

# PDSA worksheet

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<b>Project Lead</b>	Andrew Maclennan (PGY-1)	<b>Title</b>	Reevaluation of POC testing implementation
<b>Team</b>	Annie Whitney, Robb Malone	<b>Change</b>	Streamline POC ordering process
<b>Date Range</b>	July 2008	<b>Cycle #</b>	3
		<b>Key Words</b>	POC, Hemoglobin A1C, Cholesterol, Lipids

## **BACKGROUND:**

See Cycle #2 worksheet.

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## **PLAN:**

**Aim/Objective Statement** for this cycle What do you hope to learn? What are you trying to improve (aim), by how much (goal) and by when (timeframe)?

Can streamlining the POC ordering system result in fewer patients missing their indicated POC testing? Can we achieve the 90% target?

Specific questions to address in this cycle:

1. Is simplifying the POC ordering procedure feasible and reliable?
2. Can we improve the percentage of patients receiving indicated POC testing?

**Predictions/Hypotheses** (What do you think will happen?)

I believe that simplifying the ordering system will result in fewer patients “falling through the cracks” and missing their POC testing.

### **Plan for change/test/intervention**

*Who (target population):* Front Desk Staff

*What (change/test):* Changing and simplifying ordering the procedure for POC testing.

*When (dates of test):* 7/11/08-7/15/08

*Where (location):* ACC Clinics

*How (description of plan):* Use diabetes yellow sheets instead of POC list to identify patients for POC testing.

The first part of the plan is to eliminate the old POC ordering system outlined in Table 2 above.

In its place, POC tests will be ordered using yellow sheets. Every diabetic patient in the enhanced care database has a yellow sheet printed before their visit. Among other things, these yellow sheets contain a reminder stating whether or not POC A1c and TC/HDL testing is indicated at this visit. Note: The same information in the database (date and result of last

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A1c and chol) is used to generate to POC list and the indication marked on the yellow sheets.

The plan is to add a space on the yellow sheets where the front desk staff can initial. When the patient checks in for the appointment, the front desk staff will look at the yellow sheet and initial that they have or have not ordered the indicated POC tests. This will accomplish two things:

- 1) Leaves a record that the front desk staff has addressed the issue.
- 2) Provides a space for front desk staff to indicate why a POC test wasn't ordered, if, in fact, it wasn't ordered. This way, valid reasons for skipping POC testing can be accounted for (i.e. patient already had testing done outside the UNC system, patient refused, etc.).

One drawback from this approach is that the POC list is printed in the morning of the day it is used. So any patients who had appointments scheduled the afternoon before, will be on the POC list. Yellow sheets are printed one full day before the POC list prints to give the front desk staff time to collate the yellow sheets with the billing encounter forms. Using the yellow sheets means that we may miss patients who scheduled an appointment after the sheets were printed. However, we feel that this will only be a few patients and may not outweigh the potential benefits of trying this new procedure.

**Measures** (What will you measure in order to meet your aims? How will know that a change is an improvement? Will you use outcome or process measures?)

## **Plan for data collection**

*Who (will collect):* Andrew MacLennan (during Continuity Elective)

*What (measures):* POC HbA1c and lipid measurements indicated and obtained

*When (time period):* July 2008

*Where (location):* UNC Internal Medicine clinics.

*How (method):* 1. Calculate the percentage of indicated POC testing that actually occurred as described in cycle 2.

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**DO:** Carry out the change/test. Collect data.

Note when completed, observations, problems encountered, and special circumstances. Include names and details.

I evaluated the number of patients with an indication for POC testing who actually received it. Shaun McDonald, in IT, gave me three days worth of data after the change was instituted. A longer time period was not studied due to my time constraints and rotating to a new service.

Shaun altered the yellow sheets, to include a space for the front desk staff to mark their initials.

I spoke with Johnnie Satterfield and Rob Hartman and the rest of the front desk staff on the day before the intervention, to ensure that they were aware of the change. Robb Malone sent an email

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to Edna Mark, the clinic manager, and the rest of the front desk staff alerting them to the upcoming change in POC ordering procedures.

