R1 QI Assignment

This assignment will be submitted at two points in time:

I. **September 23rd, 2016**

    a) Team Charter and Clinic Approval of Project

    b) QI Worksheet: Assemble Your QI Team and Plan Phase

II. **November 18th, 2016**

    a) QI Worksheet: Do, Study, and Act Phases

QI Worksheet

How to use this worksheet: Type your responses into the correct fields – they will expand as you type. Write in complete sentences and provide as much detail as possible. When you create attachments, create an appendix at the end of this document and reference your attachments in the answers you give.

Submit your QI Worksheet on or before the dates listed above.

Assemble Your QI Team

Name of Clinic: **The Anytown Clinic**		
Date: August 12th, 2016		
Name	**Role – MOA, Nurse, MD, EMR specialist, Clinic Manager, etc.**	**Responsibilities**
Alan Fresco	Nurse	Ask patients about their smoking statuses and enter statuses in EMR.
Dr. Dianne Ameter	MD	Ask patients about their smoking statuses and enter statuses in EMR.
Dr. Richard Tea	MD and Clinic Manager	Make sure that project aligns with clinic processes and approve project.
Penny Tool	MOA	Book appointments and escort patients to the exam room.
Hans Down	EMR specialist	Search EMR for smoking statuses
Dr. Indigo Violet	MD	Ask patients about their smoking statuses and enter statuses in EMR.
Dr. Desmond Eagle	MD, Resident	Work with staff to complete QI Project.

Plan Phase

Topic: Current smoking statuses of patients aged 15 and above

1) **Problem/Opportunity statement –** what's wrong?

We noticed that many of our patients do not have smoking statuses in the EMR.

2) **Why is this topic important to your clinic?**

This topic is important to our clinic because many clinical decisions involve knowing patients' smoking statuses and, if we know that a patient smokes, we can encourage them to quit smoking.

3) **How did your QI team arrive at this topic?**

One of Dr. Ameter's patients died of lung cancer, so this sparked a concern about patients' smoking statuses. She brought the issue up at our monthly clinic meeting and all of Anytown's staff agreed that we should regularly ask patients about smoking.

4) **Aim statement –** What are you trying to accomplish? Your aim statement should be clear, time-specific, location-specific, express what you are trying to improve, and by how much.

By December 1st, 2016, 95% of patients aged 15 and older who visit the Anytown clinic will be asked about their smoking status and evidence of this inquiry will be recorded in the EMR.

Baseline Measure

5) **What are you measuring?** We're measuring the presence of smoking statuses in the patients' electronic medical records. Since we can't monitor each previous patient encounter, we assume that if a smoking status has not been declared, its questioning did not happen.

6) **Why are you measuring it?** We are counting how many times patients' smoking statuses are found in the EMR, so we know how many patients currently smoke AND how often we ask patients if they smoke. By counting the absence/presence of this information, we can satisfy our aim statement. Another reason is simplicity – this metric is easier than having patients complete a covert survey about their family physician that asks them if they have been asked about their smoking.

7) **Plan for data collection:** Who is collecting the data? What type of data is it? When will they collect it? How frequently will they collect it? Where is the data coming from? How are they going to collect it? **Make sure everyone is on board.**

Hans Down has agreed to go into the EMR and pull two weeks' worth of eligible patient encounters for all of the physicians at the Anytown Clinic. He will only focus on patients aged 15 and older. There are 3 full-time family physicians, so two weeks' worth of data is representative of activity at our clinic. Since there may be more than one way of indicating smoking status, Hans will search for "smoker," "tobacco," "cigarettes," and smoking-related keywords in the EMR. For our baseline measure, Hans will only extract this data once on or around August 20th, 2016.

8) **How do your measures link to your aim statement?** Make sure that your measurements actually account for what you are trying to improve.

We aim to improve the number of patients with current smoking statuses. By counting the absence/presence of smoking statuses, we learn how many patients get asked about their smoking status.

9) **What question(s) do you want to answer with this PDSA cycle (if different from aim statement)?**

Since we are pulling smoking statuses from the EMR, it will be interesting to know how "current" the smoking statuses are – i.e., when was the last time we asked the patients about their smoking statuses? If it was a long time ago, should we ask again?

Now that you have your baseline measure...

10) **What are your results?** Describe and attach a graph to this document.

