

Problem Solving (A3) Report

Topic: Health Department Database

Date: 01/20/21

Name: Jose L Vera

1. Identify a Problem	PLAN
<ul style="list-style-type: none"> What is the standard? The data is given physically, in other words, through paper instead of digitally. Does it reflect the customer's point of view? Yes, as the citizens of Puerto Rico understand the slowness of how the data is reported. Is understood by those doing the job Yes, as those who work at the Puerto Rico Health Department understand the slowness of how the data is reported. Are we meeting the standard? No as other countries, like the United States report their data in real-time. What is the GAP What we hope to achieve is to digitally standardize how we record and report a census for every mayor illness on the island. Gather facts as known from Gemba– Who, What, When, Where What we know currently: <ul style="list-style-type: none"> Those affected is the population of Puerto Rico as they cannot properly classify the emergency state of Puerto Rico. With the current standard, the shown data is from the data obtained two weeks prior. How important is it to solve this problem? This problem is important to solve as more time passes, more people get infected What did you do to contain the problem? Set a digital standard for sharing medical information to reduce time of publication 	

2. Set the Target	PLAN
<ul style="list-style-type: none"> What are your intermediate targets (milestones) and when do you expect to achieve them? <ul style="list-style-type: none"> Minimize the time from the patient registration to the updated public statistics from two weeks to real-time. Standardize how data is shared between doctors and the public health department. To achieve this, we must communicate with representatives of the Puerto Rican health department. 	

3. Analyze the Causes	PLAN
<ul style="list-style-type: none"> Why does this problem occur? Lack of motivation and miss management from the health department. Do potential causes map to the known facts? What are some reasonable assumptions to make about potential causes (where should we look first)? The potential cause is the outdated technical infrastructure on the island. Can we gather more facts to help determine Root Cause? The extreme poverty on the island and the lack of knowledge from the government on modern networks can be the Root Cause. Can we explain the cause and effect relationship plausibly? The poverty and lack of knowledge from the Puerto Rican government on how to effectively use modern media and technology is the cause of the outdated system we have which in turn unmotivates developers to work on a program that can easily reduce the time between the data obtained to its publication. 	

4. Propose & Implement Countermeasures	PLAN/DO
<ul style="list-style-type: none"> What countermeasures are most likely to eliminate the Root Cause? <ul style="list-style-type: none"> Restructure the whole network on the health department. Teach older medical doctors how to effectively use a computer Create a program that does not require high computational power in order to update the census of an illness. Which countermeasures are most feasible and effective; likely to cause the least impact; what is the cost, difficulty? The first countermeasure is not feasible as Puerto Rico does not have the budget for a full technological restructure. The second countermeasure is possible but unreliable as some medical doctors are stubborn when it comes to learn about technology. The most feasible countermeasure is the third one as making a simple program is not as expensive and can be used by employees of both the department of health and of medical offices. Can I select the countermeasures that will achieve my targets? As previously stated the third countermeasure is the best solution. 	

5. Check/Evaluate	CHECK
<ul style="list-style-type: none"> Did the countermeasures work? It has worked for other countries such as the United States and China. Was the target achieved It has been achieved by other countries. Can I verify that the Root Cause was eliminated (can I turn it off & on) It has been eliminated in other countries. If the Countermeasure was not effective, why didn't it work? N/A 	

6. Act and/or Standardize	ACT
<ul style="list-style-type: none"> How will we ensure the process continues to work (stays solved)? Besides maintaining the hardware for the data, we can do a biweekly revision of the data on the computer with the data received on paper. What have we learned? We need to find areas of our local communities where outdated methods hinder the efficiency of data sharing. Where else can we apply this learning? We can apply this not only in other departments of our local government, but also as a self-reflection of our own business practices. 	

