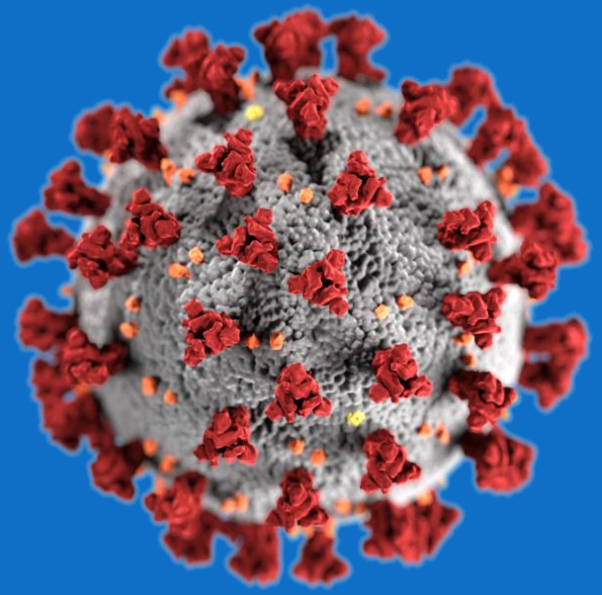


The COVID-19 Vaccine Distribution Support Playbook

Version: 2.2

Last Updated: December 18, 2020; 1230hrs

Developed by:

The Ottawa Hospital

Ontario Health

UHN Toronto General Toronto Western Princess Margaret Toronto Rehab Michener Institute

Purpose of document

- This document has been prepared as a summary of the standardized guide to planning for, and implementing, vaccination sites
- It is based on findings from the University Health Network (UHN) and The Ottawa Hospital (TOH) experience as a pilot sites for administering Pfizer's COVID-19 vaccine from December 15-18
- A detailed implementation guide can be found <here>

Playbook Summary Table of Contents

Pilot Summary

Storage of Product:	• Established a Freezer Farm which can received 3000 doses • 2 freezers (-80ºC) up and running with back-ups; remainder of the units in place in January
Pilot Clinic	• 9 bays set up with one-way traffic flow @ UHN; 10 bays set up with one-way traffic @ TOH • Current capacity to **385/day @ UHN;** Proposed Capacity of **554/day @ TOH** • Daily volume of vaccine will be transfer from storage to the pilot clinic each day prior to clinic times to allow for preparation.
Prioritization for the pilot:	• Based on the MOH's recommendation, the pilot will only be open to the LTC staff (15% - 20% per cycle) • Secondary population of High Risk HCWs at geographically proximal hospital sites

Immunization Clinic Checklist

The check list below presents the high level activities that should be completed for the set up of a COVID-19 Immunization Clinic. Other activities may be required based on your site's individual needs.

- ☐ Identify key partners and prepare an engagement strategy
- ☐ Identify prioritized staff to receive immunization
- ☐ Set up a registration system for immunization recipients
- ☐ Organize space for the immunization clinics
- ☐ Establish a secure and robust vaccine management process
- ☐ Develop, model and implement clinical flow processes
- ☐ Identify staffing needs
- ☐ Develop and delivery training programs
- ☐ Ensure all necessary equipment is readily available
- ☐ Set up an Incident Management Structure (IMS)
- ☐ Set up a data analytics process and KPIs
- ☐ Prepare a documentation and reporting process

Key Lessons Learned – UHN and TOH

- Start your IMS early – build your team and get meetings into calendars
- Trial entire process with small sample of recipients eg/ 20 vaccinations before full day launch
- Ensure role clarity among your team
- Identify roles within the clinic with colored vests eg. IT
- Use laminated cards to make requests of IT support, additional vaccine etc.
- Ensure adequate technical support on site (red coat strategy)
- Preparation of vaccine: Pharmacy adds sharp admin needle to avoid lure lock issues and limit practice variability
- Begin transition planning from “go live” to sustained operations
- Establish process for PDSA, QI and optimizing improvement
- Control media requests in first few days to ensure focus on clinic safety and efficiency and physical distancing requirements

Key Lessons Learned – UHN and TOH

Governance:
-Build IMS team early & Define roles
-Hire Clinical Manager and Supervisors from host hospital to oversee vaccination clinic

Evaluation
-Establish Huddles 2x/day including daily metrics
-PDSA and QI approach

Standardize Practice
-Training of clinical staff via SOPs, observe for competency
-Limit variation in lure lock securement; Pharmacy attach administration needle

Sustainment and Metrics:
-Develop Go Live to Clinical Operations transition plan.
-Create Dashboard

Clinic operations:
-Identify differing clinic roles via vests
-Ensure robust onsite IT support Day 1-2
-Laminated cards to communicate support of IT, additional vaccines etc

Communication:
-Establish early, clear interagency collaboration to ensure a strong foundation built to support the scaling up of operations efficiently while effectively leveraging limited resources;
-Effective bidirectional information flow provincial /regional tables
-Daily check in meetings with LTCH and Ontario Health team to ensure timely information, answer questions, identify and eliminate barriers to vaccination uptake; generate energy and excitement
-Consider development of additional comms materials not provided by the Ministry but tailored to this key population
-Develop well defined frameworks on the determination of the prioritization of key population groups in order to build and grow public trust in vaccine programming;
-Ensure adequate technology infrastructure, logistical and administrative supports are established early to allow for at-scale processing of information and a registration system with capacity for residents to schedule and cancel vaccination appointments on their own;
-Leverage partners to create regional labour pools, such as academic centres, hospitals, agencies, etc.
-Collaborate and share communications plans and materials early and throughout the rollout to address vaccine questions including safety concerns, ensuring communications teams at each level of government and partnerships work in tandem;
-Confirm involvement of public health units in all vaccine rollouts throughout the province to ensure lessons learned on influenza vaccination clinics can be transferred to COVID-19 vaccination.

Human Factors Observations

Initial reflections into people's behaviour and interactions with processes, technologies, and space

Not your average vaccination experience

Front-line HCPs who have witnessed the brunt of COVID-19 arrived at the clinic in groups to receive the first dose of this breakthrough vaccine. This arrival pattern was in part driven by their employers scheduling group transportation as well as the somewhat momentous and celebratory nature of the occasion. Unfortunately, this often resulted in large queues growing outside the clinic and people having to wait in the cold due to insufficient waiting space. There is a need to design scheduling and communications to drive a more steady arrival pattern.

Ensuring a second dose

While patients arrived consistently for their first vaccine, often during their work shifts, it is feasible that returning for a second vaccination might not be as easy. Dependent on the patient's profession, availability, and location, barriers could exist to returning for their next appointment. As such, we would like to continue to observe and understand the barriers and facilitators to returning to clinic to define the design implications for the scheduling and communication systems.

A unique patient population

Vaccinating HCPs who have provided care for people living with and dying from COVID-19 is arguably going to result in a different clinic experience than vaccinating other high priority groups, such as adults in First Nations, Métis, and Inuit populations and adult recipients of chronic home health care. Trust in the healthcare system and a basic understanding of vaccine science lends itself to less anxiety and less uncertainty amongst your patient population. We would like to understand the perceptions of other high priority groups who are likely to be less trusting of the process. This understanding could have important design implications for mass vaccination clinics.

Partnership & Engagement

Partners

Cross-sectoral representation and engagement is encouraged

The Ottawa Hospital

Toronto Police

O.P.P.

Ontario Health

UHN Toronto General Toronto Western Princess Margaret Toronto Rehab Michener Institute

Ottawa Public Health Santé publique

Ottawa Police

Ontario

Toronto Public Health

*Key partners in UHN and TOH pilots

Key Aspects of Engagement

1. Leverage existing **Hub and Spoke** relationships with congregate settings, where possible
   - Establish a lead point of contact to interface with each LTCH
   - Enables two-way communication built on pre-existing trust relationships
   - Provide support and information in ‘real time’
   - Ensures follow up and monitoring of LTCH staff and resident status

2. Provide access to clear, tangible, information (in writing) to eligible cohort as early as possible

3. Allow space and time for ‘myth busting’ and sharing across settings

Engagement Process

PHU identifies prioritized population for vaccination (in partnership with OH Region and local hub (where applicable)

Initial Engagement

- Region (OH) arranges call with participating LTCH, pilot site, PHU, and Ministries (MOLTC/MOH)
- Context (OH, Ministry), clinical overview (PHU), logistics (pilot site), moderated Q&A

- ❑ Ministry communications package
- ❑ Registration link and pilot site 'one pager'
- ❑ Details on prioritized setting

Follow-up Engagement

- Region (OH) arranges call 24-48 hours after initial engagement with same partners
- Review of key asks (OH, Ministry), updates to clinical guidance PHU), updates to logistics (pilot site), moderated Q&A

- ❑ Additional Q&A or logistical materials to be provided

First vaccination clinic appointment available

Ongoing Engagement

- Leverage existing Hub and Spoke model to manage clinical questions related to vaccination
- Leverage local LTC IMS to support key messages and promote vaccination clinic participation

- ❑ Ottawa Public Health supported the promotion of vaccine uptake. The OPH team in collaboration with Ontario Health led the engagement with all LTCH identified in the Ottawa pilot. OPH and OH led daily meetings to answer questions and identify barriers to vaccination uptake. Letters, videos and FAQ's were developed and shared with the LTCH to support their efforts to recruit volunteers.

Key materials to support engagement

All documents, with the exception of starred items, are being drafted by the Ministry of Health and will be made available to support engagement.

For vaccine recipients	For vaccination sites	For health care providers	For LTCH
• Vaccine Information Sheet (C-19 Vaccine Information Sheet) • After Care Sheet (C-19 After Care Sheet) • Pre-package Fact Sheet (C-19 Fact Sheet) • Consent Form (C-19 Consent Form) • Scheduling link*	• Script (C-19 Script) • Vaccine Clinic Operations Planning Checklist (C-19 Checklist) • Consent support for COVax Data Collection (C-19 Consent Support for COVax Data Collection)	• Approval process and Safety (C-19 Approval Process and Safety) • About vaccine (C-19 About Vaccines) • Pfizer vaccine administration (C-19 Vaccine Administration) • Vaccine availability and rollout (C-19 Vaccine Availability and Rollout)	• Cover letter to LTCH workers (C-19 Cover letter LTCHs) • Map with directions to vaccination clinic* • Time vaccination will take from start to end

Distribution:
Vaccination sites, Ontario Health Regions, and public health unit leads should receive all packages.

- LTC should receive the pre and post vaccine document including the LTC specific documents above. The LTC package should be sent to participating LTCHs by one designated local lead (PH lead, OH lead).
- The HCP education documents should go to Health Care Workers so they can answer patient questions. This will be shared through other methods as well with a wider audience.

Roles and Accountabilities of Partners

Ministry of Health	Ministry of Long Term Care	Public Health Unit	Ontario Health Region	Hospital Vaccination Site
• Provide high level communications to all sectors participating in vaccine clinics • Provide communications materials for general use (ie. key messages) • Support media inquries	• Engagement with Associations and Union leaders • Facilitate and reinforce key messages	• Provide clinical guidance and updates to congregate sites and hospital vaccination sites • Engage and support promotion of vaccine uptake • Creation of additional, local communication materials (i.e. letters, videos, FAQ's if required) with LTCH and Ontario Health Regions to support efforts in recruiting volunteers • Participate in engagement sessions ahead of vaccination clinics	• Act as a support for coordination and roll out • Coordinate engagement sessions among hospital vaccination site, PHU, Ministries, and congregate settings • Provide data to inform engagement of key participants and planning for roll out • Identify congregate setting leads and act as a conduit where required	• Communicate registration logistics and expectations • Develop local "what to expect at our clinic" one-pager (including hours, directions, parking, etc.) • Participate in engagement sessions ahead of vaccination clinics • Provide input to MOH/PH/OH • Ensure safe and efficient clinic environment for recipients and staff

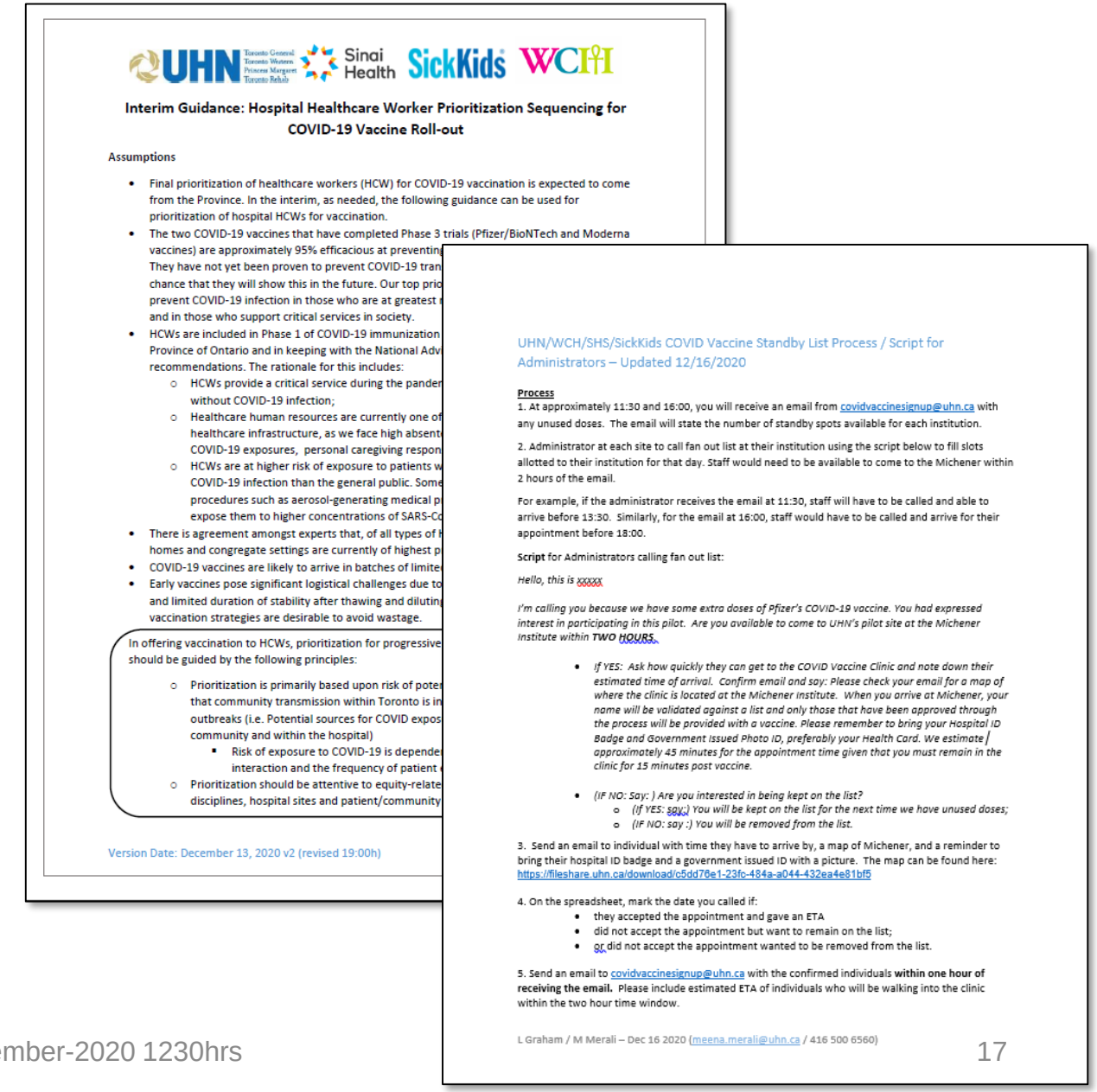
Recipient Prioritization

Recipient Prioritization

- The Province has provided direction on priority populations
- Local Public Health Units have identified local prioritized sites
- A standardized approach will be communicated by the OH Region
- The initial rollout plan is as follows:
  - Front line LTC paid staff (including FT/PT employees, regularly scheduled agency staff, and physicians with consistent and frequent attendance in Home) will be prioritized; *pilot does not include Essential Caregivers*
    - 15%-30% of staff from priority population, at the direction of PHU, to ensure stability of staffing in the event of staff requiring sick days (related to adverse reactions to vaccine)
  - Hospital staff in high risk environments (if needed for 'no waste' approach) – *see next page for guidance*
  - Voluntary participation