For the two weeks prior to August 20th, 2016, we had 100 patients aged 15 or older visit our clinic. For these patients, we found that 45% of them have smoking statuses written in the EMR. Since our aim is to have 95% of patients with smoking statuses, we have room for improvement.

11) What do the results tell you?

Our results indicate that for the two weeks' worth of eligible patients, we asked about smoking status and wrote the answer in the EMR less than half of the time.

12) Were there any surprises?

Yes, there were some surprises! The older the patients got, the less they were asked about smoking status. For whatever reason, female patients were the least likely to be asked about their smoking status.

13) Based on your baseline findings, what potential interventions could be used?

Since the physicians at Anytown Clinic are strong EMR users, we could create an EMR flag that reminds physicians to inquire about smoking status whenever a patient aged 15 and older is being examined. A few more ideas could include: posters reminding physicians in the lunch room, a lunch n' learn where we teach the physicians about smoking statuses, or we could have the MOAs inquire about smoking status at reception.

14) What resources would be required to run these potential interventions?

In terms of resources, we will have to ask Hans to create the EMR flag, but nothing beyond that; the clinic can run as usual.

15) Of the potential interventions you have described, which one is most practical for your clinic?

Since Hans is an EMR specialist, he can easily create an EMR flag, so the most practical intervention is the EMR flag. The other options are complicated or not ideal. For example, posters could mess up the lunch room, lunch n' learns are big productions, and the MOAs asking about patients' smoking statuses at reception will increase wait times, which is not good.

16) What intervention are you going to use?

We will run with the EMR flag, since Hans knows what he's doing and it will be seen by the physicians who will enter the smoking statuses in the EMR.

Submit your team's QI worksheet and wait for feedback from your RRTC.

Deadline: September 23rd, 2016

Do Phase

Your intervention measure quantifies the same thing as your baseline measure.
17) What are the results of your intervention measure? *Describe and attach a table.*   Again, Hans measured two weeks' worth of eligible patient encounters. This time, 83% of eligible patients were inquired about their smoking statuses and the physicians wrote the answers in the EMR. This is an improvement.
18) What challenges did you encounter while implementing your intervention?   The EMR at Anytown Clinic is not as customizable as we anticipated, so Hans created a flag that sits in the corner of the eligible patients' records. This flag did not pop up or flash, however, so it was likely missed.

Study Phase

19) Compare and contrast your Intervention to Baseline Measure   Our baseline indicated that only 45% of eligible patients were being asked about their smoking statuses. After our intervention, this figure increased to 83%, so we saw a lot of improvement.

20) Was there improvement from your baseline to your intervention measure?

There was improvement; now, 83% of eligible patients are being asked about their smoking statuses.

If yes, how so?

We went from 45% to 83% of eligible patients being asked about their smoking statuses, so this represents an improvement.

Why do you think you achieved improvement?

We believe that improvement was gained by the EMR flag reminding physicians to inquire about smoking status and record the answer in the EMR.

What observations can you make?

We can make a few observations: 1) the physicians were more successful in inquiring about smoking statuses in the morning than in the afternoon, 2) in the intervention phase, the older patients were, the less likely they were asked about their smoking status, and 3) the patients were most likely to be asked about their smoking status if they were visiting for an annual physical exam.

If not, was there a neutral impact or did things get worse?

N/A

What explanation can you give for this lack of improvement?

N/A

Act Phase

21) Would you recommend standardizing your change? If yes, why? If no, why not?

Since it is easy to continue using, we recommend leaving the EMR flag in the EMR, so it reminds physicians to ask patients aged 15 and older about their smoking status.

22) What would your next PDSA cycle look like? Since we only got to 83% of eligible patients, another PDSA cycle to bump this percentage up to 95% is in order. For this hypothetical PDSA cycle, we could place posters the patient waiting room. These posters would encourage patients to tell their family doctor about their smoking status in the exam room.

23) What can your clinic learn from your QI project? There are a couple of learnings: 1) we need to ask about smoking status AND write it in the EMR, and 2) the EMR has some limitations in terms of customizability that should be addressed with the EMR service provider, Black Mesa.

24) How could your clinic carry on with your QI project?

The clinic could continue with our project by leaving the EMR flag in the EMR and keeping track of how often eligible patients are asked about smoking. These numbers could be discussed at the monthly clinic meetings. The clinic could also display the ongoing results on a whiteboard in a high-traffic area for staff to see their progress.

Submit your team's QI worksheet and wait for feedback from your RRTC.

Deadline: November 18th, 2016