

Recall for Overdue Vaccination: Cycle 1

MODEL FOR IMPROVEMENT

Team Name: ABC Pediatrics

Plan a Test of Change

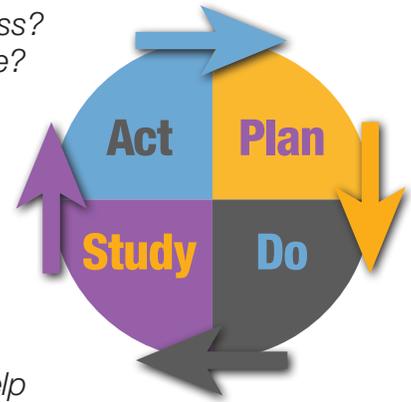
Cycle #: _____ Start Date: _____ End Date: _____

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

Do 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.

Study Describe how the results from the data collected compare to the predicted outcome.

Act How will you 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.



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.

Over the next 6 months, our practice will recall patients 19–23 months of age who have a record in our jurisdiction's immunization information system (IIS) or our practice's electronic medical record (EMR), who are 30 days or more behind schedule with at least one immunization, in order to decrease the percentage of 24 month old patients who are overdue, to 10% or less.

Plan

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

Performance Gap

Our providers are very pro-vaccination, but we are a busy practice and rely on parents to remember to bring in their children. We haven't used any system to check for vaccinations that are overdue and to bring patients back in. Our recent assessment revealed our rates of up-to-date (UTD) patients isn't as high as we'd like.

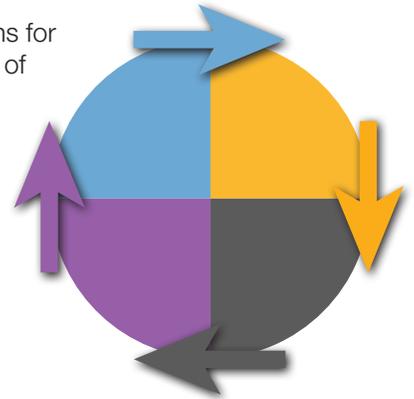
Idea for Test

We will test having a front desk staff run a query in the IIS to find patients ages 19 to 23 months, who are not UTD on all vaccinations. Current patients identified by the query as overdue for vaccines will receive a phone call from staff to schedule an appointment for overdue vaccines.

Every month, the front desk staff will do the following:

1. The first Tuesday of every month, Jan, at the front desk, will run the IIS query, which will generate a list of our patients in the IIS who are 19-23 months of age and are at least 30 days past due for 1 or more immunization(s).
2. By Thursday afternoon, Dan (the LPN) and Jan will review the list.
3. Starting with the oldest (and most overdue) patients, they will inactivate records of those who are no longer our patients (who they know have moved or gone elsewhere [MOGE]).
4. They will compare immunization records in the IIS for remaining patients with our patient records. Any additional/corrected information from our patient records will be added to the IIS, including updated demographics (addresses, phone numbers, emails, if available).

- Dan and Jan will maintain a log as they conduct their review. They will record reasons for the changes made to the original recall list (ie, patients inactivated, additional doses of vaccines entered into IIS, corrected vaccines and/or vaccination dates, updated demographics).
- Jan will make phone calls to the remaining list of current patients ages 19-23 months who are 30 days or more overdue for at least 1 vaccination, asking them to schedule an appointment to get caught up on their vaccinations.



Predicted Outcomes:

Within 30 days, 30% of patients on the final list will have been called and asked to come in for vaccination.

Barriers:

- Staff are usually busy at this practice and this project is adding another task to their plates. We are starting it in April, as flu season is winding down, and kids aren't coming in for school physicals yet.
- There may be a lot of discrepancies between the IIS records and the practice's records. Rectifying these can be very time consuming.
- There are many recall methods to choose from (phone calls, robocalls, letters, postcards, email, texts, etc).

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.

How we will measure our rates:

- Jan will record the number of patients on the final list, after removing those who are no longer our patients and updating the immunization records of current patients (current patients ages 19-23 months who are 30 days or more behind on at least 1 vaccine).
- Jan will log how many calls were made to families each week.
- The number of overdue patients who received a recall over the total number of overdue patients will determine the percentage of children behind on vaccination who received a recall.