Interim hospital staff prioritization sequencing

- The Task Force is currently completing work on HCW prioritization
- In the event of no shows, or unfilled spots, interim guidance was developed to support the ‘no waste’ approach
- Interim prioritization of HCWs aligned to NACI recommendations
  - Prioritization based on risk of potential exposure to COVID-19 (ie. COVID-19+ hospital units)
- For purpose of pilot, targeted to hospitals within walking distance (staff must present within 2 hours)
- Fan out list and script developed to fill slots allotted to their institution for that day



Interim Guidance: Hospital Healthcare Worker Prioritization Sequencing for COVID-19 Vaccine Roll-out

Assumptions

- Final prioritization of healthcare workers (HCW) for COVID-19 vaccination is expected to come from the Province. In the interim, as needed, the following guidance can be used for prioritization of hospital HCWs for vaccination.
- The two COVID-19 vaccines that have completed Phase 3 trials (Pfizer/BioNTech and Moderna vaccines) are approximately 95% efficacious at preventing
  They have not yet been proven to prevent COVID-19 tran
  chance that they will show this in the future. Our top prio
  prevent COVID-19 infection in those who are at greatest
  and in those who support critical services in society.
- HCWs are included in Phase 1 of COVID-19 immunization
  Province of Ontario and in keeping with the National Adv
  recommendations. The rationale for this includes:
  - HCWs provide a critical service during the pander
    without COVID-19 infection;
  - Healthcare human resources are currently one of
    healthcare infrastructure, as we face high absent
    COVID-19 exposures, personal caregiving respon
  - HCWs are at higher risk of exposure to patients w
    COVID-19 infection than the general public. Some
    procedures such as aerosol-generating medical p
    expose them to higher concentrations of SARS-Co
- There is agreement amongst experts that, of all types of H
  homes and congregate settings are currently of highest p
- COVID-19 vaccines are likely to arrive in batches of limite
- Early vaccines pose significant logistical challenges due to
  and limited duration of stability after thawing and dilutin
  vaccination strategies are desirable to avoid wastage.

In offering vaccination to HCWs, prioritization for progressive should be guided by the following principles:

- Prioritization is primarily based upon risk of pote
  that community transmission within Toronto is in
  outbreaks (i.e. Potential sources for COVID expos
  community and within the hospital)
  - Risk of exposure to COVID-19 is depende
    interaction and the frequency of patient
- Prioritization should be attentive to equity-relate
  disciplines, hospital sites and patient/community

Version Date: December 13, 2020 v2 (revised 19:00h)

UHN/WCH/SHS/SickKids COVID Vaccine Standby List Process / Script for Administrators – Updated 12/16/2020

Process

1. At approximately 11:30 and 16:00, you will receive an email from covidvaccinesignup@uhn.ca with any unused doses. The email will state the number of standby spots available for each institution.

2. Administrator at each site to call fan out list at their institution using the script below to fill slots allotted to their institution for that day. Staff would need to be available to come to the Michener within 2 hours of the email.

For example, if the administrator receives the email at 11:30, staff will have to be called and able to arrive before 13:30. Similarly, for the email at 16:00, staff would have to be called and arrive for their appointment before 18:00.

Script for Administrators calling fan out list:

Hello, this is xxxxx

*I'm calling you because we have some extra doses of Pfizer's COVID-19 vaccine. You had expressed interest in participating in this pilot. Are you available to come to UHN's pilot site at the Michener Institute within **TWO HOURS**.*

- *If YES: Ask how quickly they can get to the COVID Vaccine Clinic and note down their estimated time of arrival. Confirm email and say: Please check your email for a map of where the clinic is located at the Michener institute. When you arrive at Michener, your name will be validated against a list and only those that have been approved through the process will be provided with a vaccine. Please remember to bring your Hospital ID Badge and Government Issued Photo ID, preferably your Health Card. We estimate approximately 45 minutes for the appointment time given that you must remain in the clinic for 15 minutes post vaccine.*

- *(IF NO: Say:) Are you interested in being kept on the list?*
  - *(If YES: say:) You will be kept on the list for the next time we have unused doses;*
  - *(IF NO: say :) You will be removed from the list.*

3. Send an email to individual with time they have to arrive by, a map of Michener, and a reminder to bring their hospital ID badge and a government issued ID with a picture. The map can be found here: https://fileshare.uhn.ca/download/c5dd76e1-23fc-484a-a044-432ea4e81bf5

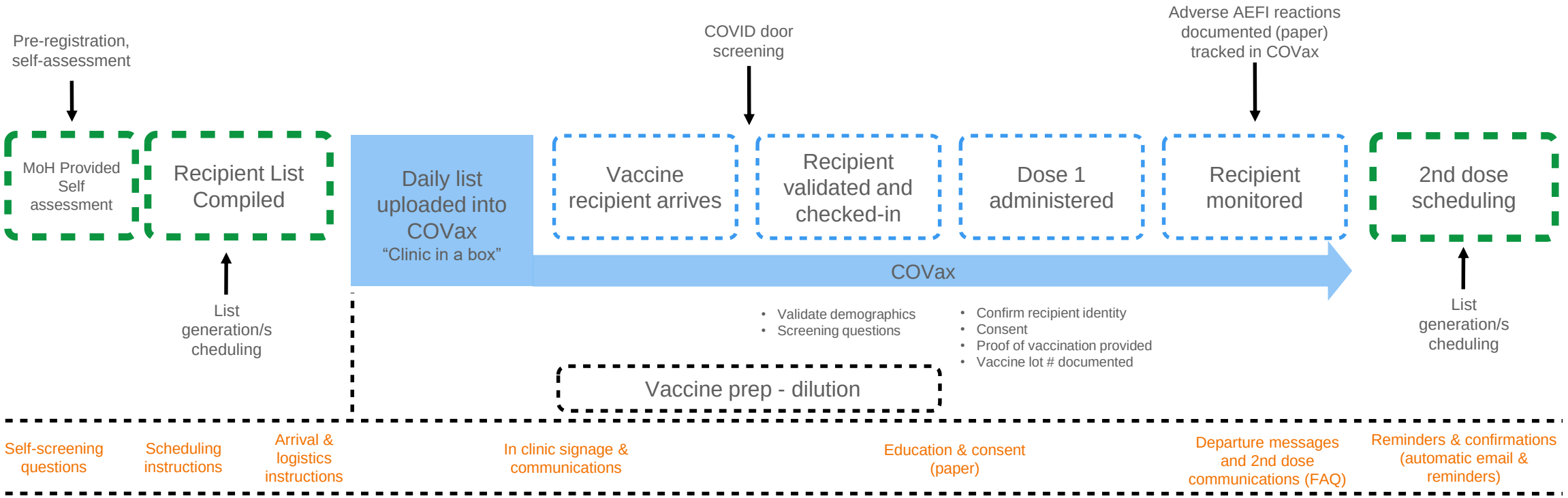
4. On the spreadsheet, mark the date you called if:
- they accepted the appointment and gave an ETA
- did not accept the appointment but want to remain on the list;
- or did not accept the appointment wanted to be removed from the list.

5. Send an email to covidvaccinesignup@uhn.ca with the confirmed individuals **within one hour of receiving the email.** Please include estimated ETA of individuals who will be walking into the clinic within the two hour time window.

L Graham / M Merali – Dec 16 2020 (meena.merali@uhn.ca / 416 500 6560)

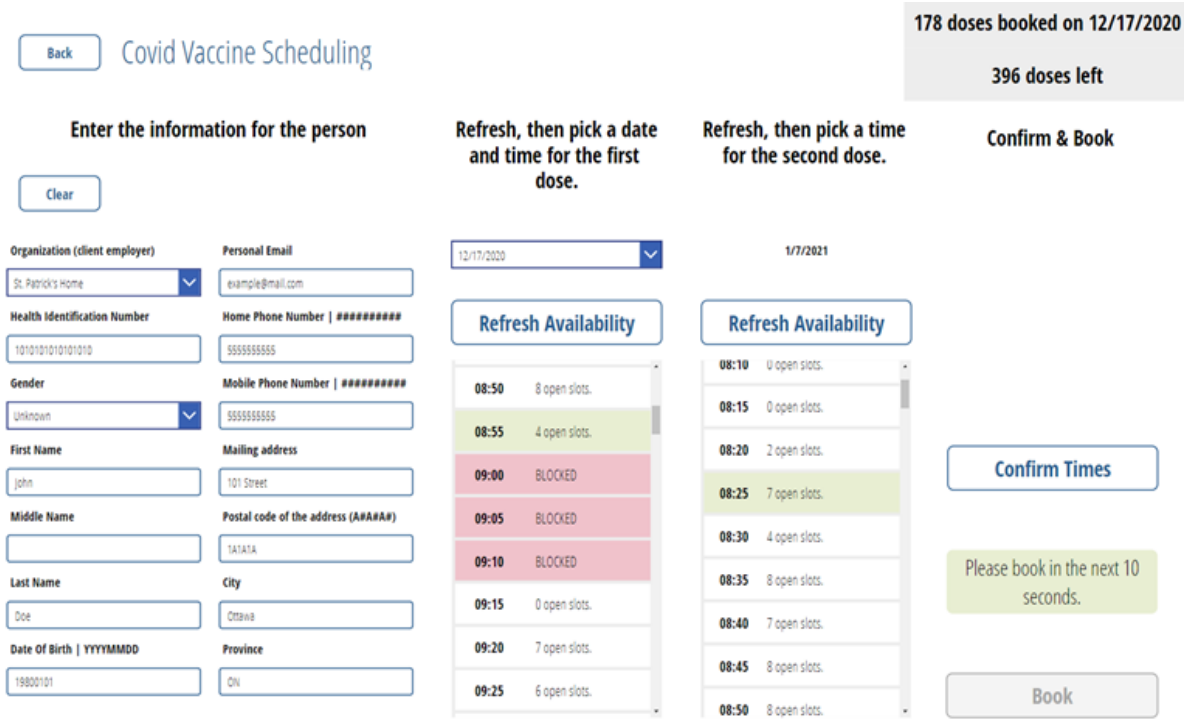
Clinic Operations

Overall clinic process



TOH booking system

- Ottawa Public Health (OPH) collaborate with LTC homes to identify client list
- Microsoft 365 Power Platform (Power BI, Power Automate, and PowerApps) is used by OPH to securely register clients
- Client health information generated in the application exported in a format that interfaces with the MOH's requirements for data transfer.
- Client list uploaded to MOH daily (24 hrs in advance)



TOH Scheduling Dashboard

The report is used for both first and second doses and is used to manage:

- bookings to date
- maximum available doses per vaccination day
- the bookings (by day) vs the allotted doses
- Bookings by Organization (LTCH)

177	1283
dosesLeft	bookings

Summary of bookings and doses

Clinic Date	bookings	dailyMax	dosesLeft
December 15, 2020	107	102	-5
December 16, 2020	250	250	0
December 17, 2020	528	554	26
December 18, 2020	398	554	156
Total	**1283**	**1460**	**177**

timeSlot	December 15, 2020	December 16, 2020	December 17, 2020	December 18, 2020	Total
8:00:00 AM	1	7	8	8	24
8:05:00 AM			8	7	15
8:10:00 AM		7	8	8	23
8:15:00 AM	1		8	8	17
8:20:00 AM		7	8	8	23
8:25:00 AM			8	8	16
8:30:00 AM	5	9	8	8	30
8:35:00 AM			8	8	16
8:40:00 AM		7	8	8	23
8:45:00 AM	5		8	8	21
8:50:00 AM		7	8	5	20
8:55:00 AM			7	8	15
9:00:00 AM			2	1	3
9:15:00 AM	5		8	7	20
9:20:00 AM		7	8	8	23
9:25:00 AM			8	5	13
9:30:00 AM	5	7	8	5	25
9:35:00 AM			8		8
Total	**107**	**250**	**528**	**398**	**1283**

Appointment bookings & registration

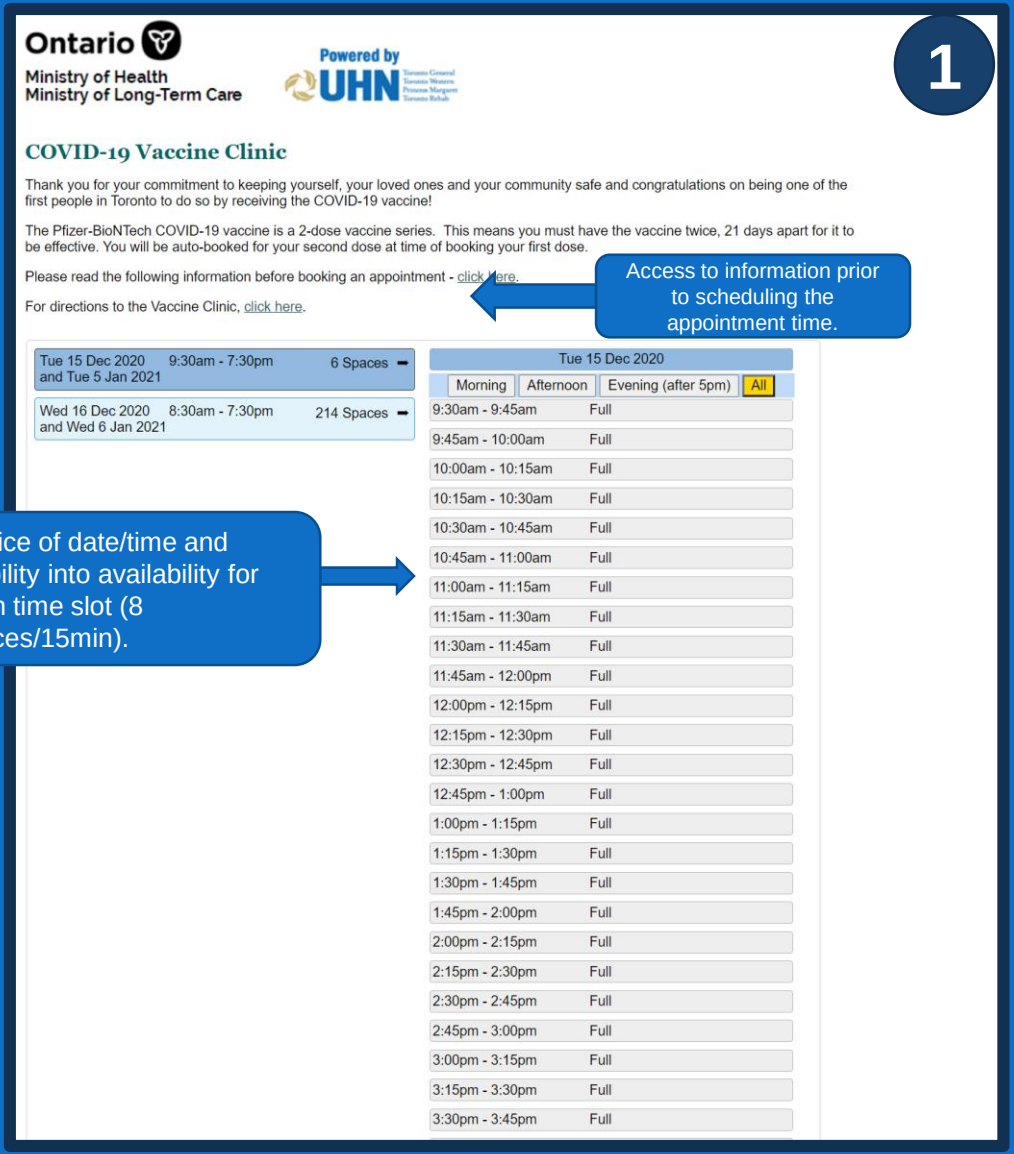
UHN has repurposed its COVID-19 testing booking system for participants to book both doses

