

PDSA worksheet plan - do - study - act	team	Meg Rutledge - Diabetes CA
	change	Diabetes Quality
	cycle #	2
	title	Aspirin Utilization

BACKGROUND:

This is a continuation of cycle 1. In cycle 1, we looked at utilization rates of aspirin, ACE inhibitors, and statins in our diabetic population using a database query. Given the large number of patients not documented in our database to be on each of these medications, we decided to break down the project into each individual medication. From October of 2007 and on, this quality improvement project was just looking at how to improve aspirin utilization rates for diabetes patients in our clinic.

PLAN: Objective for this cycle (What you hope to learn)

Specific questions to address:

1. How many patients are truly not taking ASA who should be?
3. How can we best implement an intervention to increase ASA utilization amongst patients who are indicated to be taking this medication?
4. By how much does this intervention increase utilization rates?

Predictions/Hypotheses (What do you think will happen when test is done?)

The percentage of diabetic patients who are indicated to take daily ASA will increase after we intervene.

Plan for change or test: who, what, when, how and where

Who: Diabetes patients in the UNC Internal Medicine clinic between the ages of 40 and 80

What: After having conducted a chart review, intervene on those patients who are not currently taking ASA and should be, in order to increase the utilization rates in hopes of decreasing potential cardiovascular disease amongst these at-risk patients.

When: From October 2007 to March 2008

How: Using our updated database registry of those diabetic patients between the ages of 40 and 80 not documented to be taking ASA daily, email providers about their patients to determine whether or not they are already taking ASA or are contraindicated to do so. With providers' permission, send a letter to each of their patients informing them of why diabetic patients over age 40 without contraindications to ASA should take the medication and encourage them to purchase 81mg baby ASA at a pharmacy or grocery store. We will ask patients to send back a reporting document with a prepaid stamped envelope, notifying us if they are already taking ASA, have a listed contraindication, or plan to start taking ASA. I will then follow-up with these patients by calling them individually at their home or work phone number to ask a scripted list of questions about whether or not they are currently taking daily ASA and to find out their opinion of this letter-sending system. Upon gathering this information, we will determine the success of the intervention in terms of increasing utilization rates and patient and physician acceptance of this method.

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Standards for Key Medication Use

ASA

Indication: Over 40 years old

Contraindication: Warfarin (Coumadin®) (unless prosthetic valve), GI bleed, some pts with Crohn’s disease

Precaution: Limit use to 81 mg or ½ tab of a 325 mg tablet in most cases, beware use with Plavix

Where: ACC Internal Medicine clinic

Plan for data collection: who, what, when, how and how long

Who: Meg Rutledge, Diabetes CA

What: Gather list from diabetes database of all patients between the ages of 40 and 80 who are listed as “No” or “Delay” for ASA utilization. Send a list to each provider of their patients for whom we have no documentation of their ASA utilization status. Ask them to respond either with reasons for contraindication, approval to send a letter to the patient, or decision not to have patient participate in this intervention. Providers were told that no response to the email would be viewed as clearing their patient for participation in the intervention.

When: October 2007

How: Run database query to determine who is not documented to be taking ASA. Send previously described emails to PCPs. Send letters to cleared patients. Collect returned reporting documents and conduct phone calls to update patients’ ASA utilization status and assess patients’ opinions of this method of medication utilization intervention.

How long: 10/2007- 2/2008

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

Note when completed, observations, problems encountered, and special circumstances:

Annie Whitney created a query in the diabetes database for all those between the ages or 40 and 80 who are active, in the DM Program, not deceased, and listed as “No” or “Delay” for ASA Utilization. After she did this, running the query was very easy. With that list of patients, I created a spreadsheet with all information from the query, looked up each patient’s PCP, and added a field with the PCP name for each patient on the spreadsheet. I sorted this spreadsheet by PCP name and then sent a scripted email to each PCP containing a list of their patients’ names and Medical Record Numbers.

After receiving PCP responses via email, or no response (which we notified them would be considered clearing their patients for the intervention), I created a Mail Merge letter to send to patients in the intervention. With this letter was a separate reporting document along with a prepaid envelope for them to return to us. This document gave several options for patients to check off in order for us to update our system. Patients were asked to indicate if they were already taking ASA, had a listed contraindication for ASA (and what that was), plan to purchase ASA, or to notify us of other reason why they were not taking the

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medication. In the first wave, 21 patient letters were mailed on November 8, 2007. In these letters I failed to include the patient's name or any identifying information on the reporting document. This proved very futile for data collection. However, so few documents were mailed back, some of which patient's wrote their name on themselves, that I was able to determine which letter was from which patient. However, in the second wave of mailings, when 70 letters were sent in February 2008, I included the patient's full name on the reporting document, which made assessing the data much easier.

