



COVID-19 Vaccination Workflow Process

Dr. Pearl Yang

MD CCFP, PhD, MSc

Stouffville Medical Centre Family Health Organization

Sunnybrook Health Sciences Centre Primary Care Research Unit

University of Toronto, Department of Family and Community Medicine

pearl.yang@sunnybrook.ca (905) 640-3100 February 12, 2021

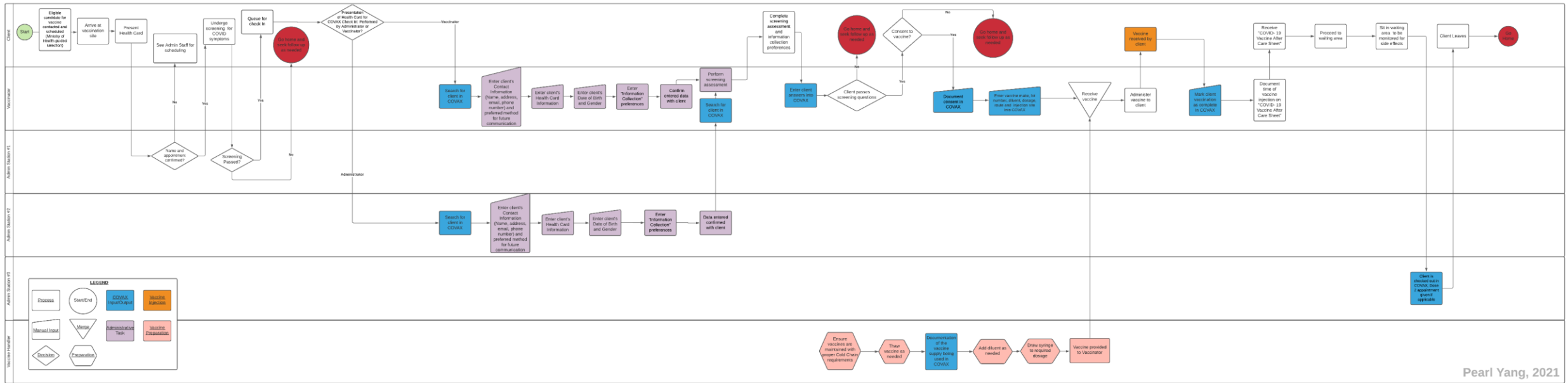
Goal

- To examine the current workflow processes of COVID-19 vaccination at hospital-based clinics, and identify areas where workflow may be improved to increase vaccination efficiency
- To outline a workflow process conducive to mass vaccination and ***allow the Drive-Thru method of vaccination***

Advantages of Drive-Thru Vaccination

- Fastest delivery rate of vaccines in arms
 - Walk-through clinic 10-12 vaccinations /hour/vaccinator in COVID vaccine clinics vs 50 vaccinations/hour/vaccinator in Drive-Thru Flu Clinics
- Social distancing
- Ease of access for individuals with mobility issues
- Conservation of PPE
- Decreased number of vaccinators and overall cost of running these clinics
 - For equivalent numbers of vaccines given per hour (i.e. 300/hr in a Drive-Thru method), current COVID vaccine clinics require a large number of vaccinators (25 or more vs. 6 in Drive-Thru) largely due to COVax documentation requirements
- Indoor room constraints dictate maximum number of people vaccinated, while choosing large outdoor spaces for Drive-Thru make vaccine supply the main limitation

Current Vaccination Workflow Process

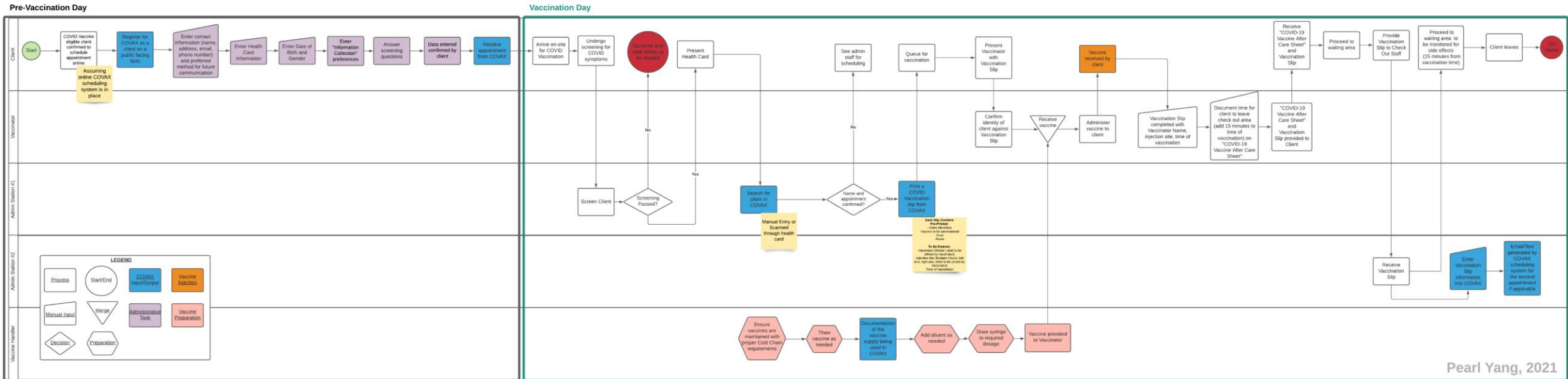


Pearl Yang, 2021

What is slowing the current vaccination process down?

- Multiple users required to re-search for the same patient in COVax (blue boxes)
- Manual entry of data instead of Health Card scanning or use of bar codes
- Vaccinator entering repeated data (Vaccine name, dose, route, site of administration) instead of saved prepopulated page
- Vaccinator unable to focus only on role as vaccinator since designated to enter data into COVax

Ideal Vaccination Workflow Process



Where can we increase clinic efficiency?

- **Pre-Registration** - online public facing form for data entry and consents, encouraging physician follow up for any concerns
- **Check In/Out flow** - On Vaccination day, plan to minimize queueing
 - Bar code/QR scanning vs health card
 - App on phone vs other device for check in
 - Check out - immediately post-vaccination
- **Appointment booking** - ensuring capacity for **mass immunization** (i.e. 75 ppl/15 minute blocks)
- **Vaccination confirmation** - printed slip vs. emailed confirmation
- **Data entry** - Concomitant or post-clinic by proxy vs online with COVax
 - QR scanning

Expected Outcomes

- Improving our COVID-19 vaccination digital workflow process will improve efficiency of both Walk-In and Drive-Thru methods of vaccination
- Implementing suggested changes would make Drive-Thru a viable vaccination option for mass immunization
- Improving workflow processes will increase the total number of vaccinations in arms

Thank you!

Dr. Pearl Yang

MD CCFP, PhD, MSc

Stouffville Medical Centre Family Health Organization

Sunnybrook Health Sciences Centre Primary Care Research Unit

University of Toronto, Department of Family and Community Medicine

pearl.yang@sunnybrook.ca (905) 640-3100

This presentation was made in collaboration with *Idealogical Systems Inc.* and *LogicalDox Inc.*