- Blocks of time/availability will be communicated to LTCH-Leads for booking their appointments– this will be a manual process for the purposes of the pilot
- **Reminder notices** will go out to the participants ahead of their second dose to ensure they still meet the eligibility requirements
- Pfizer Vaccine requires 3 weeks between doses, Moderna Vaccine requires 4 weeks between doses; the booking system will need to account for this

System Requirements

Requirement	
• Facilitate users scheduling a first appointment with an automatic scheduling of a second clinic appointment for two-step vaccination	
• Facilitate pre-screening of eligibility criteria to ensure appropriate patients attend clinic appointments	
• Mitigate waste by ensuring timelines appropriate with pharmacy preparation guidelines	
• Allow for tracking of no shows and cancellations	
• Align with the Ministry of Health requirements to pre-load data into the CoVax database	
• Align with Toronto Public Health requirements to mitigate impact on LTC homes by releasing spaces based on total staffing capacity	

UHN booking system



UHN booking system

Ontario
Ministry of Health
Ministry of Long-Term Care

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3

Registration for COVID-19 Vaccine Clinic

Dates/Times: Tuesday 15th Dec 2020, 7:15pm - 7:30pm
Tuesday 5th Jan 2021, 7:15pm - 7:30pm
Location: COVID-19 Vaccine Clinic - Toronto - Michener Institute
153 McCaul Street Toronto ON
Availability: Just 1 space remaining

COVID-19 VACCINATION

Please complete your registration; do not refresh your screen. Your reservation will expire in 9min 50sec

Name: First Name, Middle Name, Last Name
Date of Birth:
Biological Sex: Male
Heath Card Number: 10 numerical digits
Email:
Confirm email:
Phone Number:
Mobile Phone:
Address Line 1:
Address Line 2:
Town/City:
Province: Ontario
Postal Code: A0A 0A0
Organization: Organization...

Important:

I understand that the COVID-19 Vaccine is **ONLY** effective when two injections are given, one after another:

- First vaccination
- Second vaccination **21 days later**

I agree to participate in this full treatment and to return for the second vaccination at the appropriate time.

I confirm that I have reviewed the information about the COVID-19 Vaccine and its side effects and I want to receive the COVID-19 Vaccine.

I confirm that I consent to receiving further information about the vaccine and any necessary follow up information after my vaccine administration.

Do you agree to the above statement(s)? Yes

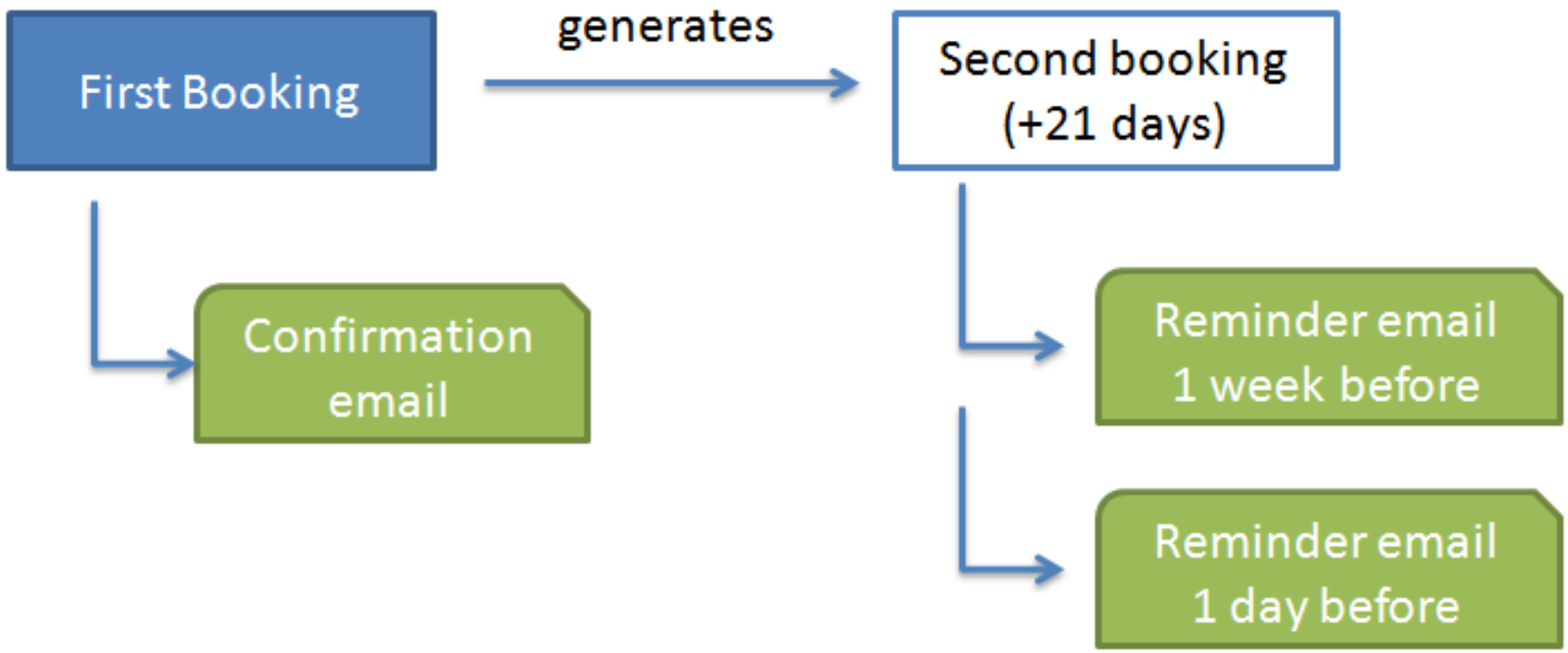
Submit Cancel

Personal Health Information aligning with the Ministry of Health preload requirements for CoVax.

Patient agreement to participate in 2-step vaccine, review all vaccine information and consent to receive further information after vaccine administration.

1. The appointment scheduling system needs to be **easy to use** and should **allow planning of the second dose**. It is recommended for the booking system that is to be adopted to have the functionality of selecting the type of vaccine to be administered with the required dosing interval and the ability to book both appointments
2. In some cases, the registration system might allow for the LTCH staff to obtain virtual consent for ahead of their appointments. However, a **verbal consent will always be obtained by the clinician administering the vaccine** during the appointment
3. **No-shows and empty slots**: in an effort to ensure all doses get administered, communicate and open up any empty blocks to ~~its~~ acute care HCW with frequent exposure and risk to Covid + patients (eg. ED and COVID Units, CAC, ICUs, Code Blue teams etc.) staff twice a day – *for more information refer to page 15*

UHN booking system



Email confirms location of clinic and links to more details about the vaccination. Also advises patients to bring their Employee ID, OHIP & Government ID to streamline the registration process.

1

VID-19 Vaccine Clinic <no_reply@fhtsolutions.com>

Reply | Forward | Archive | Junk | Delete | Mor

gistration completed 4:40

To Me <barlow@sentex.net>

Name: Christopher Barlow
Class: COVID-19 Vaccine Clinic
Date: Friday 18 Dec 2020, 6:30pm - 6:45pm **and** Friday 8 Jan 2021, 6:30pm - 6:45pm
Location: COVID-19 Vaccine Clinic - Toronto - Michener Institute, 153 McCaul Street Toronto

- Plan for each appointment to take up to 60 minutes, please arrive on time
- **You must** bring your:

1. OHIP card
2. Photo issued Government identification
3. Long-term Care or Employee identification

Note:

- Be sure to wear a comfortable shirt which is loose along the arms. This will allow you to roll up your sleeve easily and receive a vaccination in the upper arm.
- What to expect for the COVID-19 Vaccine, click here
- More information about the COVID-19 Vaccine - click here.
- For directions to the COVID-19 Vaccine Clinic, 153 McCaul Street, click here

You can review or cancel this booking by using this link: Review/Cancel Booking

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This e ation for the sc
An whom it was
If y nder and delete
Op mail may not be that of the organization.

If y cial nature and would like to be removed from the sender's mailing list pleas

1. Follow any unsubscribe process the sender has included in their email
2. Where no unsubscribe process has been included, reply to the sender and type "unsubscribe" in the subject line. If you require addi

Please note that we are unable to automatically unsubscribe individuals fro

Initial registration confirmation.

COVID-19 vaccine details and reminders.

Ability to cancel booking at any time.

2

message contains an invitation to an event. Accept | Decline | More

Reply | Forward | Archive | Junk | Delete | More

From Toronto Western FHT <no_reply@fhtsolutions.com>

Subject **COVID-19 2nd Vaccination Reminder** 2:14 AM

To Me <barlow@sentex.net>

Christopher Barlow,

This is a reminder that you have a second COVID-19 vaccination scheduled for Friday 1 Jan 2021 at 8:00am.

It is important that you receive the second vaccination to be protected from COVID-19.

Regards,
Vaccine Clinic

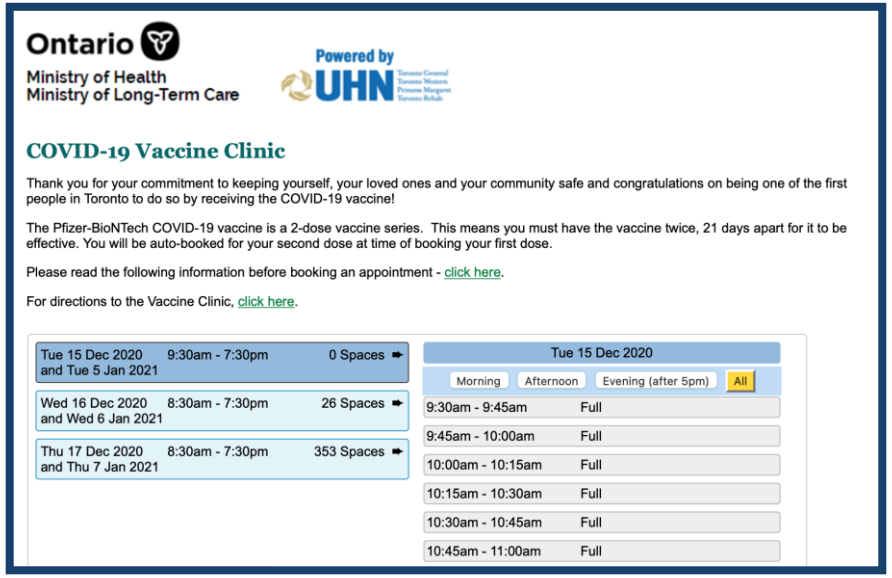
FHT Patient Communication Engine | FHT Solutions | www.fhtsolutions.com

Toronto Western FHT has invited you to COVID-19 Vaccine 2nd Appointment Clinic	
Title:	COVID-19 Vaccine 2nd Appointment Clinic
Location:	COVID-19 Vaccination Centre, 347 Bathurst St. Toronto
When:	Fri 1 Jan 2021 8:00 AM – 6:00 PM
Organiser:	Toronto Western FHT <no_reply@fhtsolutions.com>
Description:	COVID-19 Vaccine 2nd Appointment Clinic
Related Link:	http://www.ewfht.ca/displayPage.php?event=38

Second email confirmation.

UHN Scheduling Dashboard

The scheduling dashboard will enable tracking of open time spots to maximize immunization delivery



Ontario
Ministry of Health
Ministry of Long-Term Care

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COVID-19 Vaccine Clinic

Thank you for your commitment to keeping yourself, your loved ones and your community safe and congratulations on being one of the first people in Toronto to do so by receiving the COVID-19 vaccine!

The Pfizer-BioNTech COVID-19 vaccine is a 2-dose vaccine series. This means you must have the vaccine twice, 21 days apart for it to be effective. You will be auto-booked for your second dose at time of booking your first dose.

Please read the following information before booking an appointment - click here.

