

**PDCA storyboard**

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| Division/Office: | Division of Health Promotion |
| Section: | Environmental Health Section |
| Members: | Maria Almanza, Joe Durczak, Dan Eder, Kristin Johnson, Amy Lantis, Juan Magana, Vic Mead, Neal Molnar, Austin Schramer, Liz Swanson, Ben Sylejmani, Sharon Verzal, Julie Wiegel |
| Project Title: | Routine Food Inspection Report Completeness |
| Dates of Project: | January 9, 2013 – July 10, 2013 |

**PLAN**

Identify an opportunity and

Plan for Improvement

**1. Getting Started**

To standardize a process for how routine food inspection forms are filled out, the Environmental Health (EH) staff met and developed criteria that led to the creation of a checklist to use to review inspections for consistency. Inspections were initially audited by the supervisors using this checklist, but to limit subjectivity the supervisors met to test their internal consistency in how the checklist was being used to review inspection reports.

Previously there was not a system developed to standardize how the forms were being filled out, so the project created an opportunity to improve the quality of reports being given to food establishments. Inspections audited from February of 2013 found that 42% of inspections were in compliance when using the newly created checklist.

**2. Assemble the Team**

The entire Environmental Health Section of nine Environmental Health Practitioners, two Program Supervisors, one Administrative Assistant, and one Assistant Director were involved in the process. All team members had an active role in the discussion, design, and implementation throughout the PDCA process. From the results of the February baseline data an Aim Statement was created: *By 05/13/2013, the EH Section will see an increase in the percentage of completely written inspection reports from 42% to 80%.*

**3. Examine the Current Approach**

On 02/13/2013 the EH staff were anonymously surveyed regarding how often they fill in each of the required fields on the inspection report. EH staff then each completed flowcharts to indicate their individual processes for completing inspection reports. Both tools showed variability in the procedures among the staff members.

To determine the root causes of the problem the EH staff members conducted a Cause and Effect Diagram during a meeting on 03/05/13.



Based on the result of the Cause and Effect Diagram, some of the root causes determined were inconsistency in assessment by the supervisors, pressures of time and workload, and not enough group collaboration in defining what a completely written inspection form is.

**4. Identify Potential Solutions**

On 03/13/13 the EH group talked about best practices around how inspection reports are written and looked at potential solutions to ensuring completeness of inspection reports. The EH staff brainstormed potential solutions and created an Affinity Diagram to identify the best possible method of improvement.



Based on the Affinity Diagram results and previous discussions, the group voted and selected to create an Inspection Standardization Form. This served as tool to use in the field in which EH staff had an identified list of what should be written on the inspection form and how it should be written. The form supplied EH staff with concise guidelines for standard inspection documentation.

**5. Develop an Improvement Theory**

In selecting the creation of an Inspection Standardization Form, the prediction was that if each EH Practitioner brought the guide and used it after each routine inspection, then the percentage of correctly written inspection reports would increase from 42% to 80% by 5/13/2013. The form was created by the team to address the identified root cause of inconsistency and to ensure group collaboration, and the final version of the form was handed out to use between 04/13/2013 to 5/13/2013.



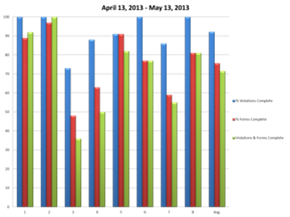
During this period each routine inspection was evaluated by the EH Supervisors using the inspection review checklist, the same version used to establish the February baseline data.

**DO**

Test the Theory for Improvement

**6. Test the Theory**

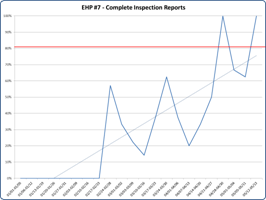
Because the team anticipated that improvements may be seen just by identifying and working through the PDCA process, data was collected from February 2013 until the end of the PDCA cycle. The data was collected and analyzed by the two EH Supervisors. Bar charts created showed monthly results for each EH Practitioner and a group average based on the percentages of violations written correctly, percentages of forms filled out correctly, and percentage of completely written reports. Bar charts were created for February, March, April, May (May 1-13), and from during the implementation period of April 13-May 13.



A line chart from February 2013 to May 2013 demonstrated the percentage of completely written inspection reports.



Individual line charts for each EH Practitioner showed by week the percentage of completely written inspection reports throughout the entire PDCA process. Trend lines were put into these graphs to show an average positive or negative trend. All individual data was displayed anonymously.

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**CHECK**

Use Data to Study Results

of the Test

**7. Check the Results**

Data showed an increase in completely written inspections from 42% in February to 75% by end of the PDCA cycle (05/13/2013). The data showed increases by month in average percentages of correctly written violations, forms, and completely written reports. Individual data also showed increases by every Environmental Health Practitioner, though variations in the degree of improvement. This variability is an issue for further investigation.

**ACT**

Standardize the Improvement and Establish Future Plans

**8. Standardize the Improvement**

**or Develop New Theory**

While the improvement did not reach the desired goal of 80%, the increase from the baseline of 42% to 75% at the end of the PDCA cycle was deemed a success by the team. On 07/06/13 the team evaluated the Inspection Standardization Form via a SWOT analysis. The analysis revealed an increased level of consistency and team collaboration, but the team felt the development process was time consuming. The SWOT also identified opportunities for new projects.

To standardize the improvement, the Inspection Standardization Form is now standard practice and serves as a tool that EH Practitioners use during their inspections. The form has also been implemented into the process for new employee training. To sustain the gains, the EH Section will continue to monitor this data on a quarterly basis as part of the KCHD Performance Management System. Declines in performance could result in future PDCA work.

**9. Establish Future Plans**

There were numerous future plans that arose throughout the PDCA process, such as creating a future PDCA around what is considered a “correctly” written violation, possible changes to the current inspection form being used, and possibly utilizing the project as a driving mechanism towards digital inspections in the future. To celebrate the success of the project future plans include distribution of results internally and with external partners via newsletters, as well as sharing with regional and national organizations in the areas of EH and quality improvement.