# Technology Use for Influenza Vaccines in Community Pharmacies

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Prepared for:

Community Pharmacy Owners

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# INTRODUCTION

Influenza vaccinations have become an integral part of public health for a few years now. Commonly known as, flu shot, influenza vaccines can be provided at a doctor's office, primary care clinics, or more recently at a community pharmacy. In normal circumstances, one could easily walk into their family doctors or pharmacy and get their influenza vaccines. To be able to obtain the flu shot, one must fill out the documentation prior to receiving the vaccine to ensure that there are no contraindications. The documentation is a required part of the process, usually done on a paper form. Once the document is reviewed by the pharmacist, then the shot is provided to the patient. After providing the shot, the patient usually waits at the pharmacy for about 15 – 20 minutes to ensure there are no adverse effects from the vaccine. This report will explore how the process is currently being affected due to the COVID-19 pandemic, the steps being taken to deal with the difficulties around social distancing, and the potential use of technology to improve workflows.

## BACKGROUND INFORMATION

During normal conditions, when a patient walks in a pharmacy, they are asked to fill out paperwork with a set of questions regarding their health. This could include information regarding allergies, previous relevant history, adverse reactions to vaccines, etc. This is important documentation that needs to be assessed and kept by the pharmacy. Pharmacies normally keep this documentation in a binder for each patient. Due to the COVID-19 pandemic and social distancing measures in place, the process has shifted to more appointment-based model.

## PROPOSAL OF THE ALTERNATIVE

In order to manage the appointment-based model and comply with the social distancing measures, pharmacies can utilize technology to optimize their workflow. Using online technology can reduce the physical contact and also help better manage the scheduling of the appointments. As mentioned earlier, pharmacies currently use paper-based documentation which increases the chances of physical contact during the pandemic. To reduce this risk, it is proposed to potentially use technology-based online booking system.

## SCOPE OF THE REPORT

This report will analyze the current usage of technology for booking and managing of influenza vaccines in community pharmacies. It will highlight key workflow insights, methods, and inefficiencies in the current system. This scope of this report is to explore the potential implementation and use of technology from both patients and pharmacy perspectives for managing flu shots during this season.

# SURVEY QUESTIONS

A survey was conducted online where pharmacy owners were asked specific details regarding their current workflow and system management. Specifically, the survey asked for the following information:

- How are they currently booking appointments?

- How many people are they currently providing flu shots for?

- Who is responsible for reviewing the paperwork?

- How is the paperwork logged?

- How are they currently providing proofs of vaccines?

- Are they currently using any technology to improve workflow?

- How long, on average, do patients wait in the pharmacy to fill out the paperwork?

These survey questions were anonymously filled out by 6 different pharmacies.

# DATA COLLECTION

## METHODOLOGY

The survey questions were formed as multiple choice to make it convenient for the owners to fill out and also to analyze the data after. The links were emailed out to a few community pharmacies located in Vancouver, Richmond, Surrey, and Abbotsford. These surveys were sent out via email with a link attached. The recipients could click on the link and fill out the survey in their browser.

# DATA ANALYSIS

After the data was collected, the results were compiled in pie charts and bar charts for each of the questions.
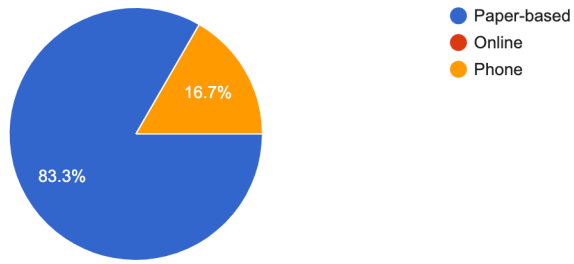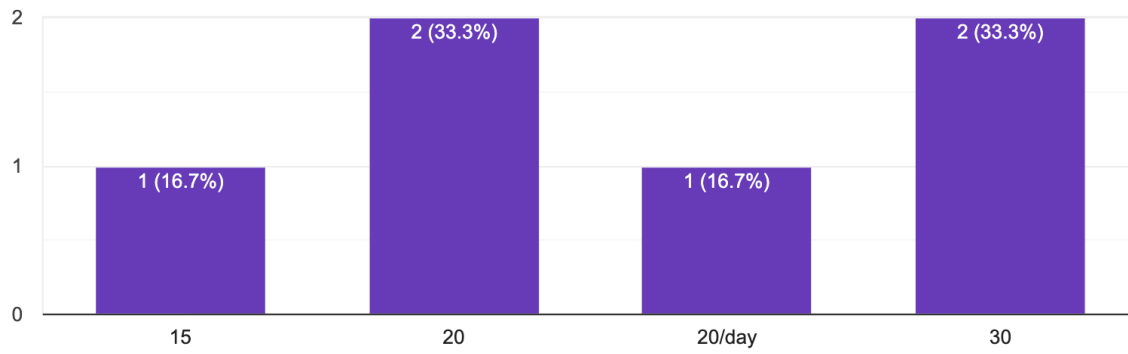
*Figure 1: Appointment Bookings*