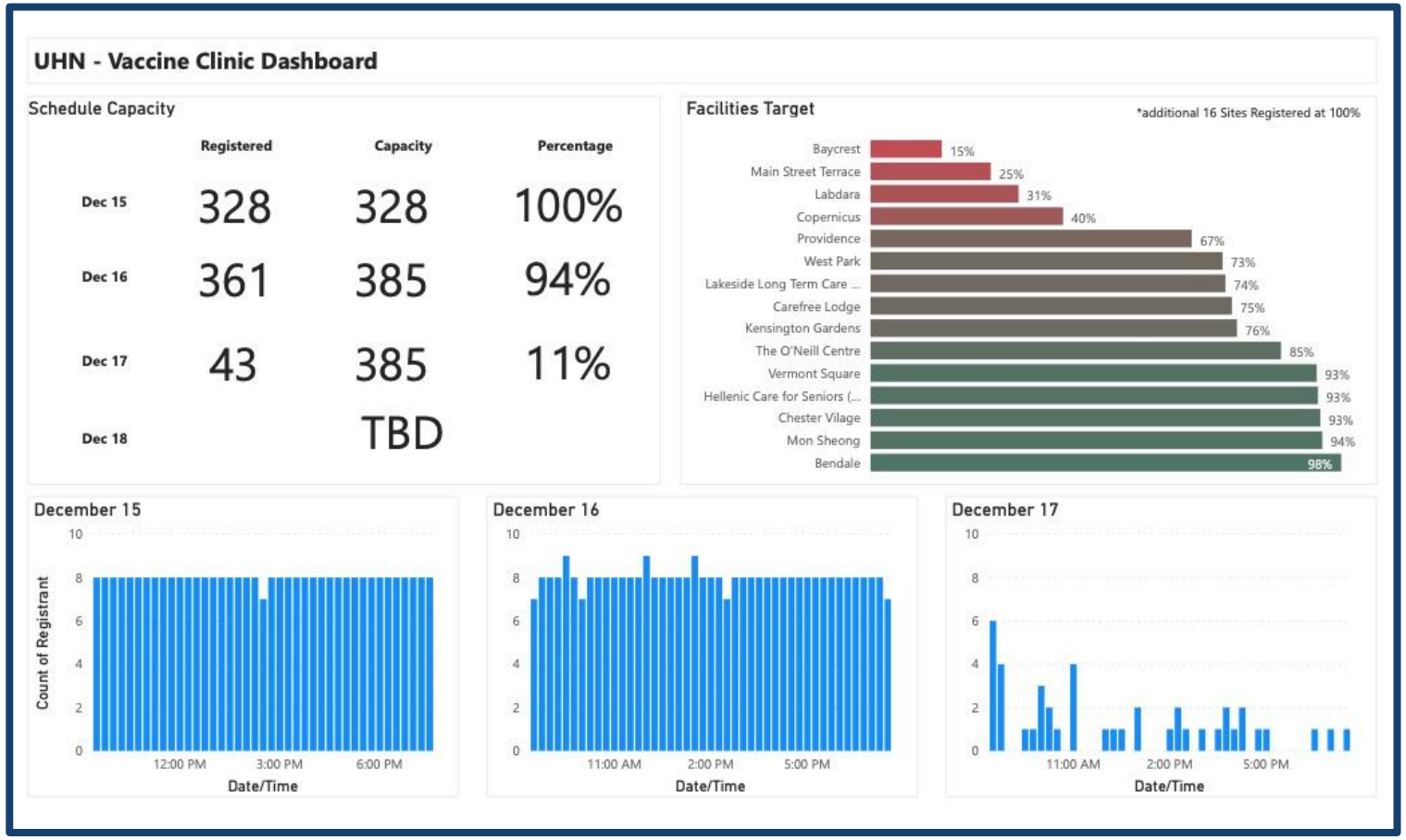
For directions to the Vaccine Clinic, click here.

Tue 15 Dec 2020 and Tue 5 Jan 2021	9:30am - 7:30pm	0 Spaces
Wed 16 Dec 2020 and Wed 6 Jan 2021	8:30am - 7:30pm	26 Spaces
Thu 17 Dec 2020 and Thu 7 Jan 2021	8:30am - 7:30pm	353 Spaces

Tue 15 Dec 2020

Morning | Afternoon | Evening (after 5pm) | All

9:30am - 9:45am	Full
9:45am - 10:00am	Full
10:00am - 10:15am	Full
10:15am - 10:30am	Full
10:30am - 10:45am	Full
10:45am - 11:00am	Full



UHN - Vaccine Clinic Dashboard

Schedule Capacity

	Registered	Capacity	Percentage
Dec 15	328	328	100%
Dec 16	361	385	94%
Dec 17	43	385	11%
Dec 18		TBD	

Facilities Target

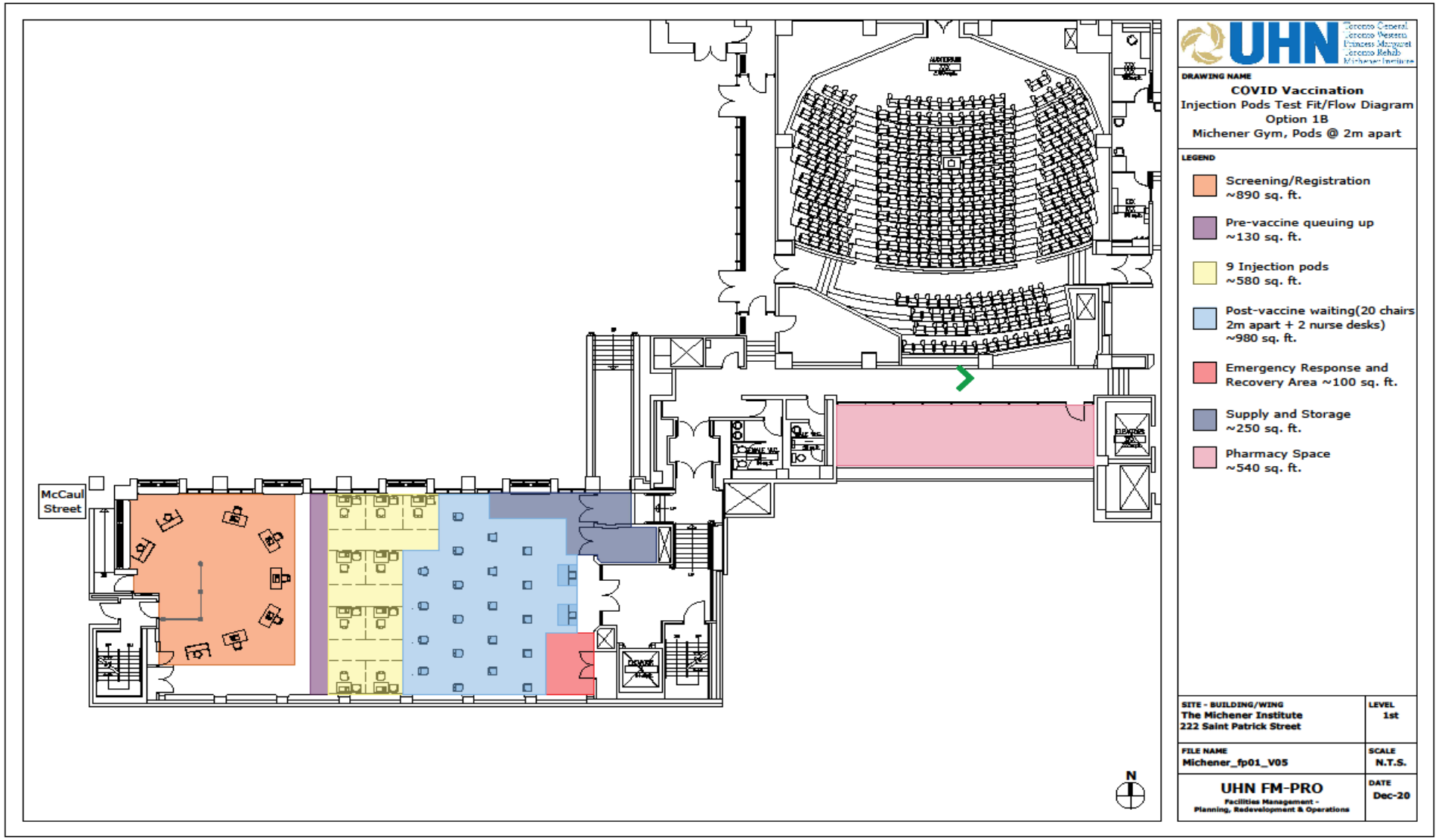
*additional 16 Sites Registered at 100%

Clinic setup summary

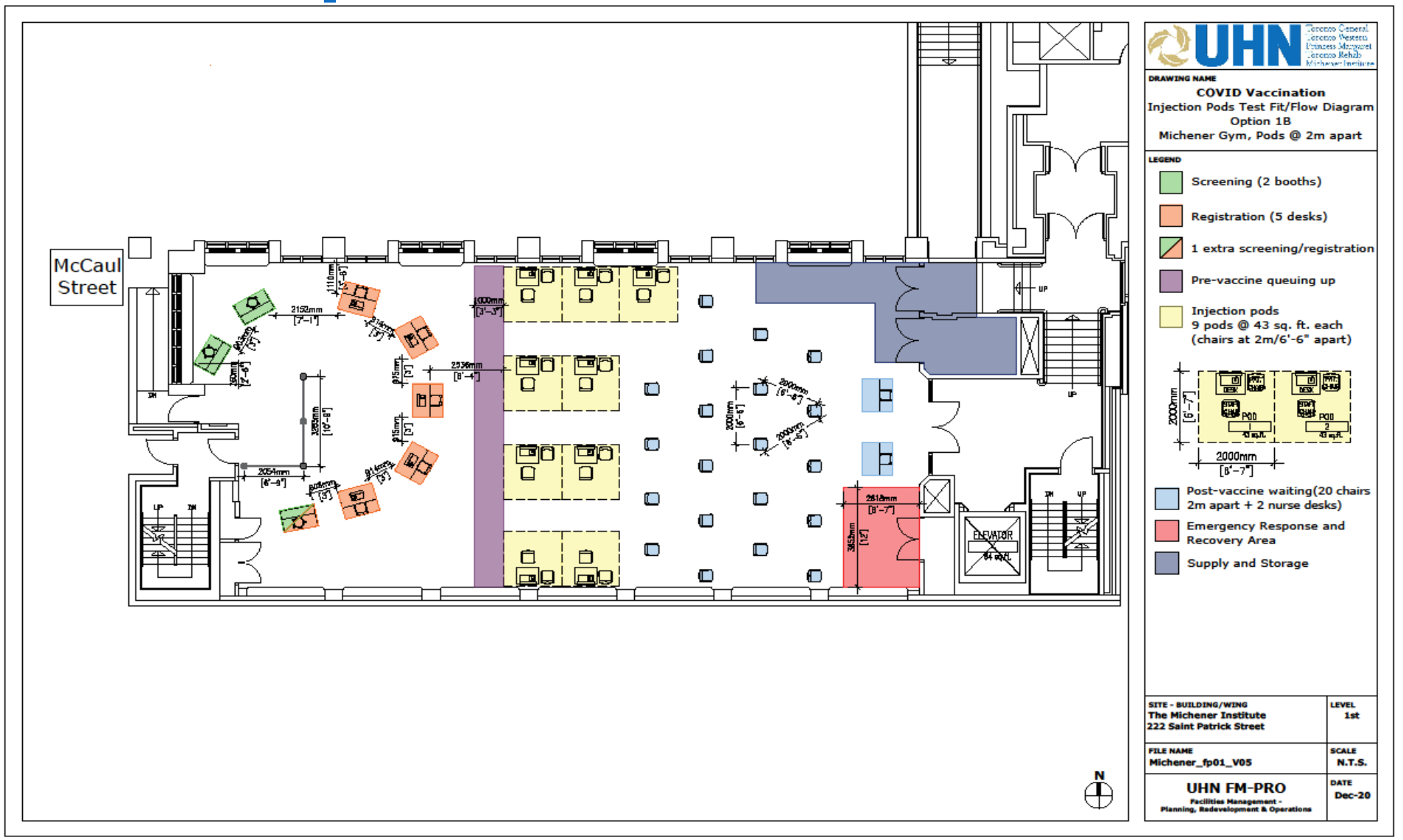
While the set-up of a every clinic will vary across the sites, a few principles are recommended:

- Convenient location (accessible with parking and public transit)
- Accessibility AODA considerations
- Ample space to allow for supplies, pre-screening, screening, waiting, vaccine preparation, and vaccine administration – the space should also allow of appropriate distancing of 2meters between stations along with necessary barriers
- LTE connectivity
- Well lit, clean, and secure
- If the site is away from a hospital, it then recommended to have a physician/nurse practitioner on-site or an ambulance on stand-by
- Sheltered or addition of a shelter to protect from weather
- Access to cold-chain management

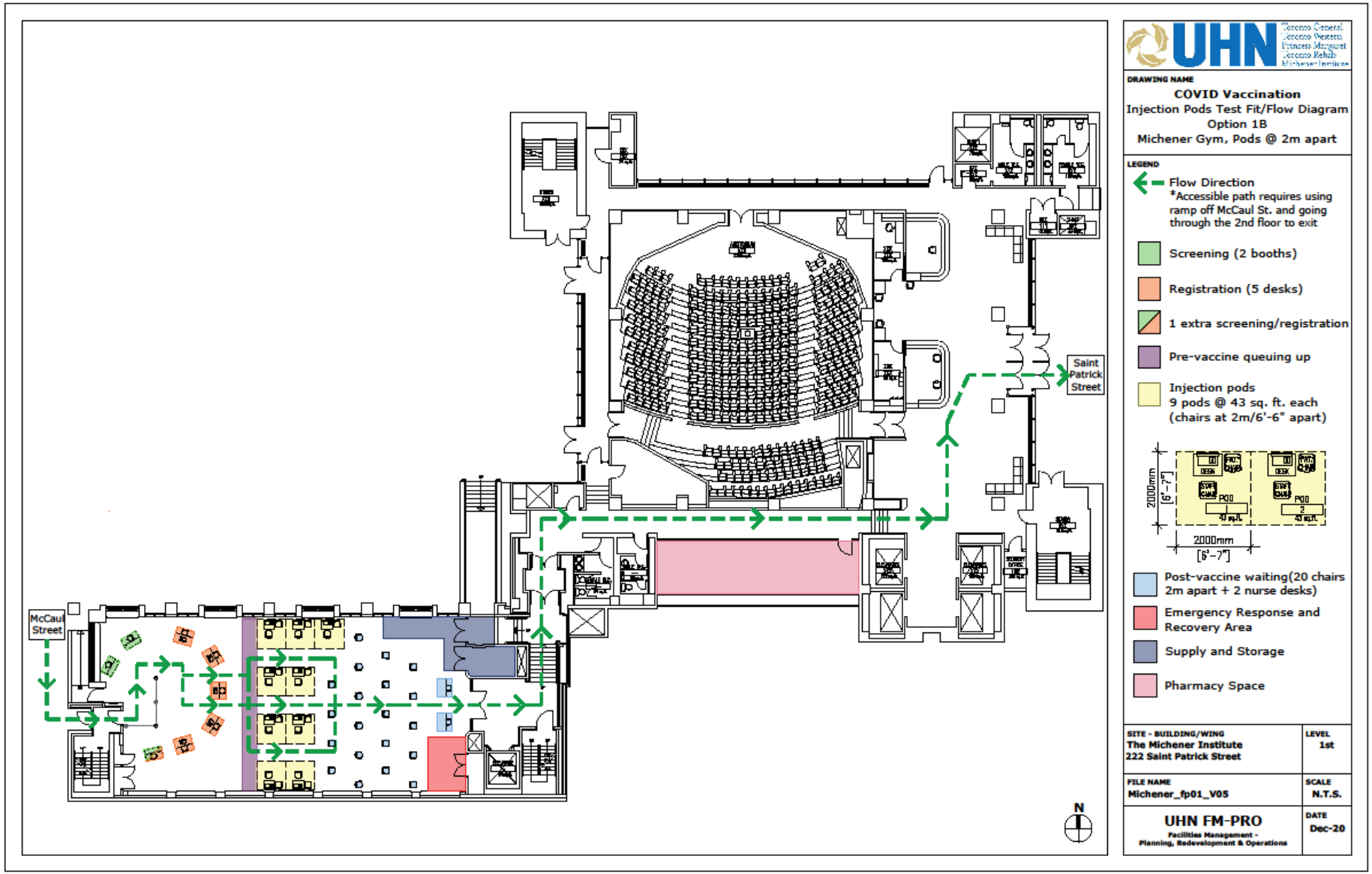
Clinic setup



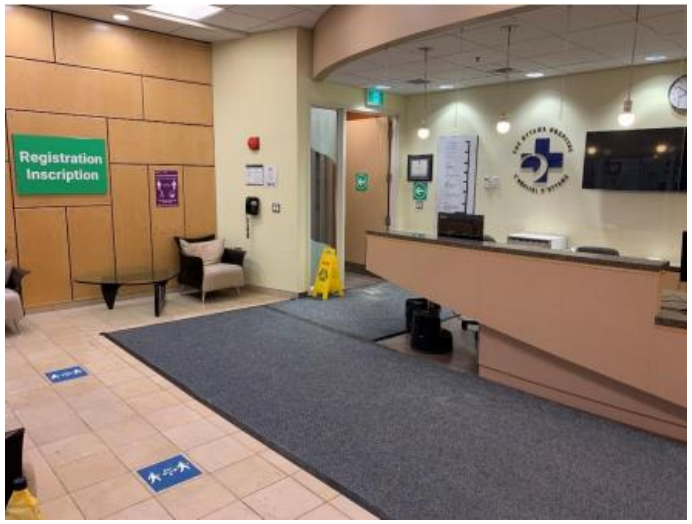
Clinic setup



Clinic setup



Clinic setup (COVID 19 Vaccination Plan: Phase 1 Ottawa Pilot)