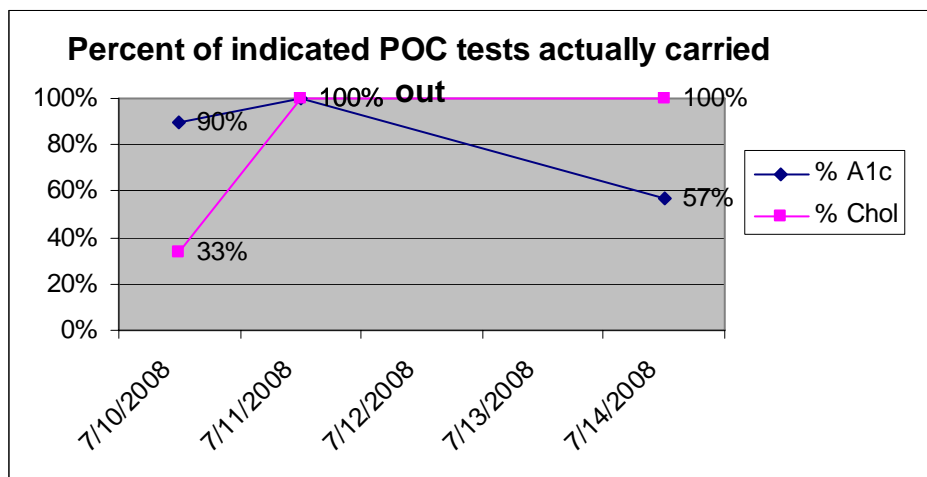
During the test of the new ordering procedure, the POC tracking function was not working due to other issues with data imports into the database. So data was collected based solely on returned yellow sheets. So we cannot be certain that some data was not lost since yellow sheets that are returned with nothing written on them are thrown away and assumed to be a no show patient.

**STUDY:** Summarize and Analyze data (quantitative and qualitative). Include charts, graphs.

**Table 3. POC tests completed after intervention**

	A1c Indicated	A1c done	TC/HDL Indicated	TC/HDL done	% A1c	% TC/HDL
10-Jul-08	10	9	3	1	90%	33%
11-Jul-08	7	7	3	3	100%	100%
14-Jul-08	7	4	1	1	57%	100%
<b>Total</b>	<b>24</b>	<b>20</b>	<b>7</b>	<b>5</b>	<b>83%</b>	<b>71%</b>

Note: Data in table 3 was collected by obtaining returned yellow sheets for these 3 days. Data in table 2 was collected by using the information in the database.



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3 of the 4 patients who missed A1c testing and 1 of the 2 patients who missed TC/HDL testing had no front desk initials on the yellow paper. One patient did not have POC testing because this was recently done at an outside dialysis center.

During busy times, the front desk sometimes pulls staff from other areas to check in patients. The absence of front staff initials on some of the yellow sheets suggests that not everybody was aware of the new change.

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**ACT:** Document/summarize what was learned. Did you meet your aims and goals? Did you answer the questions you wanted to address? List major conclusions from this cycle.

1. The percentage of indicated **POC testing that actually occurred with the new yellow sheet ordering system is at least as good as the old ordering system** (83% of indicated A1c tests occurred, 71% of indicated TC/HDL tests occurred). The 90% goal is still not being reached, however.
2. The **new system reduces work for the front desk staff**. The staff have reported that they like the new procedure.
3. It is possible that all of the front desk staff was not aware of the change in procedure when checking in patients. We need to **make sure all front desk staff are educated on new procedure**.
4. The **yellow sheets allow for better communication between the front desk staff and healthcare providers**. In fact, one front desk staff member did note an outside lab result as a reason not to order the POC A1c that was indicated. It will also allow them to note patient refusal of labs, which has been reported to occur.

Define next steps. Are you confident that you should expand size/scope of test or implement? What changes are needed for the next cycle?

1. **Measure the efficacy of the POC ordering system using yellow sheets for a longer period of time**. The data from this cycle were gathered for only a few days. Some of the staff may not have been aware of the change. Also, the POC tracking generated from the database needs to be fixed to ensure we are collecting all data.
2. **Institute a redundancy system and re-assess**. One such intervention is to involve the nursing staff. When the nurses bring a patient back to the room, they could be asked to glance at the yellow sheets to see whether the front desk staff has initialed the POC section. If the front desk staff has not ordered the POC testing and has not indicated a reason for omitting the test, the nurse can rectify the problem before the physician sees the patient.
3. **Educate nurses and other staff to note POC testing issues on yellow sheets**. Since the yellow sheets are attached the paperwork that follows the patient through the clinic, nurses can also note any issues with POC testing on that sheet as well. They are times when nurses pull a patient from the POC line due to a backlog in the lab.