Two weeks after sending the letters, I began calling patients over the phone to inquire about current ASA utilization status and their opinions regarding the letter we sent. I had a scripted list of questions to ask each patient. If patients were scheduled to come in to the clinic for a visit within a month after mailing the letter, I saw the patient at that time to ask the list of questions. However, if the patient did not show up to that visit, I proceeded to call them over the phone.

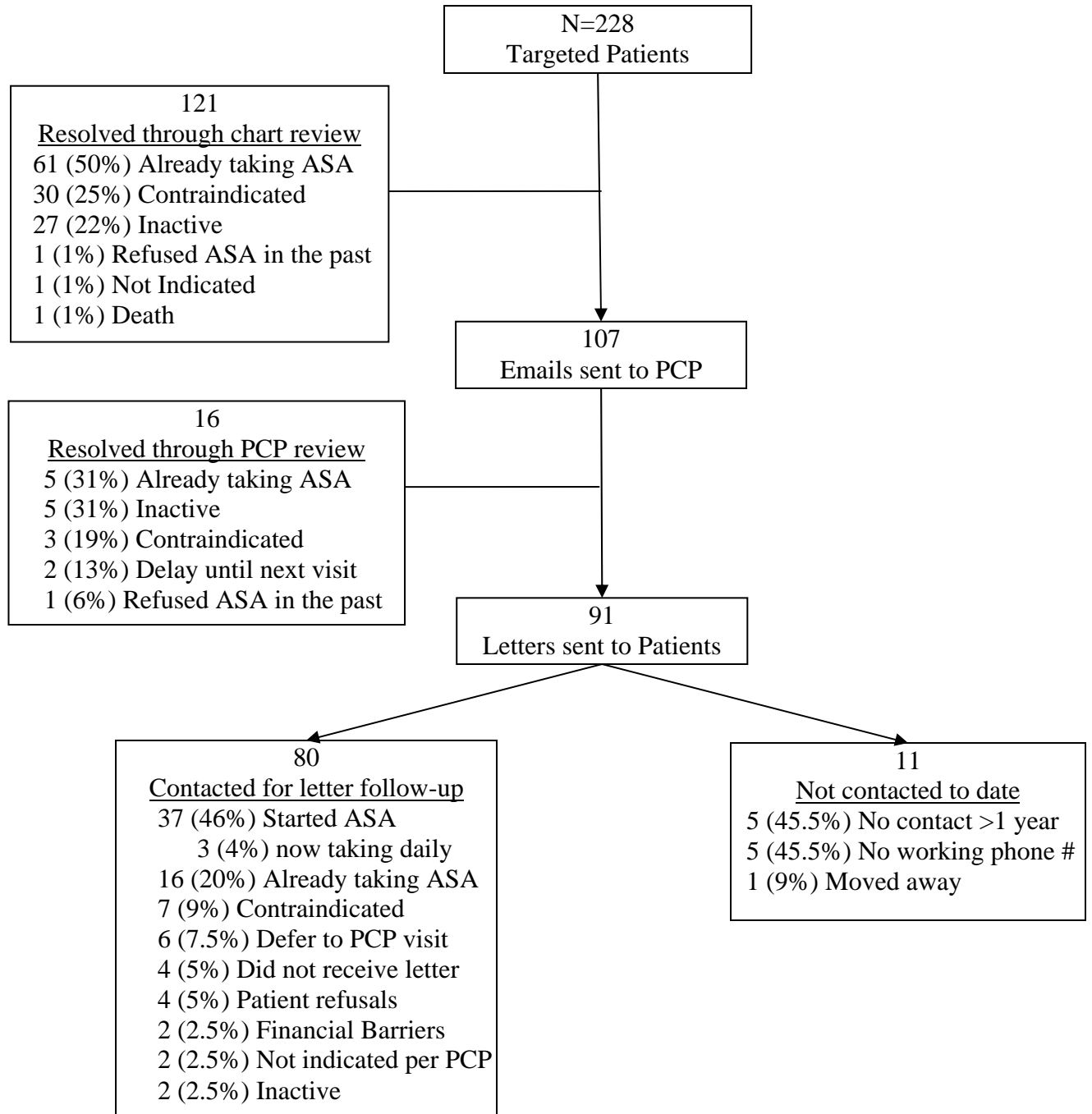
STUDY: Analyze data (quantitative and qualitative).

Summarize data:

Data was gathered from October 2007 when the query was run and emails were first sent to PCPs to March 2008, when the second wave of patients was called multiple times and seen in the clinic. The information at this point was presented at the SGIM 2008 meeting.