Registration Area

Vaccine Administration

Waiting Area

Staffing Assumptions

STAFFING ROLE	STAFFING TYPE	MINIMUM # REQUIRED
Door Screeners	Non-clinical	3
Registration Staff	Non-clinical	5
Waiting Room	Non-clinical	1
Vaccine Runner	Non-clinical	1
Vaccine Preparation	Clinical - Pharmacist/Pharmacist Tech	1
Vaccine Administration	Clinical – Regulated Professional	9
Monitoring Area	Clinical – Regulated Professional	1
TOTAL	**Clinical + Non-clinical**	**21**

UHN's staffing model for the pilot was based on the following assumptions:

- 1.5 trays [1,460 doses] as Dose 1] – UHN was able to split the trays from Pfizers
- 4 days to administer
- 12-hr clinic and shifts [10.5 hr with breaks]
- 10-11 patients arriving every 15-min

AREA	SPACE NEEDS
REGISTRATION	▪ Max 6 Patients waiting in queue with physical distancing ▪ 5 Physically distanced Registration Stations
WAIT AREA BEFORE VACCINE ADMINISTRATION	▪ 2 Physically distanced Seats
VACCINE ADMINISTRATION	▪ 9 Physically distanced Bays ▪ 1 central pooling area for vials from preparation area + 2? printers
MONITORING AREA	▪ Max 17 Physically distanced Seats

Additional Metrics:

- Approx. 3min/syringe (includes dilution, drawing up and labelling)
- 3 pharmacy staff on site: 2 diluting and 1 labelling, coordinating and logging pick-ups
- For the 11.5 hour clinic, roughly 5-6 batch sessions/day @ 1hr each

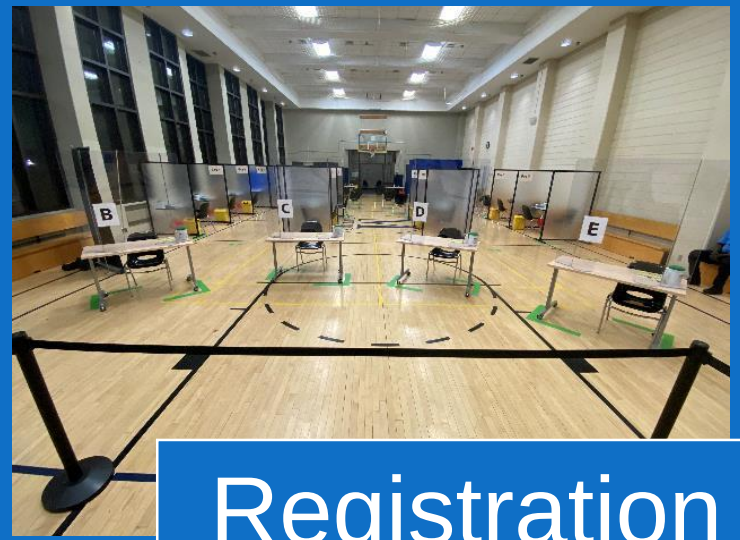
Process & Implementation

Walking the process

Walk through floor plan several times while designing it before locking in (with tape and physical structures)

- Talk through each step, the client flow, queuing areas and task areas.
- Try different configurations - cohorting stations and joint/separate queues
- Maximize space while keeping physical distancing (i.e. chair spacing in vaccine station)
- Think about the phasing of the process - moving from registration to vaccine - how do clients get there?
- Through this process UHN determined no waiting room required between registration and vaccination required

Vaccine Bays



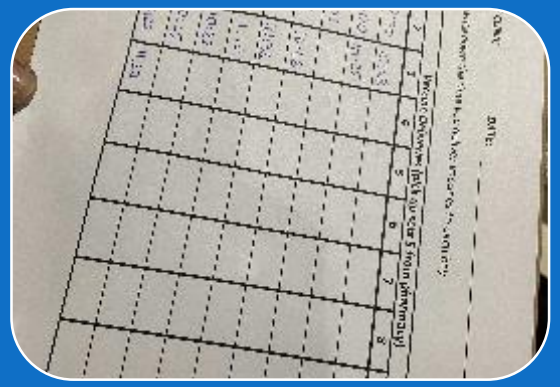
Registration

Standard Work

Moving vaccine to the floor

- Sorted by expiry times (groups of 50)
- Runner is flagged to collect more vaccine when one dose left in vaccine station
- Pharmacy releases 5 doses - tracked by vaccine station #, runner records time of delivery,
- Reconciliation between pharmacy records and runner documentation done at the end of day

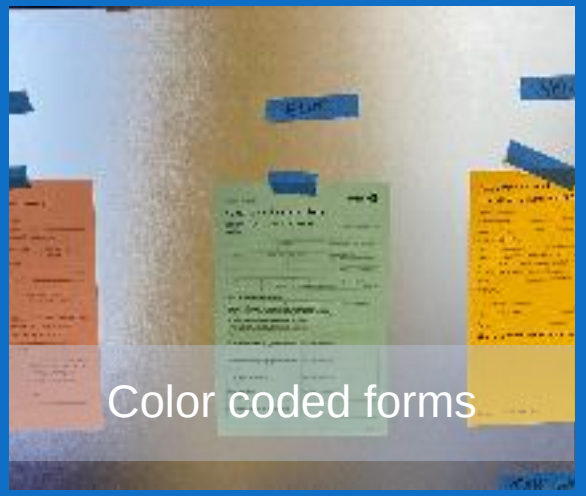
			Issued			
12	15-Dec-20	10:26	5	7	41	Needle attache
13	15-Dec-20	10:28	5	8	43	Needle attached
14	15-Dec-20	10:29	5	2	44	Needle attached
15	15-Dec-20	10:29	5	5	44	Needle attached
16	15-Dec-20	10:32	5	4	47	Needle attached
17	15-Dec-20	10:45	5	9	60	Needle attached
18	15-Dec-20	10:52	5	1	25	Needle attached
19	15-Dec-20	10:56	5	2	27	Needle attached
20	15-Dec-20	11:01	5	6	75	Needle attached
21	15-Dec-20	11:18	5	4	46	Needle attached
22	15-Dec-20	11:32	5	8	60	Needle attached
23	15-Dec-20	11:46	5	1	54	Needle attached
24	15-Dec-20	11:46	5	2	50	Needle attached
25	15-Dec-20	11:55	5	9	70	Needle attached
26	15-Dec-20	12:21	5	3	120	Needle attached
27	15-Dec-20	12:30	5	7	120	Needle attached
28	15-Dec-20	12:37	5	6	96	Needle attached
29	15-Dec-20	12:37	5	5	120	Needle attached
30	15-Dec-20	12:57	5	1	75	Needle attached
31	15-Dec-20	12:57	5	4	85	Needle attached
	15-Dec-20	13:02	5	3	41	Needle attach



Standard Work

Supplies

- Pre-portioned baskets with complete supply kit available on stand by
- When vaccine station needs new supplies - the notify runner
- New basket brought to station
- Runner replenish full baskets
- All bins labeled and stock monitored
- All paper forms - colour coded for easy identification


Color coded forms

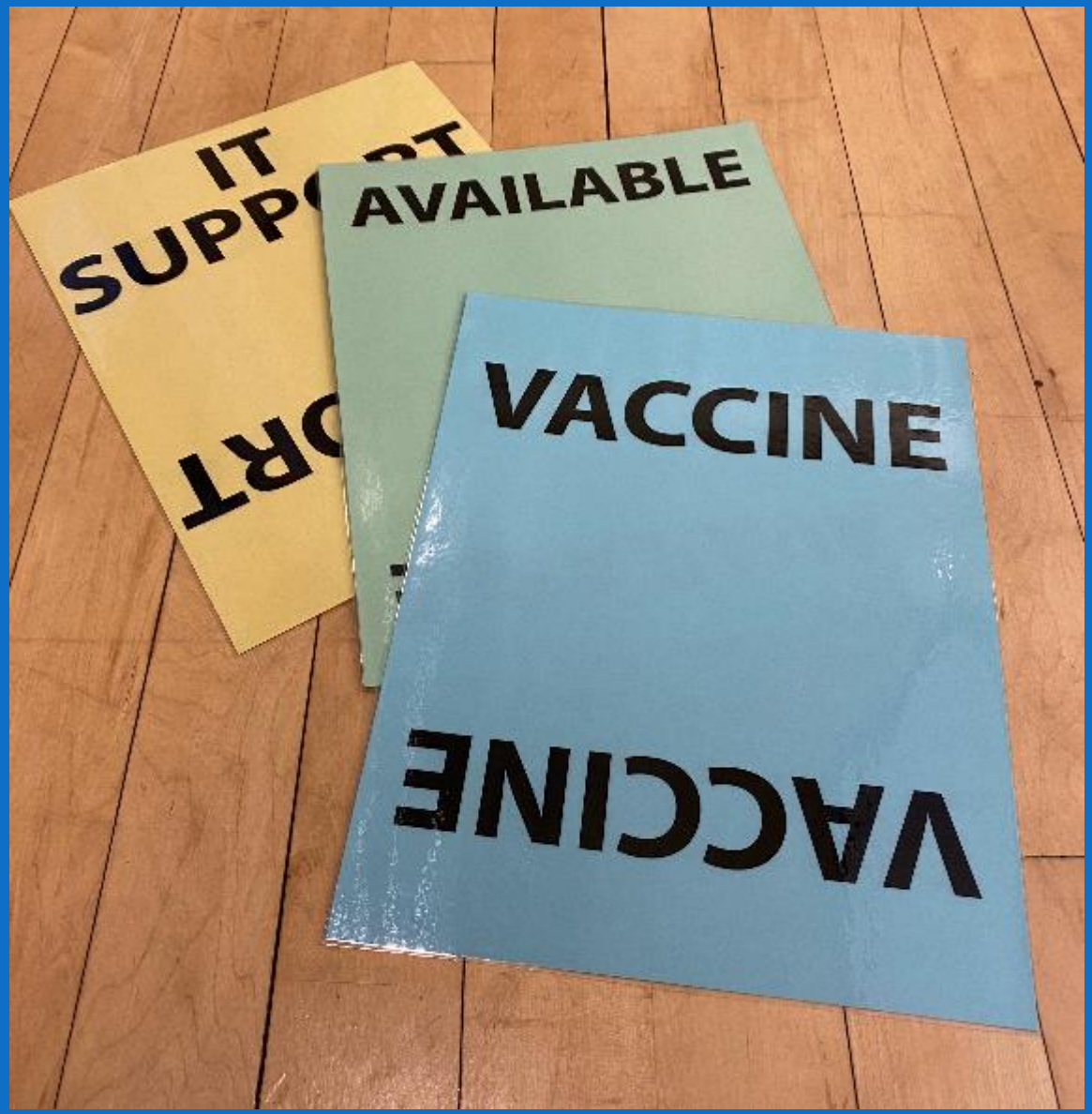

Pre-portioned supply baskets


Labeled storage bins

Standard Work

Runner & flow

- Coloured cards provided at each vaccine station
- Used to flag appropriate need
- Runners, flow management and IT people watch bays for cards
- Laminated - IPAC
- Used:
  - IT Support
  - Available for next client
  - Need more vaccine doses
  - need more supplies



Stations

Activity and Flow

Stations

Entrance Queue

- Validate list of scheduled appointments
- Manage early and late arrivals
- Consider any paper work that can be filled out ahead of time (consent)
- Line sorted by scheduled appointment time
- Manage large volumes of arrival (bus arrivals)
- Be prepared to answer inquiries from general public

Stations

Screening

- Screening as per hospital protocol for COVID-19
- Standardized questions used
- Screening app available at uhnpatientscreen.ca
- Ensure client has OHIP and ID ready for registration
- Ensuring PPE provided, hand washing
- Flexibility to adopt registration role if needed

Stations

Screening

- Screening as per hospital protocol for COVID-19
- Standardized questions used
- Screening app available at uhnpatientscreen.ca
- Ensure client has OHIP and ID ready for registration
- Ensuring PPE provided, hand washing
- Flexibility to adopt registration role if needed

Stations

Registration

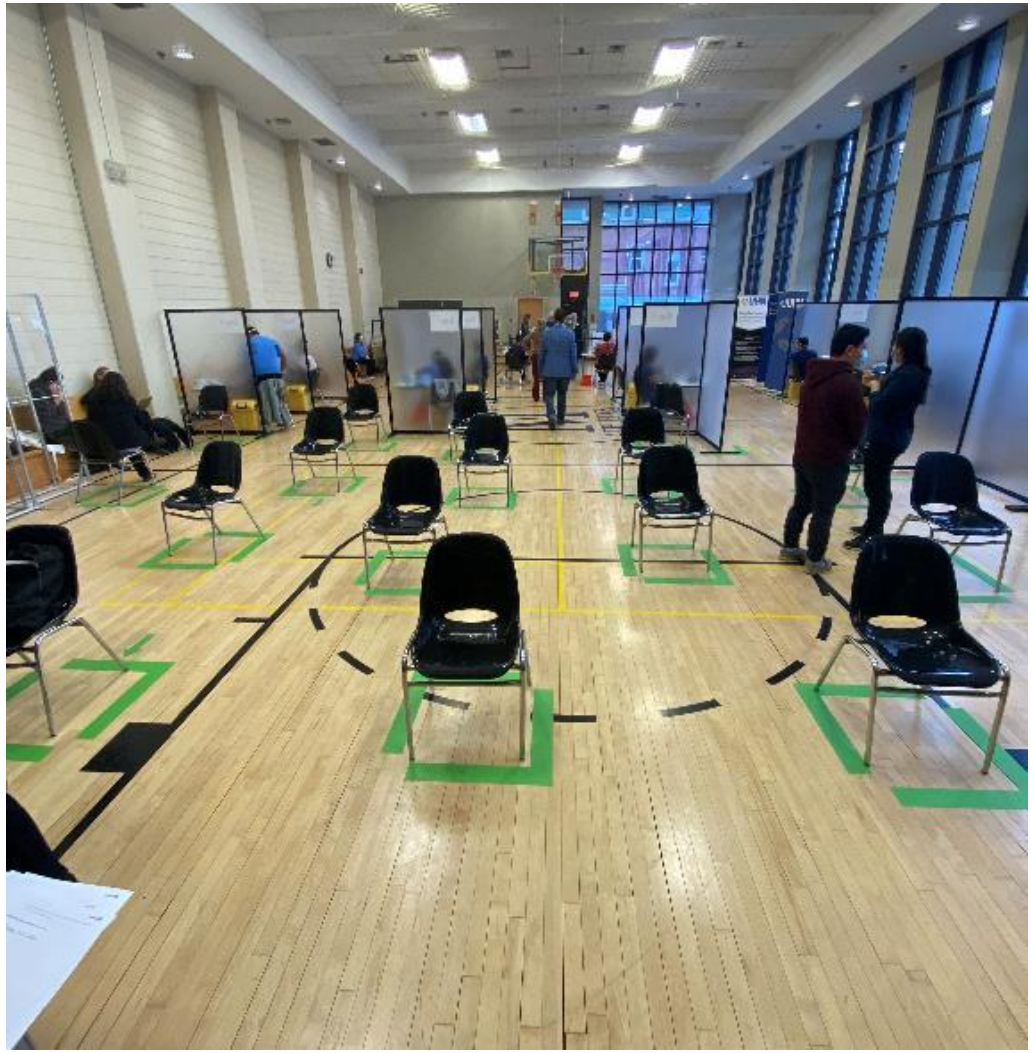
- Safe handling of OHIP and/or ID through clear “baggies” (IPAC)
- Confirm ID
- Consent completed/verified
- Search and register client in COVax - iPad
- Instruct client to wait in queue for vaccine station (handed over to flow manager)

