PDSA Cycle Focus: Provider Prompts

**AIM of this project**
Describe the aim of this project. What are you trying to accomplish? Every aim will require multiple small tests of change.

Increase rates of ‘captured’ opportunities for HPV vaccination for adolescents (aged 11-17) in the next 12 months.

**Plan**
Describe the proposed test. What performance gap will it address? What idea will you test? What barriers will you need to overcome?

**Performance Gap:**
We often miss opportunities to vaccinate adolescents, particularly at illness visits.

**Idea for Test:**
Have nurses review charts for adolescents at all visits to see if they are due for an HPV vaccine, and put a prompt in the EHR in addition to giving the provider the VIS form to remind him/her to order the vaccine.

**Barriers:**
Time to review chart, especially for same day appointments. Nurses may not be aware of appropriate vaccine intervals. Providers may be too busy to pay attention to the prompt.
PDSA Cycle Focus: Provider Prompts continued

MEASURES
What is the desired goal that will close the performance gap? Describe the specific measures that will determine a successful outcome for the test.

We estimate that we are currently giving HPV vaccine for patients who are eligible 20% of the time. We hope to increase this rate to 40% in the next 12 months.

Predicted outcome: Describe your plan for change. List the tasks and tools needed to perform the test. Predict what will happen when the test is carried out?

Tasks and tools

<table>
<thead>
<tr>
<th>Who:</th>
<th>Start with training 'blue team' nurses and MAs on the schedule, Dr. P and Dr. H on that team need to know where to look for reminder.</th>
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</thead>
<tbody>
<tr>
<td>What:</td>
<td>1.) Location in EHR to document 2.) Printed copies of VIS forms</td>
</tr>
<tr>
<td>When:</td>
<td>Discuss at clinic-wide meeting and answer questions. Start doing this on February 1st, before patients arrive for the day and check again at lunchtime.</td>
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<td>Where:</td>
<td>At the nurses station nurses will review charts, VIS forms will go in the billing folder, documentation will be made in the visit encounter for the patient.</td>
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<tr>
<td>How:</td>
<td>As above</td>
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<tr>
<td>Tools:</td>
<td>1.) VIS Forms 2.) Immunization schedule to train nurses on appropriate intervals</td>
</tr>
</tbody>
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Predicted Outcome:
By implementing a system to check HPV vaccination status for eligible patients at all visits, we will increase our HPV vaccination rates.

Do
Make a change! Try your change with a few patients over a short period of time. Collect data that can be measured. Describe what happened when you ran the test.

We tried this the first week in February with the blue team. We found the following: 10 patients eligible, 3 received the vaccine.

Study
Did the change lead to the desire improvement? Describe how the measured results compare to the predicted outcome.

We predicted we would achieve 40%, and we achieved 30% in one week.
Act

Describe how you will modify the plan in the next test cycle based on “learnings” from this cycle. Or, describe a new idea to test to help you achieve your aim.

We will review with the 2 nurses and 2 providers what happened with the other 7 patients—did the parent refuse, did the provider forget, was the patient too sick?

- The nurse thought the patient was ‘too sick’ because he had a cough and runny nose.

Review true contraindications to vaccination and repeat the following week.

END OF CYCLE 1
**PDSA Cycle Focus: Provider Prompts**

**AIM of this project**

*Describe the aim of this project. What are you trying to accomplish? Every aim will require multiple small tests of change.*

Increase rates of ‘captured’ opportunities for HPV vaccination for adolescents (aged 11–17) in the next 12 months. For the next 9 months among patients aged 11–12 years, we will increase the proportion that receive an HPV vaccine at the same visit as Tdap vaccine.

**Plan**

*Describe the proposed test. What performance gap will it address? What idea will you test? What barriers will you need to overcome?*

**Performance Gap:**

Our inventory records show that we give many more Tdap vaccines than HPV vaccines. We intend to initiate the HPV vaccine series every time we give a Tdap (if not already initiated).

**Idea for Test:**

Have IT turn on the EHR prompt for HPV vaccination.