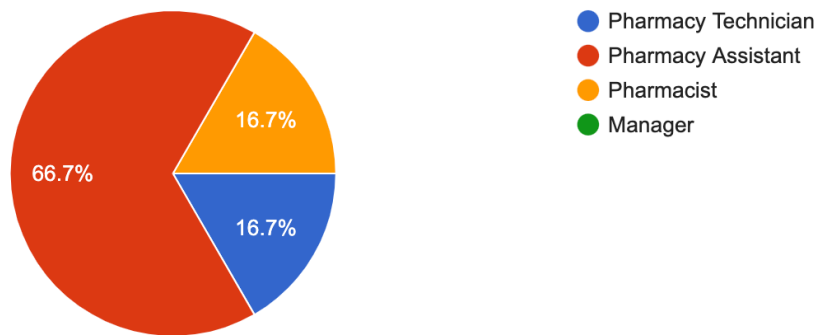*Figure 2: Approximate Number of Flu Shots currently given daily*
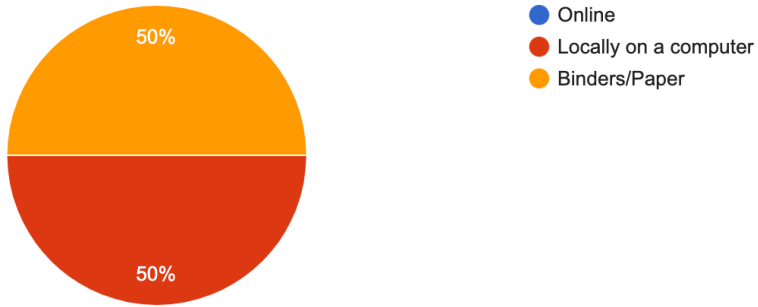


*Figure 3: Responsibility for filling out paperwork*
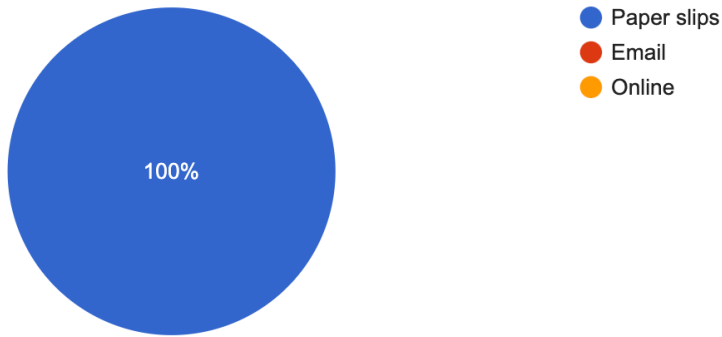
*Figure 4: Paperwork Logging*



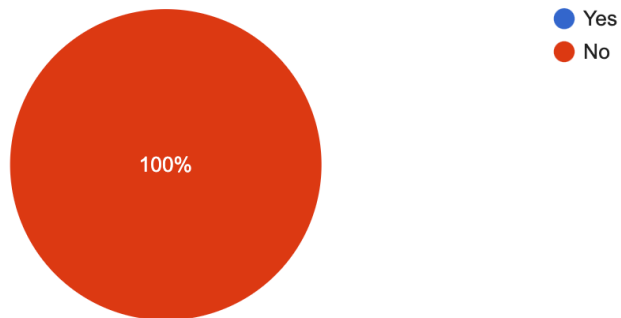*Figure 5: Proofs of vaccines*



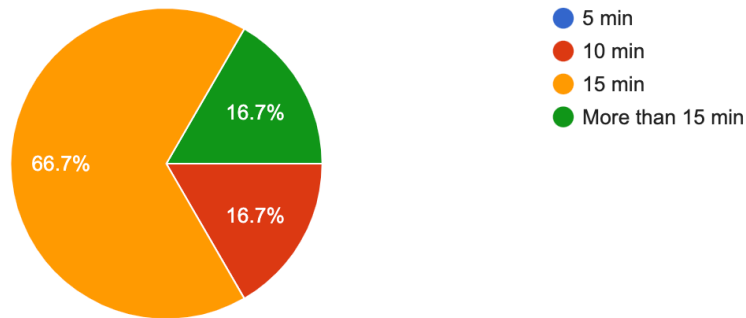*Figure 6: Current Use of Technology*

*Figure 7: Patient Wait Times in the Pharmacy*

Based on the survey results, we can deduce that most of the pharmacies use paper-based bookings, while a very small percent uses phone based. No pharmacy reported using online technology to book appointments. On average, a pharmacy reported providing around 15-20 flu shots per day. Most of the documentation was done by pharmacy assistants, while on some occasions, the documentation was also reviewed by pharmacy technicians or pharmacists. The documentation was later logged on either locally on a computer or binders. After the patient received their vaccines, they were provided with a paper slip as a proof of their vaccine. This could be utilized by them to show to their employers or in other situations where a proof might be required. No pharmacy reported using technology to improve their current workflow. On average, patients spent around 15 minutes to fill out the paperwork while at the pharmacy before they received their flu shot.

## PROPOSED ACTION PLAN

Utilizing technology to optimize flu shot documentation and bookings can improve patient experience, reduce physical contact, and increase efficiency in the current

workflow. For example, using online booking system can allow patients to pre-book their appointment times and arrive at the pharmacy accordingly. This will help increase social distancing measures. Patients can also complete their documentation online as opposed to filling out the paperwork while they are at the pharmacy. This can make the process more efficient for both the patient and the pharmacy. The staff can assess their documentation beforehand to save time and reduce the time patient has to wait in the pharmacy. After receiving the flu shot, a proof can be emailed to the patient instead of handing them a slip of paper. Implementing such technology can increase the overall efficiency of the workflow. For example, pharmacies can search up information at a later date without having to go through the paper documentation. Furthermore, this can help ensure social distancing compliance during the pandemic.

## CONCLUSION

### SUMMARY OF THE RESULTS AND INTERPRETATION

Most of the pharmacies are not currently using technology to optimize their workflow for flu shot bookings and documentations. The results of the survey highlight how long the patients have to wait to fill out the documentation before they can receive their flu shot. This report analyzes the potential implementation and use of technology to improve pharmacy workflows and patient experience. In the light of the current pandemic, it can further help reduce the risk of COVID spread and keep people safer. Using an online system to allow patients to pre-book and document can provide more convenient and safer experience.