Stations

Vaccinations

- Standard layout of vaccination station
  - Supply basket
  - Vaccine baskets (safe syringe storage)
  - Coloured cards
  - Wipes, gloves, masks and shields
  - Sharps container and garbage
  - RN script
- Document vaccination information in COVax - iPad
- Administer vaccine
- Instruct client to move to monitoring area - provided with “post-it note” with time of vaccination
- Instruct client to wait 15 min

Stations



Monitoring

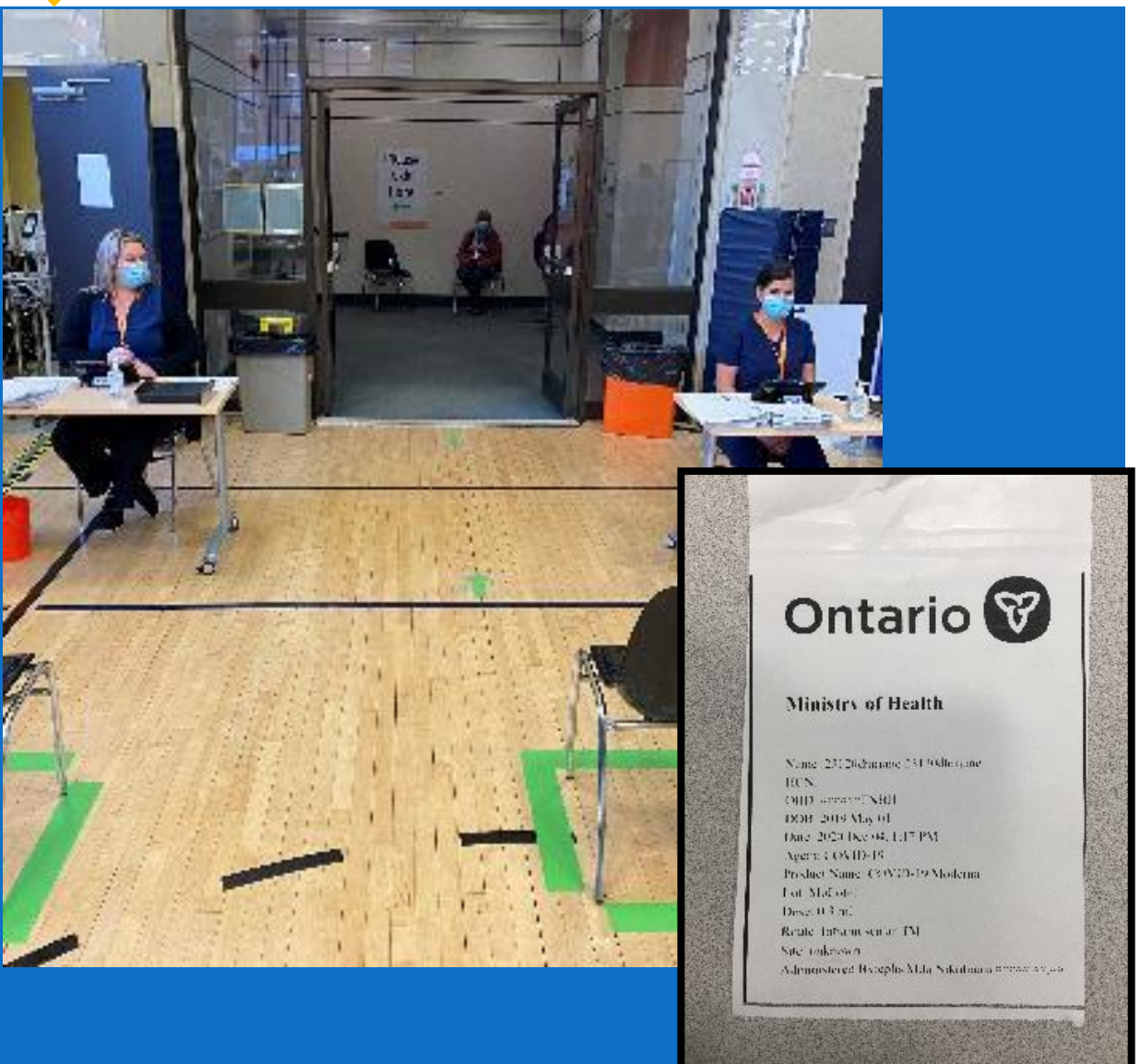
- RN monitoring station - visibility to all seating
- Self directed checkout time - using “post-it note” vaccination time (15min)
- Anaphylactic kits available
- MD on-site

Stations

Resuscitation area

- Oxygen
- Stretcher
- Vital sign machine
- Enclosed/private space

Stations



Check Out

- Staffed by RNs
- Ask if any symptoms or reactions
- Check client out in COVax - iPad
- Print receipt and provide to patient with 2nd appointment date written on receipt
- Hand out education material, list of all COVID CACs in areas, phone numbers (paper)
- Provide after care instructions (paper)
- Direct client to exit

Scenario Testing and Preparedness

Scenario Testing

Pressure testing processes and “what-ifs”


Long queues - ready to open new stations (screening, registration & check-out)


Arrival rates (early and late arrivals)


Unscheduled slots starting the day


What to do if no-shows


Flexing up capacity - queues getting too long


Client doesn’t meet pre-screen criteria

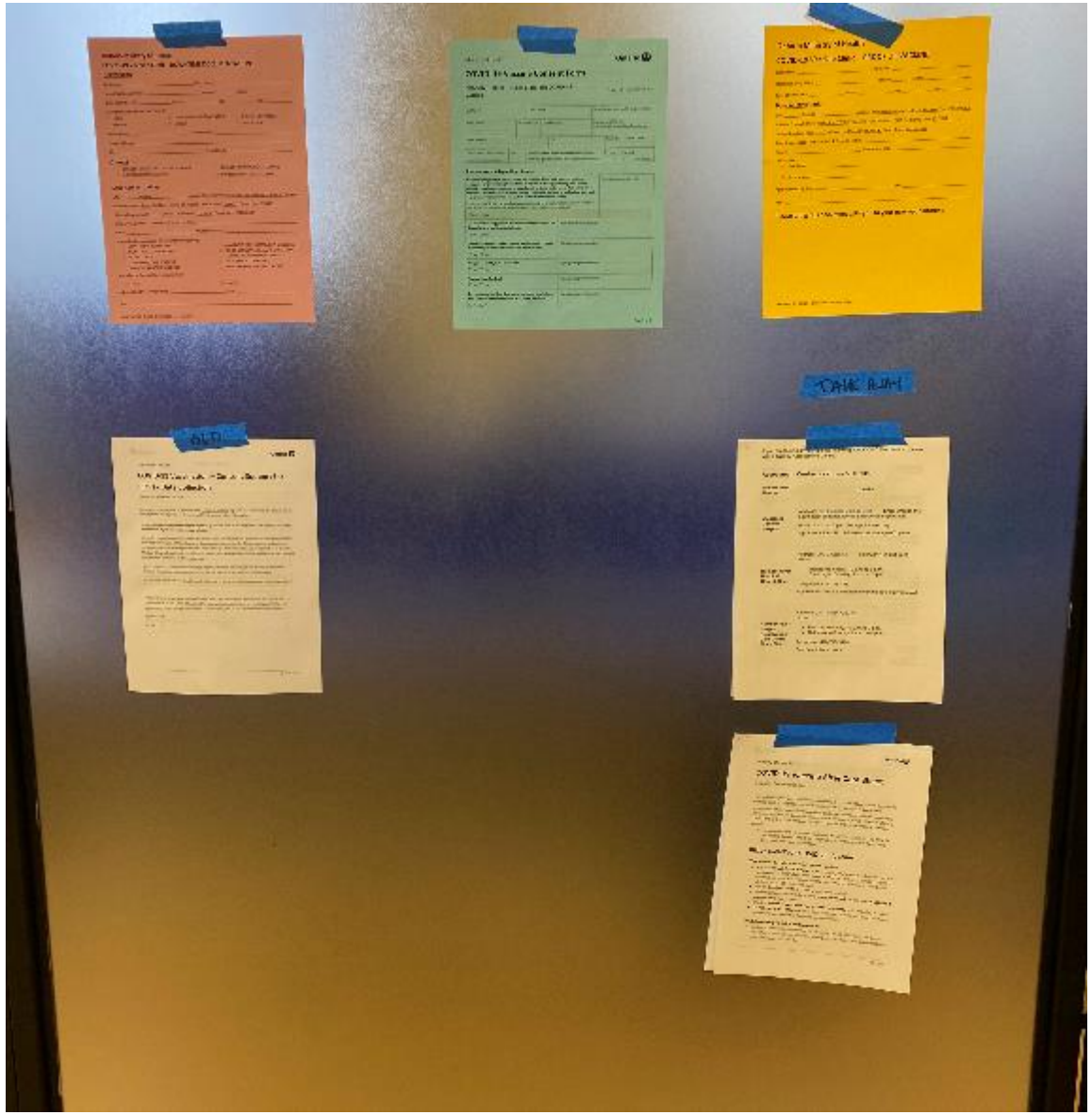

Need for manual registration


Remaining doses - unscheduled slots


Manual check out (hand written receipt)

Down Time

Paper Process

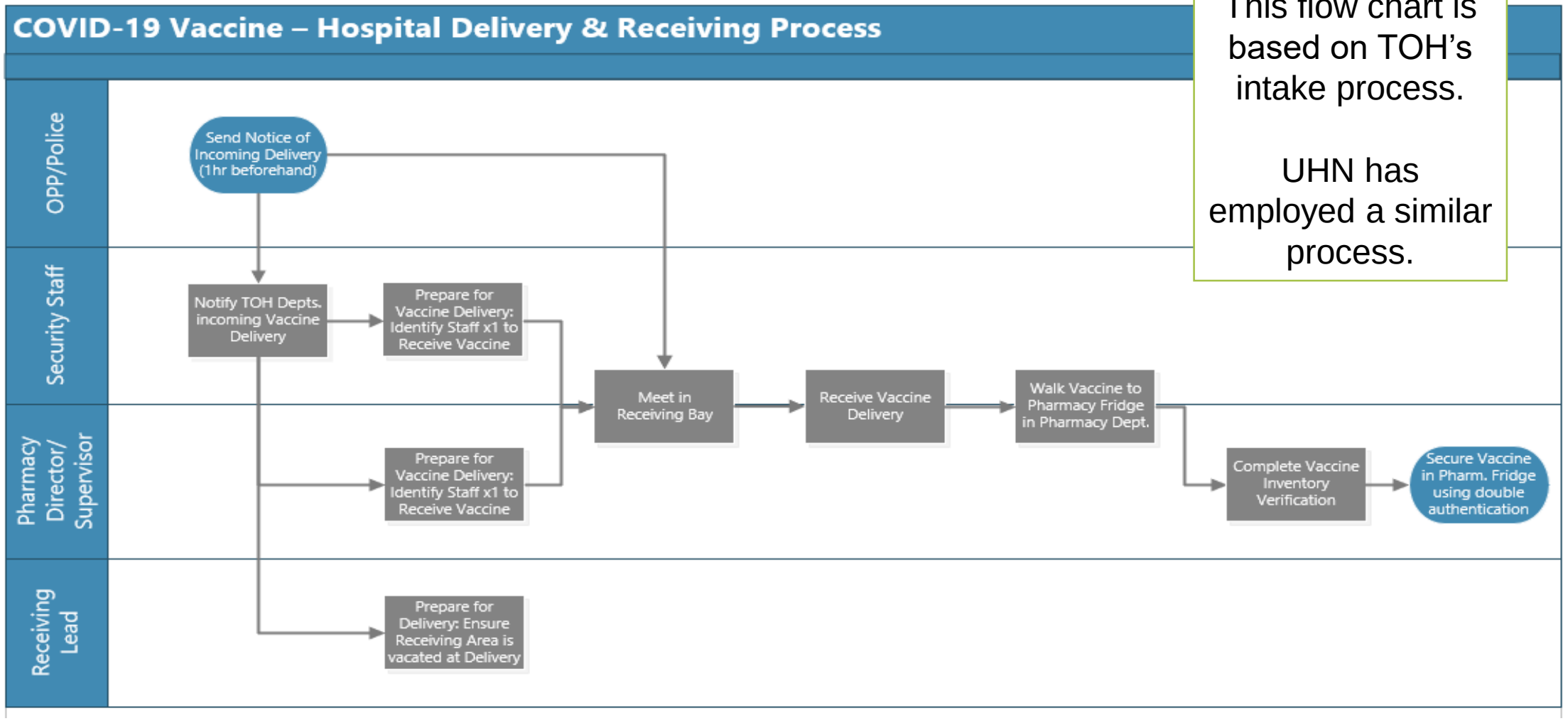


Information Technology

- MoH - to be added

Vaccine Management

Vaccine Transport and Receiving



This flow chart is based on TOH's intake process.

UHN has employed a similar process.

Vaccine Storage (may not apply to all sites)

UHN has built a storage site exclusively for storing the vaccines with appropriate operations and security protocols in place. Identifying a safe/secure site is important for the storage and security of the vaccine.