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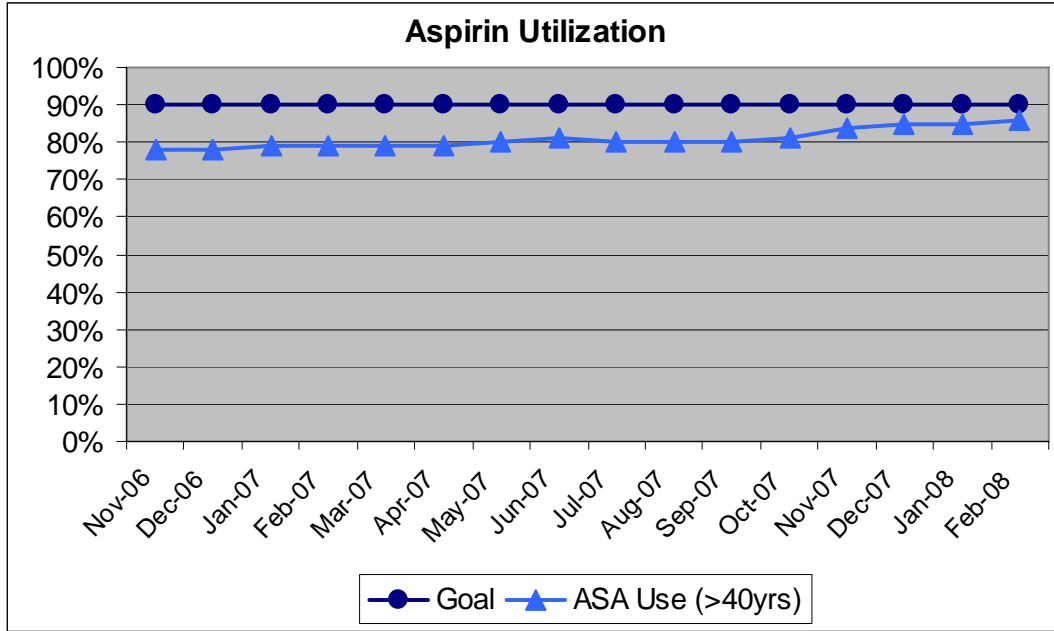
Figure 1. Progression of Intervention



After sending letters to eligible patients, the ASA utilization rates for our diabetic patient population increased from around 80% to 87% as of March 2008. This is closing in on our goal of a 90% utilization rate.

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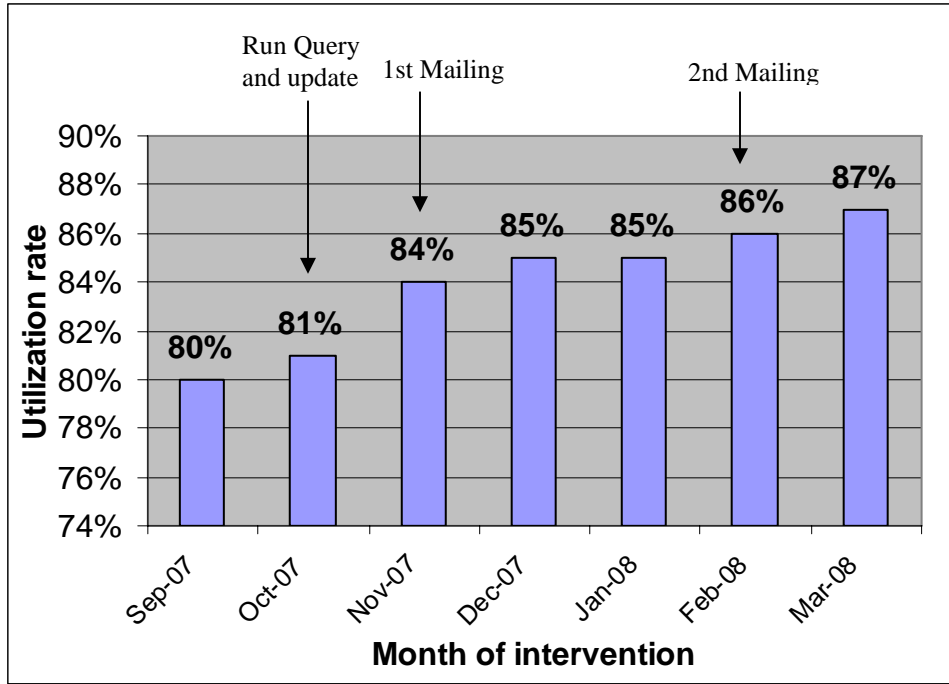
Figure 2. Aspirin Utilization Trend



The figure below shows the ASA utilization rate in September, before the intervention was implemented, in comparison to the proceeding months.