**Barriers:**

1) IT takes a while to fulfill requests; 2) the EHR may not have complete vaccination records so we may get prompts for patients that are already vaccinated; 3) the providers get so many prompts that they are starting to “click through”/the providers may be too busy to pay attention to the prompt; 4) the nurses may resent being asked to vaccinate during sick visits, which are pretty rushed already.
**MEASURES—among patients aged 11–13 years only**

What is the desired goal that will close the performance gap? Describe the specific measures that will determine a successful outcome for the test.

\[
\text{Tdap}^x = \text{The number of Tdap vaccines we used (through VFC) in month } X \\
\text{HPV}^x = \text{The number of HPV vaccines we used (through VFC) in month } X \\
\text{HPV}_{\text{January}} / \text{Tdap}_{\text{January}} = 13/100 \text{ (January 2015)}
\]

Goal: By the end of the QI project, our monthly goal is \( \text{HPV}^x / \text{Tdap}^x = 40/100 \)

**Predicted outcome:** Describe your plan for change. List the tasks and tools needed to perform the test. Predict what will happen when the test is carried out?

<table>
<thead>
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<tbody>
<tr>
<td><strong>Who:</strong> Dr. S will talk with IT to get them to turn on the prompt. Karla will do an in-service on this effort for the nursing staff. Dr. S and Dr. H (Medical Director) will talk with the physicians on the team about the QI effort and will discuss a way to get feedback to providers regarding their individual performance.</td>
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<tr>
<td><strong>What:</strong> 1) IT assistance → turn on prompts; 2) IT assistance → provider specific ordering of HPV vaccine at the time of a Tdap (for patients aged 11-12 years)</td>
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<td><strong>When:</strong> Dr. S will talk with IT this week, but we are not sure how long their queue is. Karla will do an in-service on this effort for the nursing staff the week before the prompts begin. Dr. S and Dr. H will talk with the physicians on the team about the QI effort at the next physician meeting (next week). Based on the discussion, there may be more things on the To Do List.</td>
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<tr>
<td><strong>Where:</strong> Dr. S will talk with IT—conference room; Karla will do an in-service—multi-purpose room; Dr. S and Dr. H will talk with the physicians—multi-purpose room.</td>
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<tr>
<td><strong>How:</strong> As above</td>
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<tr>
<td><strong>Tools:</strong> EHR prompts, AAP training materials</td>
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**Predicted Outcome:**

By turning on the provider prompts for HPV vaccination, we will increase the number of HPV vaccinations being administered at the same time as Tdap.
Do

Make a change! Try your change with a few patients over a short period of time. Collect data that can be measured. Describe what happened when you ran the test.

Pre-Launch: IT expedited our request because the EHR prompts were pre-programmed so we quickly got the conversation going. At pre-launch meeting, the nurses welcomed the project after hearing from a cervical cancer survivor. The providers believe in HPV vaccination, but believe parents resist it much more than Tdap.

Week 1: IT had turned on prompts for all childhood and adolescent immunizations—that was too much to handle! We got them to scale back to just HPV vaccination for patients aged 11-12 years.

Week 2: Everyone felt “funny” about vaccinating during sick visits (e.g., suturing, stapling). We found that we gave 5 HPV vaccines/11 Tdaps during well care, but only 1 HPV vaccine/4 Tdaps during sick visits.

Study

Did the change lead to the desire improvement? Describe how the measured results compare to the predicted outcome.

We did very well recommending the HPV vaccine on the “same day” as Tdap, but only if this came up in the context of well care.

Act

Describe how you will modify the plan in the next test cycle based on “learnings” from this cycle. Or, describe a new idea to test to help you achieve your aim.

We will keep including ALL visit types in our data because a lot of adolescents do not come in for well care. Janice, the receptionist who lost her mom to cervical cancer, stapled an HPV VIS in front of every Tdap VIS. That seems extreme, but we all know why she did it and it really does make it harder to give the Tdap without the HPV vaccine.

Next step: We will review true contraindications with both nurses (Karla) and physicians (Dr. H) at our next meetings and emphasize that lacerations and other trauma are not a contraindication to HPV vaccination! We may invite an ENT to talk about oropharyngeal cancers we can (probably) prevent with HPV vaccine – this will bolster our resolve to protect these kids. We will gather data and analyze it one week after the in-services on simultaneous vaccination are done.

END OF CYCLE 2