- 20 @ -80C
  - 2 in place as of 10Dec2020
  - Remaining in Jan 2021
- All freezers on individual circuits fed by emergency generator is required
- Freezers rooms with security camera monitoring
- Freezers will have remote temperature monitoring in the new year however until then temperatures will be manually recorded twice daily

- Protocols are be in place for:
  - **Security:** tasks for each guard; authorized individuals on site; rounds
  - **Intrusion** - what is the response if there is an intrusion
  - **What do to in the event of power loss**
  - **Receiving of goods**
  - **Access to the freezer rooms**
  - **Alarms on a freezer:** what to do, who to contact
  - **Monitoring the temperature of the freezers**

Dosing calculations

Based on the information set forth by Pfizer, UHN established the following Vial/Dosage Management plan for the trays we were given:

Vial Management for week of December 14-18

Total vials : 195 vials X 3 = 585 vials

Storage of second dose : 293 vials kept in reserve (1 tray 195 + 98)

Doses for use: 292 vials or 1460 doses for use during Dec 15th – 18th

	Monday	Tuesday	Wednesday	Thursday	Friday	Doses/Vials Remaining
Doses	5	325	360	385	385	1460
Vials	1	65	72	77	77	292

Pharmacy Process and SOPs

UHN SOPs on the COVID vaccine available:

1) Disposal of damaged, unused and expired COVID vaccine
2) Preparation of Pfizer COVID Vaccine Syringes for Administration at the Vaccine site
3) ULT Freezer Temperature Monitoring and Recording
4) Receipt of Frozen Pfizer-BioNTech COVID-19 Vaccine at storage site
5) Unpacking and storage of frozen vaccines in the ULT freezers at storage site
6) Handling of spillages and breakages of COVID Vaccine

Equipment

Supplies

Provided by vaccination site:

Needles and syringes for:
- mixing with adjuvant / diluent
- administering vaccines

Alcohol swabs
Adhesive bandages
Cotton balls or gauze
Disposable non-latex gloves (assorted sizes) (note: not recommended for immunizing unless skin is not intact)

Paper cups
Table covers
Hand sanitizer (sufficient for each immunizer table, registration desks, entrance, exit, waiting areas)

Surgical/ medical masks (for staff and if needed, for clients who do not have a mask)
Face shields
Tissue boxes
Disposable gowns
Paper towels
Paper bags (lunch size)
Hypoallergenic tape
Disinfectant wipes
Disinfectant solution
Sharps containers (of appropriate sizes)
Biohazard waste boxes
Biohazard yellow bags
Insulated coolers and bags
Frozen packs
Maximum-minimum thermometers
Blood pressure cuff (child and adult)
Stethoscope
Adrenalin (epinephrine) 1:1000 or Epi-pens
Benadryl (diphenhydramine)

Provided by MOH:

- BD Eclipse Needle with SmartSlip Technology, 23G x 1 ? (0.6mm x 30mm) Injection Needle
- BD 3mL Syringe with Luer-Lok Tip
- PPEs
- #s based on the quantity of vaccine supplied

Additional Supplies recommended:
1) Eye wash station

MOH provided Vaccination Clinic Toolkit

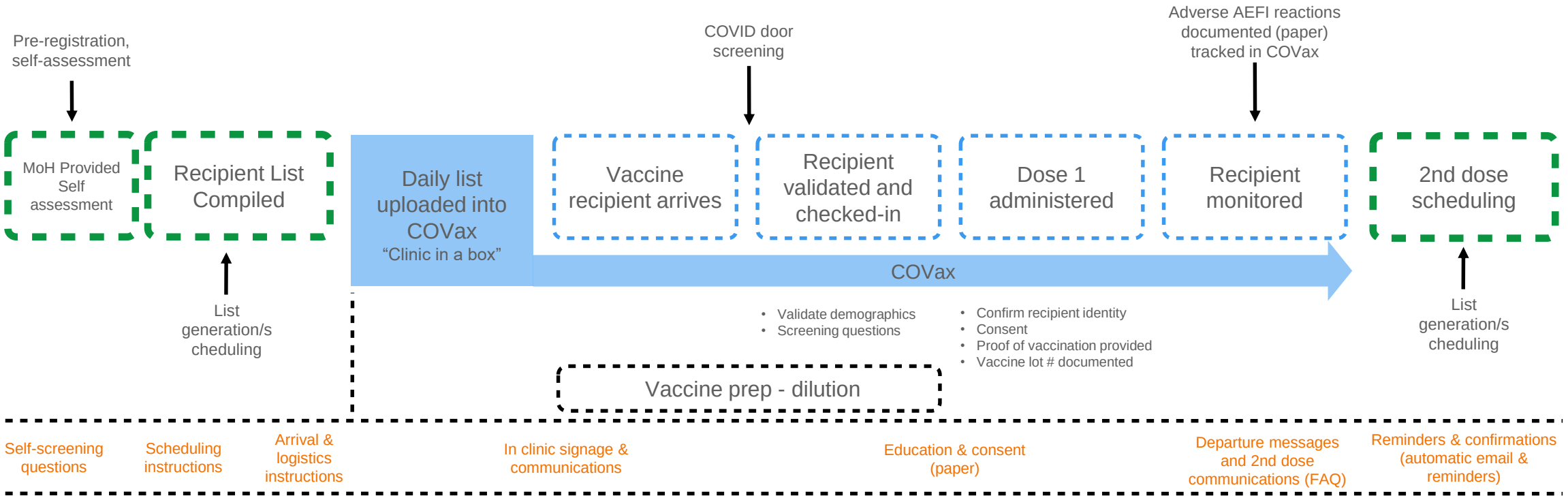
The Accenture team will be available to provide ongoing support and IT set-up.

Vaccination Clinic Toolkit (COVax) per site

- 30 iPads with Rogers 6GB SIM cards
- 30 iPad pencils
- 30 iPad hard cases
- 3 hubs/routers (Rogers hotspots)
- 1 hub/router (Bell hotspots)
- 1 hub/router (TELUS hotspots)
- 3 Rogers 6GB+ SIM cards
- 1 Bell 6GB+ SIM card
- 1 TELUS unlimited SIM Card
- 2 keyboards
- 2 monitors
- 5 printers
- 2 barcode scanners

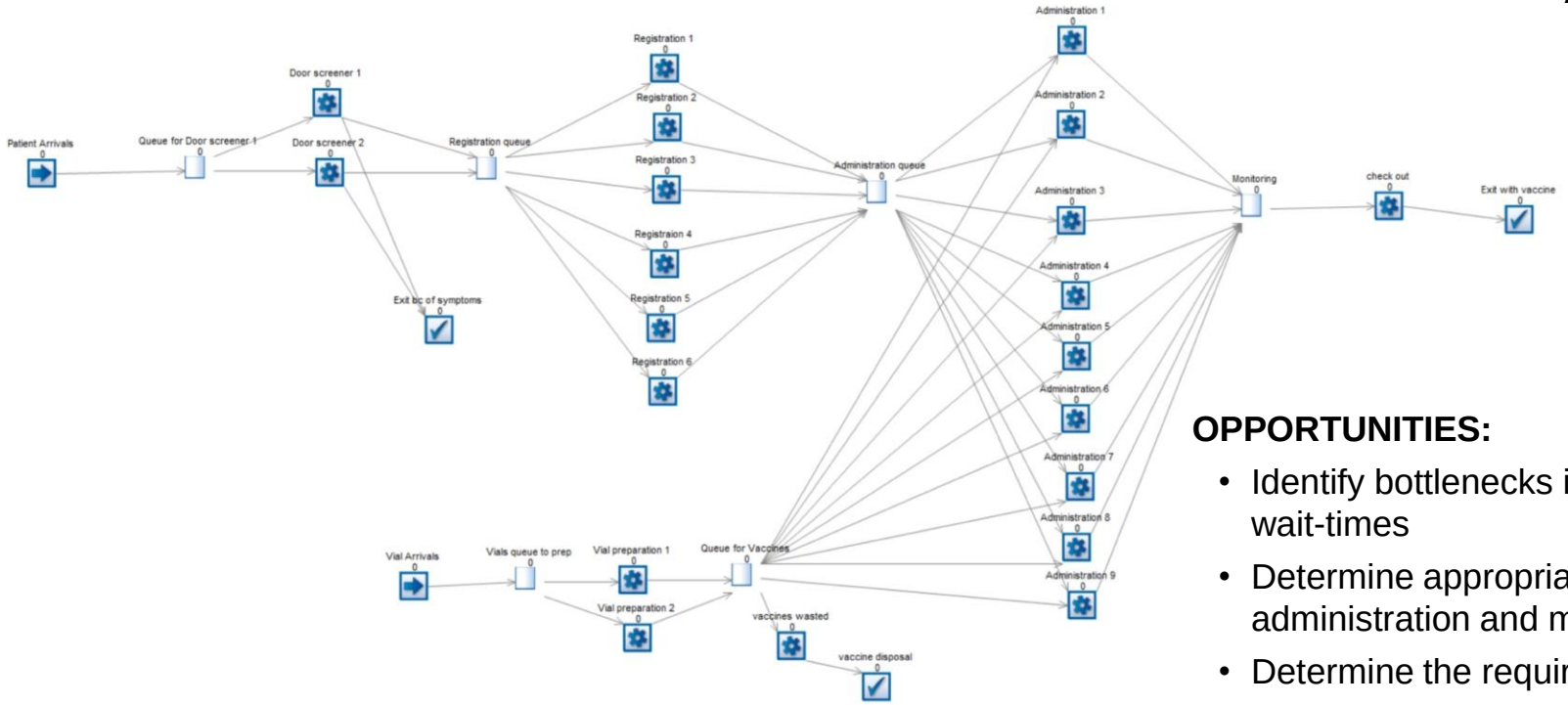
Data and Analytics

Overall clinic process



Simulation and modelling (queuing)

Informing pilot and long-term vaccine clinic decisions using queueing theory and simulation



APPROACH:

- Incorporation of queueing theory
- Leveraging learnings from observational time studies
- Using defined distributions to account for variations in processing times due to human nature and realistic scenarios
- Utilizing Simul8 software to model out the clinic and patient flow

OPPORTUNITIES:

- Identify bottlenecks in clinic flow to reduce crowding and minimize wait-times
- Determine appropriate patient arrival rates to maximize dose administration and minimize waste
- Determine the required clinic hours, stations, and staffing required
- Determine optimal clinic requirements and routing for longer-term multiple clinic/multiple vaccine type/multiple dosage environments

Clinic flow

Simulation & modelling overview

Results & Capacity

Scheduling 8 slots per 15min (32/hour)

Capacity 360 Patients per day (accounting for breaks)

2 stations	6 stations	2.5 Stations	9 booths	18 seats	2 stations (maybe 3)
Screening	Registration	Vaccine Prep	Vaccine Administration	Monitoring	Check-out






2 Runners - Supplies & Vaccine

1 Flow - registration to vaccine

1 Flow vaccine to monitoring

Day 1
325 Scheduled
Day 1+
360 Scheduled
(Pushing to 385)

UHN Data & Implementation Science
Knowing, Understanding, Changing in a Digital World

Key metrics for monitoring operations

Anticipating, planning and improving the day.. week

Real-Time (intra day)

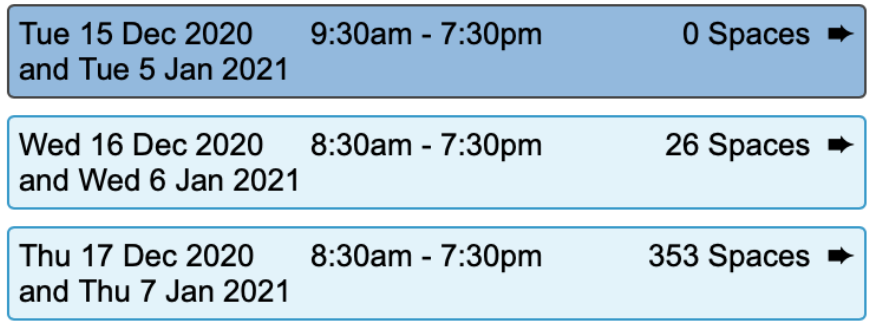
- # scheduled appointments - by volume, by day, by facility
- # expected vaccine recipients vs. actual
- # No-shows & # turn aways
- # vaccines dispensed by administration station
- # vaccines prepared (by pharmacy)
- # in queue for screening/vaccine/monitoring/check-out

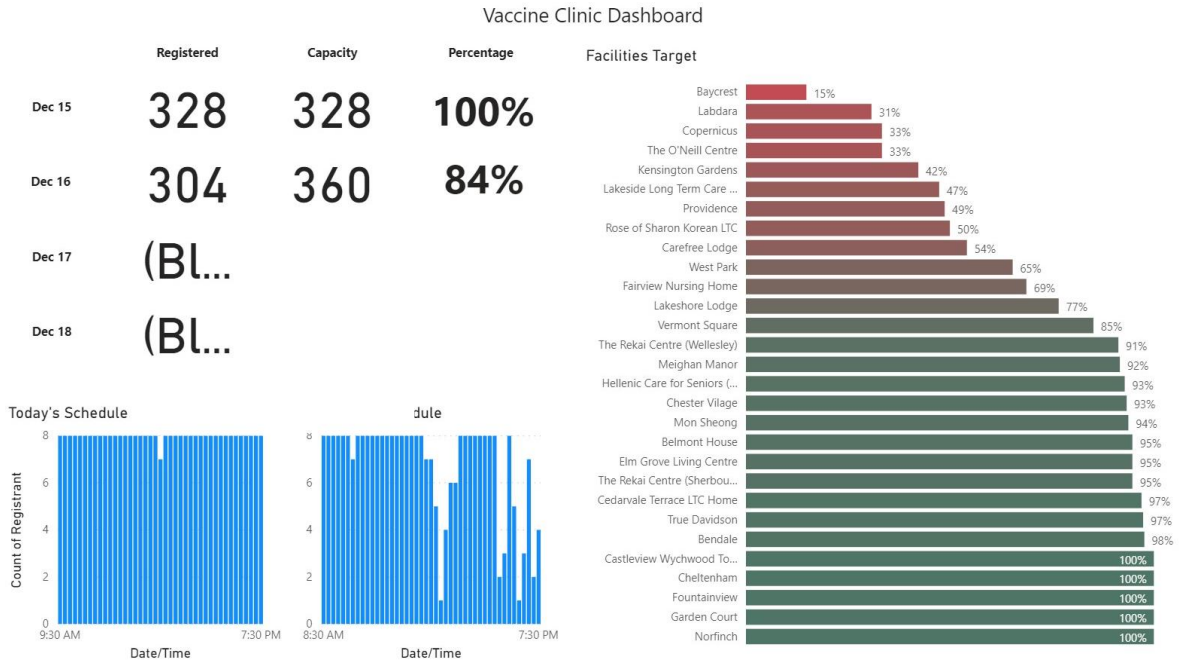
Daily

- # vaccinated vs # scheduled vs # vaccines prepared
- Vaccination waste reconciliation
- Scheduled volume - day forward

Quality Improvement

- Time/Station (min/max/mode) (reg., vaccine, prep)
- Queue and wait time (max # in queue, wait time)
- Station utilization