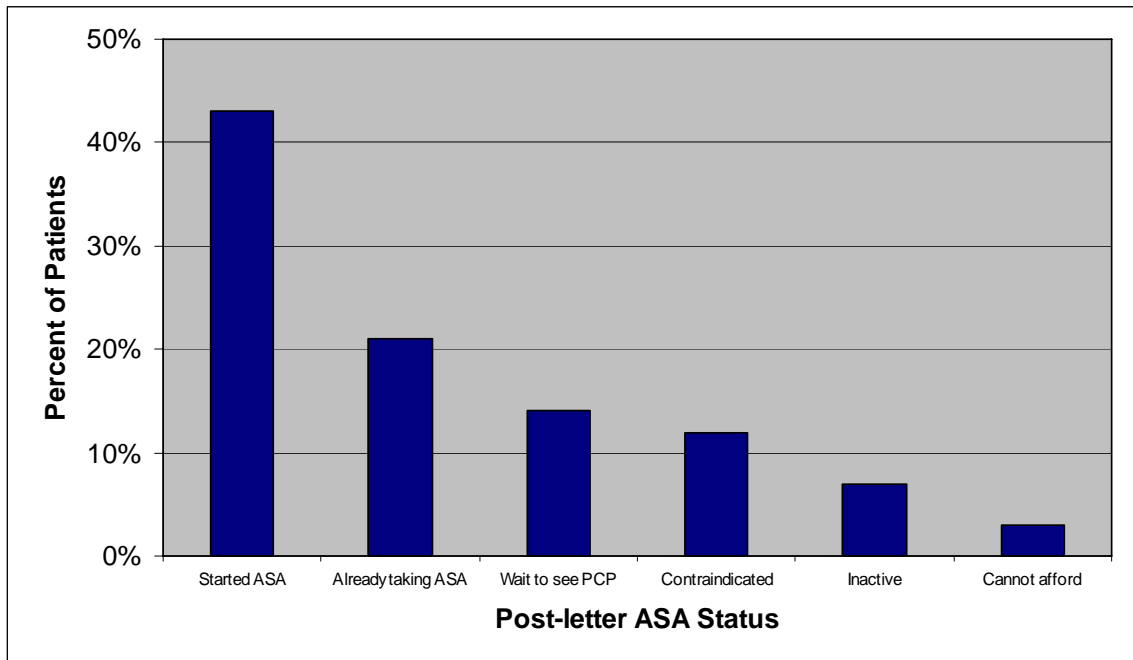
Figure 3. ASA Intervention Results

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I compiled returned reporting documents and updated data from phone calls and clinic visits to determine the outcome of the intervention. As indicated in Figure 1, there were 33 patients who did not return the reporting document, could not be reached by phone, and have no scheduled clinic appointment soon. That leaves 58 patients whose utilization status has been updated from the intervention. The chart below depicts these results, indicating the intervention's success.

Figure 4. Results of ASA letter follow-up (N=58)



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ACT: Document what was learned. Are you confident that you should expand size/scope of test or implement?

1. **This intervention has proven to be a success.** Since its implementation, ASA utilization rates have risen by 7%, up to 87% (March 08), closing in on our ultimate goal of a 90% utilization rate. Of those I was able to follow-up with after sending the letter, 43% initiated ASA use based on the letter. We were concerned that patients would not feel comfortable starting a medication without talking directly to their PCP about it, but only 14% of those reached for follow-up felt that talking with their physician prior to initiating this medication was necessary. This intervention was not overly time consuming and fairly simple.
2. **Issues reaching Spanish-speaking patients.** My only concern at this point is reaching the 4 Spanish-speaking patients to whom we have sent the letter and have had no contact to date. Since the letter was in English, they may not have been able to read the letter. Angela Thompson, another CA, is a highly adept Spanish-speaker, but upon her several attempts to contact each of these patients over the phone, none were reached. Since we do have a fair number of Spanish-speaking patients in this clinic, we may want to consider translating the original letter into Spanish to mail to these patients.
3. **Follow up with remaining patients not on ASA.** I will continue to attempt to contact the 26 patients in the intervention who have had no contact to date. I will try to see those coming into clinic in the upcoming month or two at their visit and contact remaining patients by phone.
4. **Determine how to sustain high ASA utilization rates in the future.** We plan to repeat this letter campaign once a year. In addition, we have a couple of other processes in place to sustain providers' attention to ASA utilization for their patients. ASA indication is listed on the yellow sheet that accompanies the paperwork the provider receives for each diabetic patient during their visit. We are also including ASA use recommendations in weekly emails that are sent to providers along with statin and ACE inhibitor indications for their patients coming into clinic that week (see Carolyn Menzie's QI project on statin utilization).

What changes are needed for the next cycle?

After attempting to contact the remaining patients in this intervention, we plan to end the project.