

**Southern Health/Sante Sud
Quality Improvement Project
Report Out
Vaccine Inventory Management
Heidi Donohoe PHN**

LearningToSee



CONSULTING

Define

*Public Health-Healthy Living
office Vaccine Inventory
Management of stock and
ordering process with use of
Panorama*

Define

Problem Statement:

Inconsistent storage organization of vaccine, errors and/or delays in data entry, non-recorded wastage of vaccine and lack of awareness in process for determining appropriate quantity of vaccine stock to be ordered results in increased time spent completing the monthly vaccine inventory count resulting in manual adjustment of inventory leaves Public Health Nurses feeling frustrated and potentially scrambling on short notice to ensure vaccine stock availability.

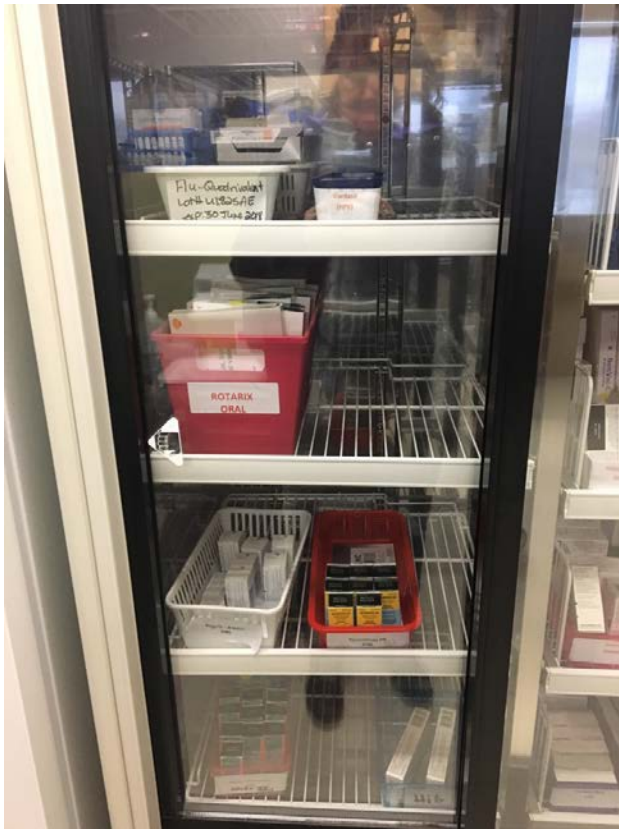
LearningToSee



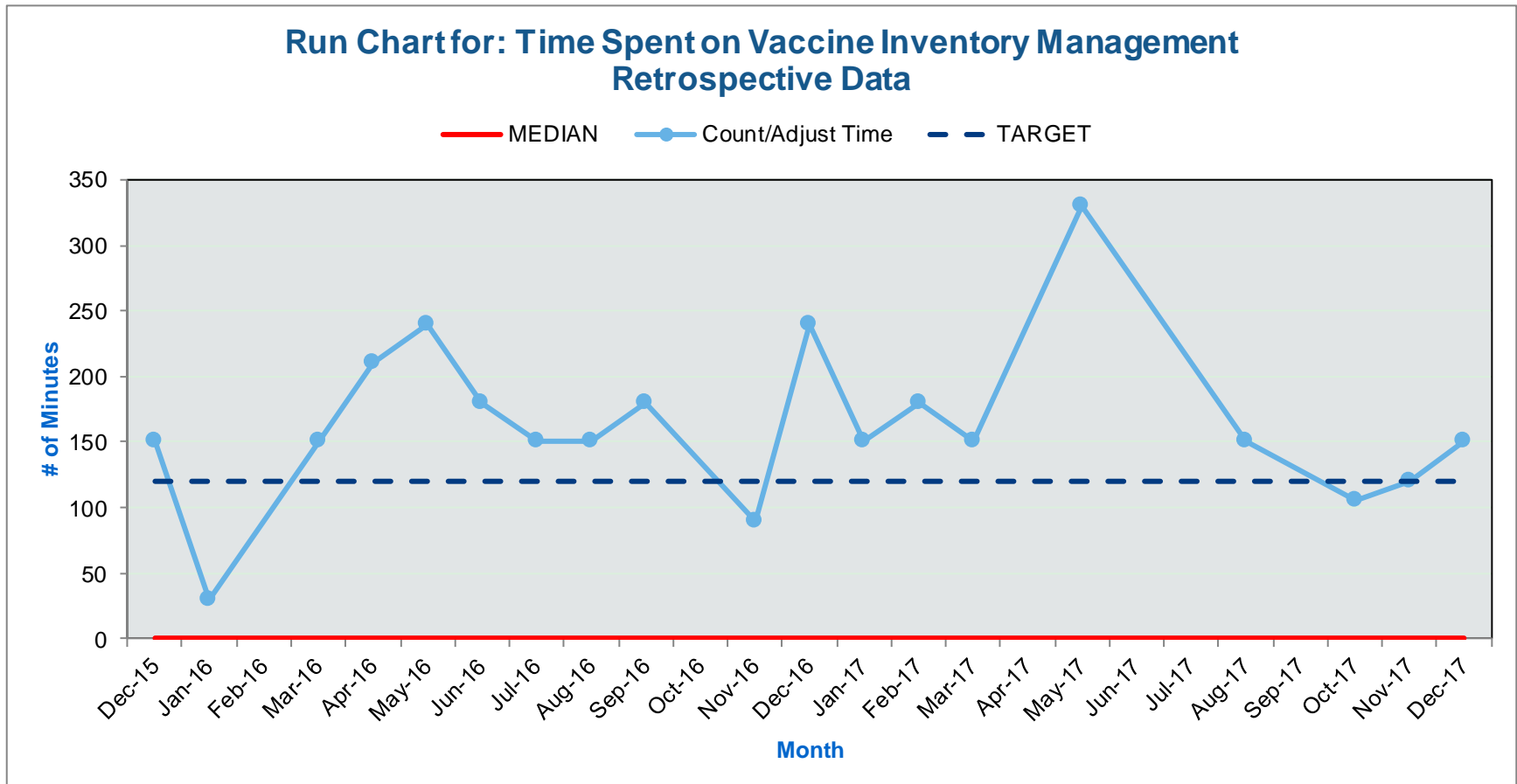
CONSULTING

Define

Vaccine Fridge “before”we already implemented some of the recommendations by Public Health Agency of Canada (PHAC) for appropriate cold chain storage, but we did not comply completely



Data Collection



3/26/2020

Measure

What?	How?	Where?	Who?	When?
What is being measured?	How will you track the measurement? Tracking sheets, observations, other? Do you need any items to measure? Clock, pedometer, etc.	On which unit/area will the data be collected?	Who is responsible for collecting the measures measurements?	When are the measures being collected?
Time spent by PHN to Count inventory	Heidi will track time spent monthly on count of vaccine	Steinbach PHU	Heidi	Monthly
Time spent by PHN to adjust inventory	Heidi will track time spent on monthly adjustment of vaccine	Steinbach PHU	Heidi	Monthly