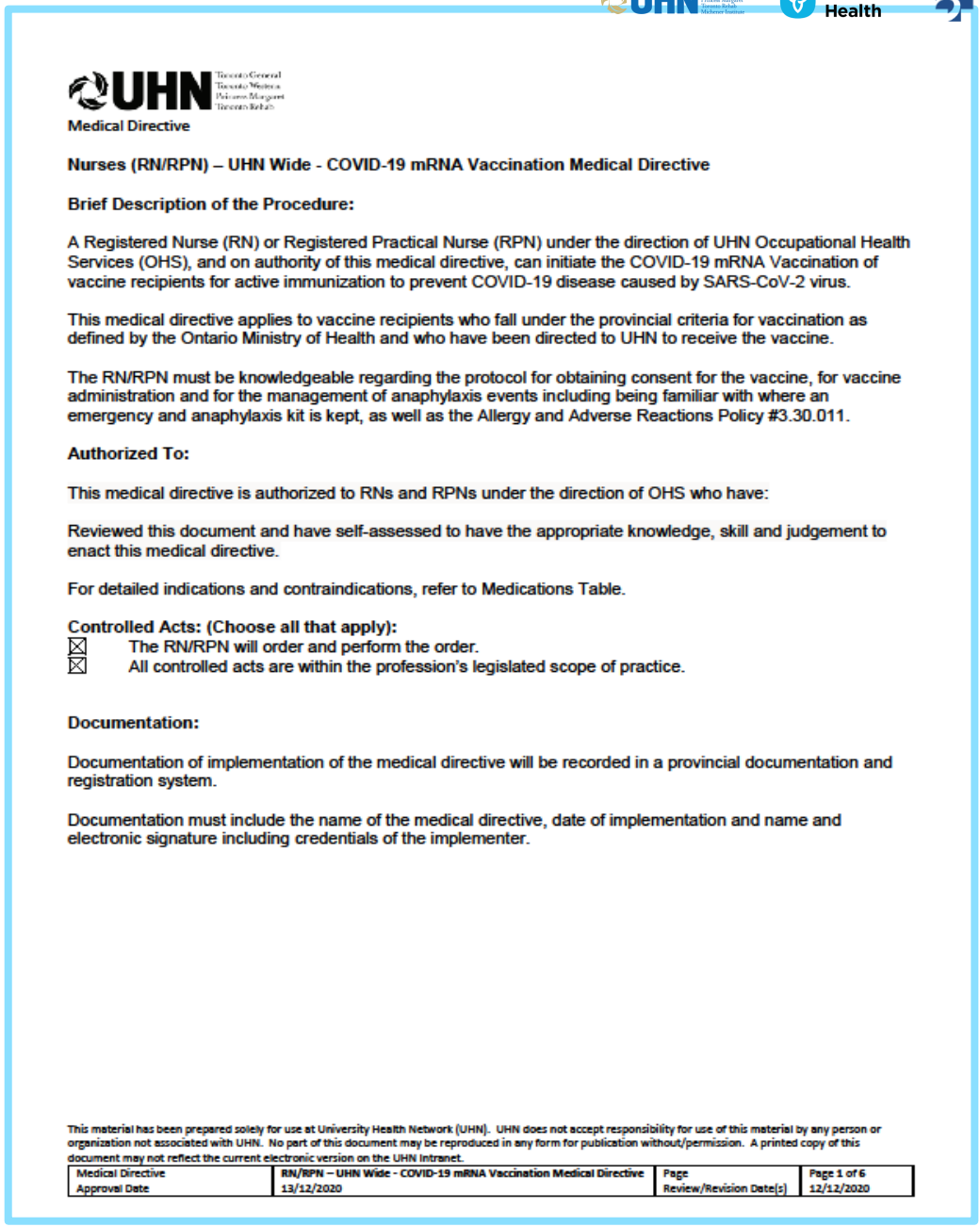




Documentation & Reporting

Clinical requirements

- **Medical Directives:** each organization is responsible to ensure the appropriate medical directives are in place to support the clinical administration of the vaccine until we see provincial directive (in progress) Seek input from hospital legal resource
- **Consent form(s)** – provided by MoH
- **AEFI** – provided by Pfizer
- **Clinical guidance** from the MOH
- **Training** of Staff
- **Incident reporting form**
- **Communication to Administrators**:
  - HCW stand-by list process and script for administrators
  - SBAR: Vaccine Pilot Implementation for Hospital Healthcare Workers
  - Scrips for huddles



UHN

Medical Directive

Nurses (RN/RPN) – UHN Wide - COVID-19 mRNA Vaccination Medical Directive

Brief Description of the Procedure:

A Registered Nurse (RN) or Registered Practical Nurse (RPN) under the direction of UHN Occupational Health Services (OHS), and on authority of this medical directive, can initiate the COVID-19 mRNA Vaccination of vaccine recipients for active immunization to prevent COVID-19 disease caused by SARS-CoV-2 virus.

This medical directive applies to vaccine recipients who fall under the provincial criteria for vaccination as defined by the Ontario Ministry of Health and who have been directed to UHN to receive the vaccine.

The RN/RPN must be knowledgeable regarding the protocol for obtaining consent for the vaccine, for vaccine administration and for the management of anaphylaxis events including being familiar with where an emergency and anaphylaxis kit is kept, as well as the Allergy and Adverse Reactions Policy #3.30.011.

Authorized To:

This medical directive is authorized to RNs and RPNs under the direction of OHS who have:

Reviewed this document and have self-assessed to have the appropriate knowledge, skill and judgement to enact this medical directive.

For detailed indications and contraindications, refer to Medications Table.

Controlled Acts: (Choose all that apply):

☒ The RN/RPN will order and perform the order.
☒ All controlled acts are within the profession's legislated scope of practice.

Documentation:

Documentation of implementation of the medical directive will be recorded in a provincial documentation and registration system.

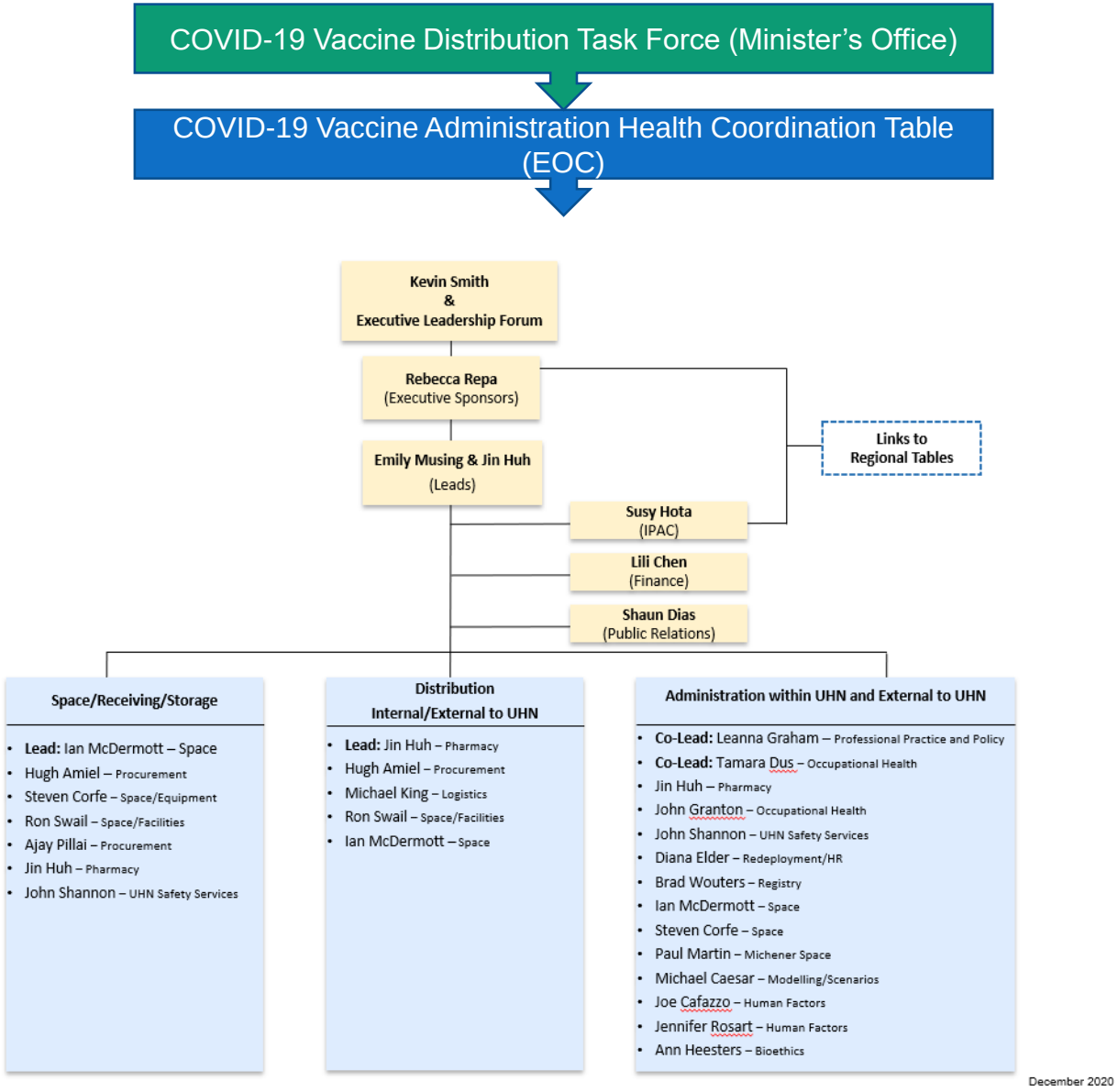
Documentation must include the name of the medical directive, date of implementation and name and electronic signature including credentials of the implementer.

Medical Directive Approval Date	RN/RPN – UHN Wide - COVID-19 mRNA Vaccination Medical Directive 13/12/2020	Page Review/Revision Date(s)	Page 1 of 6 12/12/2020

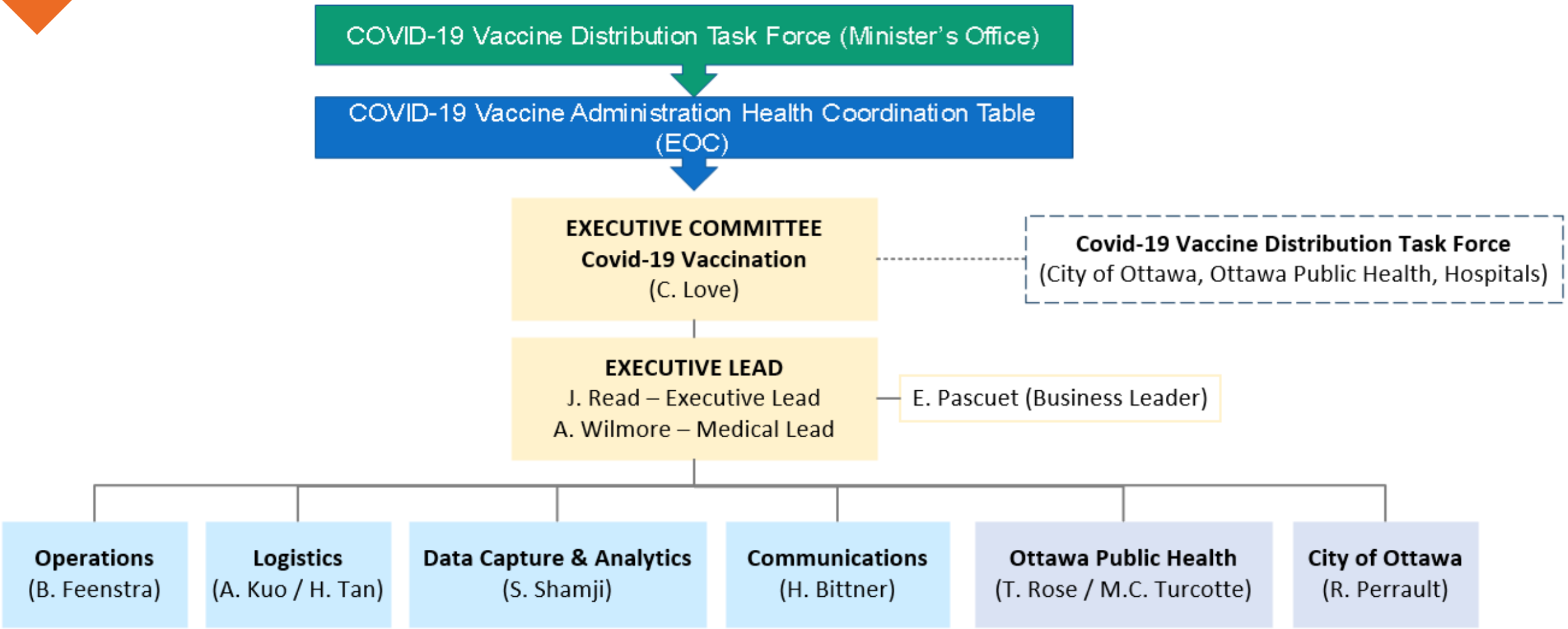
Organizational Structure

IMS Structure: UHN

- A effective IMS is essential for a successful roll-out of the vaccine clinic especially given the multidisciplinary approach required.
- Meetings twice per week and on-demand
- Each identified work stream met daily
- UHN's legal services played a cross-cutting function in this IMS
- Engagement of key OH Region and PHU partners



IMS Structure: TOH



IMS Structure - Functions

Role	Functions
Leadership	Responsible for the overall operations of the vaccine clinic planning, implementation and ongoing support. Liaison between UHN and partnering organizations
Space Planning and Security Services	Space operations and set up for the clinic site with appropriate barriers and infection control parameters in place. Ensures appropriate planning for secure storage of the vaccine and liaisons with security services throughout the operations.
Medical/Clinical	Medical oversight of the vaccine clinic; implements medical directives for the administration of the vaccine by health professionals; involved in the AEFI monitoring process, staff and recipient safety, emergency procedures, establish huddles
Human Resources	Ensure appropriate staffing and on-boarding of the clinic and support operations either via redeployment efforts or agency
Data and Analytics	Overall IT support to the clinic, supports management and flow of data within UHN and with the MOH, creates and maintains booking management
Pharmacy	Oversight on the storage, distribution and delivery of the vaccine. Ensures appropriates logs are in place and provides training to staff on the dosage calculation, vial dilution and vaccine administration
Safety Services and IPAC	Provides oversight on how the clinic must be set up with appropriate infection control measures in place
Health Services (Occ Health)	Provides staffing needs for the clinic and ensures training for all involved in the vaccine program
Finance and Procurement	Ensure procurement and tracking of all necessary supplies/resources for the overall vaccine program. Monitors the spend for the program
Communications	Ensures precise and frequent communications to the staff (UHN and LTCH) for the vaccine program
External Partners	PHU and OH partners to support key engagement of vaccine recipients, and support broad communication
Data and Analytics	support the modelling and simulation, reporting and dashboard needs to design, implement and operate the clinic
Implementation	Supports the implementation of the clinic through process design and optimization, mock-up testing, standards of work (non-clinical), implementation planning & scenario testing (risk management for process and go-live)

IMS Huddle Format

- Command Table style (twice daily – 1030hrs and 1530hrs, max 30 min)
  - Key updates:
    - Total # of vaccines to be administered
    - Total registered recipients from hospital site
    - Spots available for LTCH and prioritized recipients
  - Focus on key priorities
  - Looking back/ahead model

Thank You

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