

**Understanding the Problem**  
Facilitators Manual

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## **Resource Description**

Preceptor-facilitated small group workshop combining a discussion of how the framework of the history and physical exam relates to the steps of a quality improvement project and a facilitated small group exercise using the development of the problem statement and SIPOC, and identification of stakeholders to demonstrate an approach and how to utilize some QI tools to understand a familiar problem. Format is multimedia including Power-point didactic component, small group breakout session, and interactive group discussion. This module ends with a review of SMART goals and an introduction to managing a team

## **Purpose, Goals, and Objectives**

Participants will be able to:

1. Understand that the creation of a problem statement is the first, critical step in approaching a problem. The participant will be able to craft an effective problem statement.
2. Create a SIPOC and identify potential stakeholders.
3. Understand how to make a process map to identify areas of waste and communicate new processes.
4. Be able to use SMART goals and agendas to manage a quality improvement team.

## **Intended Audience and Prerequisites**

This module is in use for medical students, second year Internal Medicine residents in a hospitalist training program and pharmacy residents. Its contents would be applicable to anyone in the healthcare field. This module requires two hours to complete.

## **Instructor Qualifications and Responsibilities**

The preceptor should be familiar with basic quality improvement. Small group facilitation skills are needed.

## **Required Resources**

Computer with projector. Flip charts, colored post it notes and a sharpie.

## **Suggested Agenda**

- 15 minutes      Didactic: Understanding the Problem
- Brief discussion explaining and reviewing Step 1 in Handbook
- 75 minutes      QulP Team Work: Understanding the Problem
- Each team will work on Step 1 in their QI Handbook to write their Problem Statement
  - Faculty should help facilitate discussion during this time
  - Each QulP Team will report out their problem statement (10 minutes for 4 teams)
- 60 minutes      Didactic and Small Group Work: Identifying areas for improvement
- Refer to rough process map created earlier; identify areas of waste/inefficiency
  - Apply modified FMEA analysis to areas of improvement
  - Each QulP Team will work on Step 2 in their handbook
- 10 minutes      Debrief and eval

## **Suggested Preparation for Learners**

Prior to the session, learners will need to:

- Complete IHI Open School QI 102 - The Model for Improvement: Your Engine for Change (<http://app.ihi.org/lms/coursedetailview.aspx?CatalogGuid=6cb1c614-884b-43ef-9abd-d90849f183d4&CourseGuid=41b3d74d-f418-4193-86a4-ac29c9565ff1>)
- Begin a rough draft of their Project Charter (in QI Handbook)

## **Understanding the Problem**

### **Slide 2**

Review of the agenda

### **Slide 3 – Making the Case for QI**

QI discussions can produce a variety of responses – and vary from disinterest - they recoil, their eyes glaze over when I talk excitedly about fishbones or PDSA's or run charts, or outright resistance –saying things like – I went into medicine to take care of patients and this is stuff from car manufacturing and the airline industry and not something I feel equipped to do.

But, I really think we are better equipped than a lot of people and here is why: It is just like working up a patient and the steps are not very different than doing an H and P. In medicine, we have tools that we use to ensure a more consistent product. The H and P is good example of this. In QI terms we would call it “standardized work.” When we look at an H and P, no matter what service – surgery, pediatrics, orthopedics, internal

medicine- there are standard components we expect to find. It helps the reader find information, but it also helps the writer not forget important steps in gathering information.

#### **Slide 4**

When it comes to QI projects, the mistake that I see time and time again – is that we identify a problem and jump immediately to the solution. I know, because I have done it. But if you think about QI as a parallel to an H and P – it would be like jumping to a treatment plan right after you hear the chief complaint of chest pain. That is really just the very very beginning of our work. We then start asking about the HPI – what is this chest pain like, where is it, what brings it on, what makes it go away, etc, etc. This beginning investigation can launch us in the direction of GERD, anxiety, to ischemia and AAA –

A well-crafted problem statement is just that important to your QI project. It starts your team charting your course. Answering these questions isn't exactly hard, but answering them correctly is as important as your HPI sending you from GERD to MI to AAA.

Now, break into your teams and take 5 minutes to craft a problem statement for your project or a problem that you are facing in your day-to-day activities.

#### **Slide 5 - 6**

SIPOC is a tool that comes to us from six sigma. It is a tool to perform what is essentially a high-level process map – the start of you understanding the processes involved in your problem.