Amount of vaccine wastage	Record vaccine wastage on Monthly Vaccine Wastage Count sheets and list reason for wastage	Two vaccine fridges in Steinbach PHU	Public Health Nurses will record wastage as they occur	Monthly
# of vaccines that need to be manually adjusted during Monday Inventory Count	Monthly Inventory Count sheet	Steinbach PHU	Heidi, as she makes manual adjustments in inventory	Monthly

Analyze

Before:

Time to complete monthly inventory physical count = 1.5 hours

Time to make manual adjustments to monthly inventory in Panorama = 1.5 hours

TOTAL: 3.0 hours on average

Improve

- **As a 5S project, to improve organization of vaccine inventory within vaccine fridge to comply with Public Health Agency of Canada (PHAC) Standards and make monthly inventory count easier and quicker in Panorama in order to reduce PHN time by 50%.**
- **To improve time spent by PHN in Panorama by raising awareness with Public Health Nurses and Administration clerks, who do direct data entry.**

Improve

After:

Time to complete monthly inventory = 45 minutes

Time to make manual adjustments to monthly inventory in Panorama = 45 minutes

Total savings of 1.5 hours of Nurse IV time each month

Improve

Staff comments and customer feedback on the improvements:

- *QRG for Receipt of Vaccine Shipment was very helpful for me as a relatively new Clerk*
- *The visual organization of the vaccine stock in the fridge helps me find the correct vaccine quicker*
- *Colored containers labeled by vaccine antigen reduces errors when getting vaccine*
- *Develop a process of informing the nurse in charge of vaccine ordering twice yearly of number of doses for required school based immunizations and Flu clinic mass events.*

Control

What controls have we put in place to ensure that performance does not lapse?

