Reduce the office time associated with the process by 40% by 9/1/18.
4. Meet a 24/hr. processing time for inspection reports by 9/1/18.

#### 4. Identify Potential Solutions

In order to identify potential solutions to the problem, the QI team conducted process mapping of the steps required to generate the real estate PWS letter/reports. Together, the QI team identified "value added" (what the consumer cares about) and wasteful steps of the process that could then be improved. In this case, 5 wasteful steps were identified (denoted with red boxes in the Process Map below) that did not add value to the end product.



#### 5. Develop an Improvement Theory

A CTQ tree was used to identify the key measurable characteristics or processes needed to meet customer needs. Recognizing that the two identified customers are both external (the applicants) and internal (the MCDBOH staff that process the reports), the tool identified a total of five customer needs. External customers seek to have reports that are: (1). On-time, (2). Accurate, and (3). Comprehensible. Internal customers also sought timely, accurate and comprehensible reports yet they also requested: (4). A reduction in the number of forms and letters being used and (5). The possibility of automating the letters.

The use of the CTQ Tree identified opportunities to measure the outcomes of the customer needs.

### DO

#### Test the Theory for Improvement

#### 6. Test the Theory

Following the alterations based on the improvement theories findings, the customer needs were measured through phone interviews from a random selection of completed real estate inspections. This process became standardized through the use of an anonymous customer satisfaction survey that is mailed with every completed real estate inspection. The fulfillment of internal customer needs was measured by the reduction in PWS letters that have to be used by the staff and staff reported satisfaction with use of the fillable PDF well letter/report. During this time the tested results were proven as positive outcomes which allowed the program to move forward with full use of the forms (See outcomes 1-4 listed below).

### CHECK

#### Use Data to Study Results of the Test

#### 7. Check the Results

The final outcome of this project exceeded the initial set objectives. The achieved measurable goal of reducing office time associated with the real estate program has also led to an annual estimated cost savings of \$15,000. This estimated cost savings was calculated by deriving the initial monthly average for office time associated with the real estate program (52 hours/month) versus the same time associated once the changes took place (13 hours/month).

#### The following objectives and their outcomes are as follows:

- Objective 1:** Reduce the amount of PWS forms/ letters used by the Sanitarians and clerical staff by 50% by 6/1/18  
**Outcome:** The objective was met as initially 4 template forms/letters were being used for processing the results of the PWS samples; (1) Total Coliform Presence-Absence Safe, (2) Total Coliform Presence Absence Unsafe, (3) Total Coliform Colony Count Safe, and (4) Total Coliform Colony Count Unsafe. The PWS letters were reduced to 2 forms. The first form became a fillable PDF with water results. This PDF enabled the sanitarian to readily fill in the results and owner information on MCDBOH letterhead, thus eliminating transcription steps (non-value added) between clerical and the sanitarian. The second letter is an informational sheet that explains the results to the applicant. The informational sheet requires no additional information as it is an insert that is attached to the PWS reports.  
**Objective 2:** 40% Reduction in Sanitarian office time associated with real estate transfer program by 9/1/18.  
**Outcome 2:** The reduction in sanitarian time exceeded the goal of 40% by 9/1/18. Employee time tracking software, known as HDIS, indicated a 75% decrease in the amount time associated with the real estate transfer process due to the use of the new forms. Data for one year was mined from

HDIS program codes for the real estate transfer program. The initial overall total Real Estate program office time for all sanitarians combined, was 52.36 hours a month.

**Objective 3:** 85% of non-failed real estates will meet a 24-hour processing time by 9/1/18.

**Outcome 3:** A random selection of late 2017 and early 2018 of Real Estate transfer program files indicated that only 8/30 (26.6%) met the 24 hour processing goal. Once all improvement measures were in place another random selection of 30 non-failed real estates were collected and the data indicated that 86.6% were being processed within the set goal of 24 hours.

**Objective 4:** Revise the PWS language to be easily understood by the general public by 6/1/2018.

**Outcome 4:** The PWS letters were altered for improved readability and Text Readability Consensus Calculator was used to ensure the documents reading levels were reduced. The initial four letters had an average Flesh-Kincaid Grade Level of 11.53 reading ability (College Grade Level). The revised forms were reduced to an 8.75 for the Flesh-Kincaid reading level or the equivalence of an 8th grade reading level.

**ACT**  
**Standardize the Improvement and**  
**Establish Future Plans**

**8. Standardize the Improvement or Develop New Theory**

Fillable PDF forms alleviated wasteful non-value added steps in the septic system inspection and PWS components of the Real Estate Transfer program. Consequently, a plumbing program letter was similarly revised in order to reduce personnel office time associated with processing letters and reports and thus improve customer service and reduce program costs. As a result, this process is being standardized across the Environmental Health division. Additional EH programs are now reviewing template letters/reports with the focus on combining, eliminating, and converting to fillable PDFs

**9. Establish Future Plans**

This improvement will continue to be monitored as new employees are hired at the Mahoning County District Board of Health.

August, 2018