I thought it would be best if we demonstrated how to do this here – so you can work on this with your team.

You will need post it notes, a marker and a camera to take a picture of your work.

So, SIPOC are a pneumatic – it stands for...

So if we try to have a demonstration - I like to start with the process steps I have identified and place them under P

Then I like to identify who the customer is and start thinking about what they need and identify the output. Then work on the supplier and what inputs they need to do their job. SI and OC are nouns –P is verb.

I have added Requirements and Problems to this – because inevitably you start encountering problems – either know about or need to put it aside, or you may identify things that you don't know and need to get a better understanding of.

You want to have a chance to review your SIPOC and process maps with your stakeholders to make sure you have it right.

### **Slide 7 – Small group discussion**

The title for this slide was taken from a headline. It was chosen because ordering at a restaurant is a familiar activity to everyone and this topic reliably produces lighthearted conversations that learners enjoy. In the effort to achieve full disclosure, the picture is not related to this article but a family picture that fit with the theme.

At this point we place different colored post it notes in columns each with the letters SIPOC. Learners identify all of the steps in the process of ordering food and drinks at a chain restaurant. These are placed under P. Then they identify the customers and suppliers and inputs and outputs needed for each of these steps.

### **Slide 8**

The S and C columns represent your stakeholders. This is where you start to engage them. It is important to understand their view of the problem, the requirements they have to perform their role. It is time to dust off your problem statement and communicate it to the stakeholders to bring a sense of urgency. You will need to communicate what success will look like. Because change is hard and there is often resistance, it is useful to also discuss and agree on what failure will also look like.

### **Slide 9**

Process maps help you gain a deeper understanding of your process and help you identify areas of improvement or waste. They are your labs and radiology tests of your QI project. . You have a chance to understand every step, build on to your communication with your stakeholders and identify areas of potential waste or opportunities for change. You need a big sheet of paper and markers. I also recommend post it notes here because you will modify things and it is easiest to pick up the note and move it rather than scribble it out.

I urge you not to make process maps in your conference room. You need to go where it is happening and talk with the people doing the work. If you make your map in the conference room, you may have a very pretty map, but it will be of what you THINK the process is. Logistically, you can make notes of what you see, then retreat to the office or conference room to make your chart – but never forget the step where you bring this back to those doing the work so they can tell you if you have missed something.

### **Slide 10**

When we look at areas of improvement, it is helpful to categorize our possible interventions – by degree of effort involved and degree of impact we can expect. Lets start in the lower right hand corner – what things can we think of that are low effort and low impact – best example is signs and reminders. We see them all over the hospital –

wash your hands, don't forget to chart. It is relatively cheap to make the signs, and how do they work?

Then let's go to the upper left – what would be an example of high effort, high impact? A hard stop in the EMR. You cannot go further until you have done the step.

Now let's think of high effort and low impact. Educational sessions.

And Low effort (although this is arguable) and high impact – order sets and protocols.

### **Slide 11**

Let's review the important features of SMART goals.

### **Slide 12**

The last step to cover is how to manage your team. You frequently have a multidisciplinary team on a QI project and all of us have competing demands for our attention. If you are going to call a meeting, you have to have an agenda. If you don't, you should bring drinks and a bag of chips – because it might as well be a party. If this is a follow-up meeting, do your team a favor and include the action items of the last meeting so folks can make sure they have done their assignments before the meeting. Then identify what you want to solve. I recommend including your problem statement.

During the meeting, assign someone to be the scribe. Identify action items and assign a responsible party.

If your entire team cannot be present, it is helpful to post minutes of the meeting to keep all informed.

### **References**

Mark Graban, *Lean Hospitals: Improving Quality, Patient Safety and Employee Engagement* (2<sup>nd</sup> edition). Boca Raton, FL: CRC Press, 2012

Donald M. Berwick, A. Blanton Godfrey and Jane Roessner, *Curing Healthcare: New Strategies for Quality Improvement*. San Francisco: Jossey-Bass, 1990.

Debra Hadfield, Shelagh Holmes, Sue Kozlowski, and Todd Sperl, *The Lean Healthcare Pocket Guide XL: Tools for the Elimination of Waste in Hospitals, Clinics, and Other Healthcare Facilities*. Chelsea, MI: MCS Media, 2010.

### **Suggested Reading**

IHI Open School Courses 101, 102, 103

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**Conflict of Interest**

Dr. Price has no conflicts of interest relevant to this educational product.