The table shows our current situation and our goal.

	Baseline	Goal
Current patients age 19–23 months in the IIS who are 30+ days overdue for vaccinations	150*	60
Overdue patients who received a recall		
Number	0/150	45/150
(Percentage)	(0)%	(30)%

*Some practices may be able to get a denominator from their IIS or EMR, if so, feel free to include it in your measure and include a rate in your goal. If that's not possible in your practice, simply use a numerator, and aim for a decrease. Our original baseline denominator was 600, and our goal is to reduce overdue patients to 10% of our original baseline denominator.

Tasks

People	Tasks	Tools
Dr B	Designate when we start.	
Jan	Run an IIS query for all patients ages 19–23 months old who are 30+ days behind on vaccination.	IIS query list of patients 30+ days overdue for vaccination
Jan	Run the same query in the EMR.	EMR query list of patients 30+ days overdue for vaccination
Jan	Pull the records for everyone who came up on the lists.	IIS query list EMR query list
Jan and Dan	Reconcile the lists. Remove any MOGE from the list, and compare records to update immunization status for all vaccines.	AIRA Management of Patient Active/Inactive Status in Immunization Information Systems
Jan and Dan	After reconciling the lists, Jan and Dan will run a new IIS query and review the list again.	IIS updated query list
Jan	Call families on the list and ask them to schedule an appointment to receive overdue vaccinations.	Telephone access IIS updated query list Practice schedule
Dr B	Order vaccines for the children who come in for vaccine-only visits to catch up.	

Predicted outcome:

Reconciling the patient records will be cumbersome and will be the most difficult task of this intervention. Practice rates will improve after recall efforts.

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.*

Dan and Jan each spent at least 1 hour per day that week reviewing the recall list of 150 patients age 19-23 months 30+ days overdue for vaccination. They found that patients had not been inactivated in the IIS when they left the practice (staff didn't know to do that). Frequently practices will make this discovery when implementing a reminder or recall practice. Now, to make the most efficient use of the IIS, they will need to inactivate them. They also found that HiB vaccine documentation was inaccurate in the IIS (entered as HiB NOS, rather than HiB PRP-OMP). Many patients had incorrect addresses and phone numbers listed in the IIS and no emails entered.

Study

Did the change lead to the desired improvement?

Describe how the measured results compare to the predicted outcome.

This work was very time consuming (10 hours) but necessary to improve quality of information being used for appropriate recall activity. Of the original recall list, 107 patients remain. (20 patients were inactivated, given they were no longer our patients, data for 10 patients was updated to correctly reflect UTD status for HiB, dates in 8 records were corrected [5 of those were foreign records with the month and day switched], and 5 patients had additional doses of vaccine given at our practice, which were not in the IIS). Outreach outcomes would have failed because of outdated addresses and phone numbers in the IIS, which would be used to generate the address labels and phone list.

	Baseline	After data clean up	Goal
Current patients age 19–23 months in the IIS who are 30+ days overdue for vaccinations	150*	107†	60‡
Overdue patients who received a recall Number (Percentage)	0/150 (0%)	0/107 (0%)	32/107 (30%)

*Some practices may be able to get a denominator from their IIS or EMR, if so, feel free to include it in your measure and include a rate in your goal. If that's not possible in your practice, simply use a numerator, and aim for a decrease.

†Just by cleaning up patient records, we have closed the gap between to our goal by about half.

‡Our original baseline denominator was 600, and our goal is to reduce overdue patients to 10% of our original baseline denominator.

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.

- *Measure:* We were not yet able to implement calling patients. We were not ready for that step yet.
- *Train:* All staff will need to be trained on how to properly input immunization data into the IIS, how to remove patients who have MOGE'd, and how to correctly input doses of HiB vaccine.
- *Motivate:* We decided that all the patient data should be cleaned up before we continue. To motivate staff, we will share data about what our records look like before and after. We will also discuss the time, effort and impact such an undertaking had on staff and the practice. We hope this will motivate staff to keep records as accurate as possible.
- *Follow-up:* When the record clean up is complete, we will start meeting every Tuesday morning, and start our cycles of calling the families of overdue patients.

End of Cycle 1