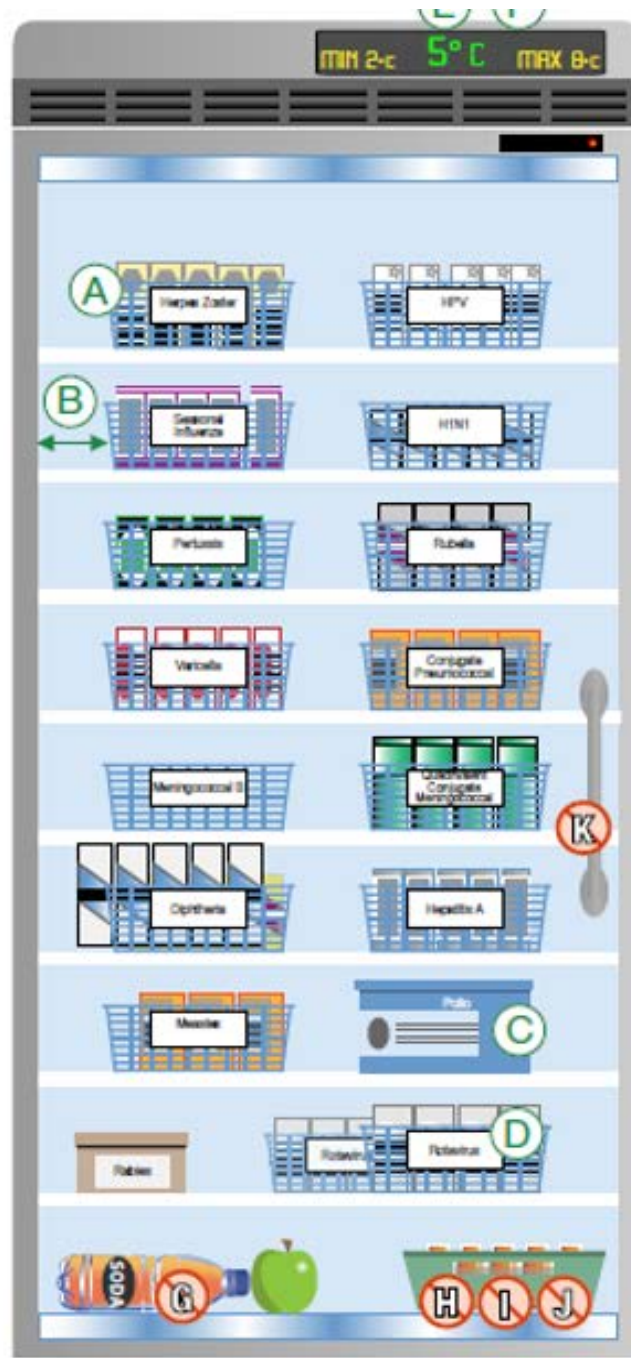
- *Quick Reference Guide-for Receipt of Vaccine Shipment – integrate into orientation of clerk & PHN*
- *Posted PHAC diagram of recommended vaccine storage near vaccine fridges*
- *Colored containers labeled by antigen not manufacturer name of vaccine*
- *Monthly vaccine inventory will act as a 5-Minute 5S*

Quick Reference Guide for Receipt of Vaccine Shipment

Administrative Support:

- Immediately upon arrival, notify Public Health Nurse (PHN) of vaccine shipment arrival.
- If PHN not immediately available, unpack shipment, locate:
 - packing form (printed on **pink paper**)
 - requisition pick list (list of vaccine products ordered) (printed on **yellow paper**)
 - temperature monitor, watch for indicator light; OK (flashing **GREEN**) or ALERT (flashing **RED**).
 - **Confirm vaccine products received matches the vaccine products listed on the requisition pick list.**
 - Place all product **immediately** in a separate container in temperature-monitored fridge.
 - Complete the packing form (with check list) and detach the bottom section and place with the vaccines in the fridge.
- Make a copy of the completed packing form for PHN information.
 - Keep requisition vaccine product list (list of all vaccines ordered by PHN) for PHN information.
 - Follow all the steps on the packing form, which include:
- Phone Provincial Vaccine Warehouse at 1-855-683-3306 or e-mail vacmda@gov.mb.ca to advise the shipment was received.
- Repack the shipping carton with the temperature monitor, the top half of the completed form, gelpacks, and all packing material to prepare for pick-up.
- Attach the enclosed pre-printed Purolator Return Shipping Label to the shipping carton.
- Phone Purolator at 1-888-744-7123 to have them pick up the carton to be returned to Provincial Vaccine Warehouse.
 - Notify PHN of above and provide copy of completed packing form and requisition list of vaccine products received.

3/26/2020



Lessons Learned

What were some of the key things we learned about quality improvement while doing this project?

- *Role Clarity! One nurse was designated to do monthly inventory but all nurses at this multi-nurse site had a role to play in ensuring vaccines were stored appropriately*
- *Communication! Even though it was one nurse's task to do the inventory and ordering of vaccine, all nurses needed to be aware of the requirements of the act of doing inventory and manual adjustments; and communicate what their vaccine needs would be in upcoming weeks.*
- *Panorama functions! We can access information from Panorama that will help with managing stock and estimating uptake for mass immunization events ie. schools*

Next Steps

What next QI project or where is the project spreading?

- April 2018 Regional Public Health Nurse meeting – shared PHAC diagram of vaccine storage with all Public Health Nurse offices
- At the same time as this project was occurring, our CD/Immunization Team was working on a Vaccine Fridge environmental scan and Inventory Management Audit tool that was also reviewed with PHNs at the April meeting.

The Team!

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