

FYDP 2022-23

Improving pharmaceutical prescription pickup for practitioners and patients

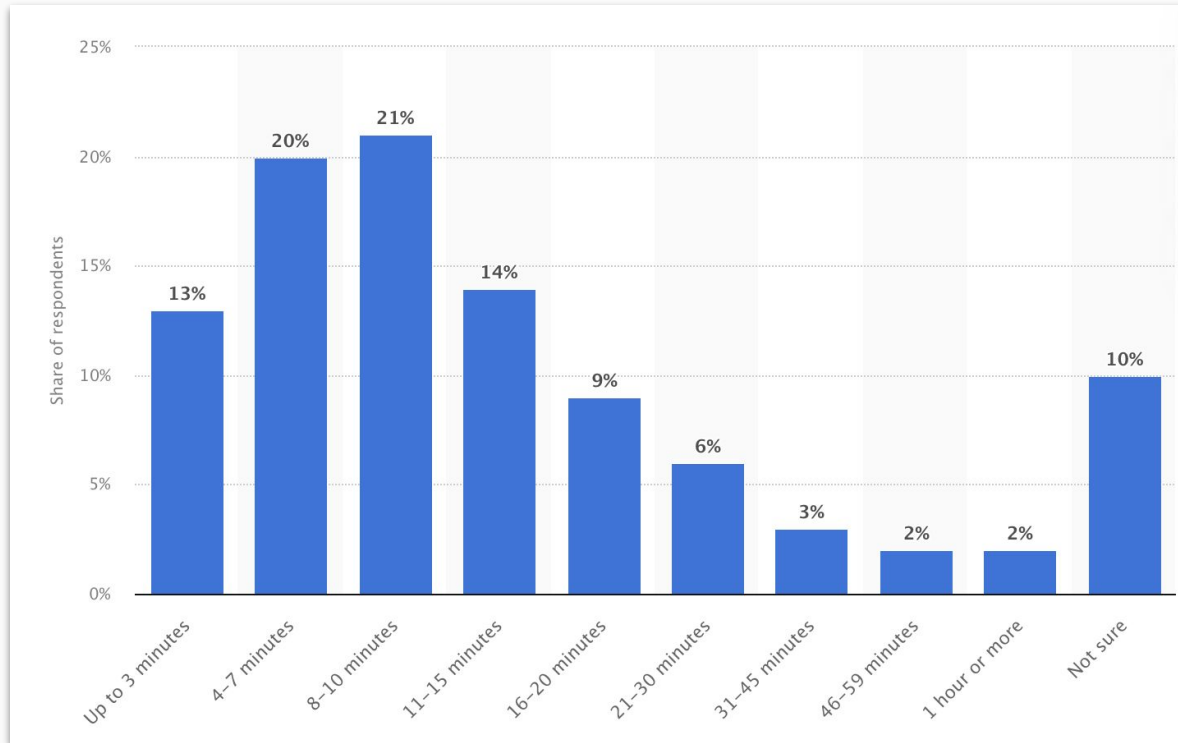
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Industry By the Numbers

11,814

Pharmacies in Canada according to the *National Association of Pharmacy Regulatory Authorities*



Over 50% of U.S Consumers are only willing to wait less than 10 minutes for prescription pickup [11].

600 million

Prescriptions pharmacists dispensed, or consulted on in 2016 according to the *Canadian Pharmacists Association*. It is likely higher today.

\$50.4 billion

Canadian National Pharmacy and Drug Store Market Size in 2022 [8]

The Problem



Long wait times [2]



Patients are unaware of
pharmacy services [1]



Shortage of pharmacists
[3]



Increasing workload [4]



Customer service takes time
[5]



75% of prescriptions are
repeat [7]



Limited accessibility of care
for patients [2]

Existing Solutions

Solution	Challenges
Automated prescription dispenser [9]	<ul style="list-style-type: none">● High touch point rate with pharmacists● Costly● High magnitude of change
Pharmacy Kiosks [10]	<ul style="list-style-type: none">● Unnecessary patient interactions can be further reduced● Poor user experience● Challenging for caregivers to complete prescription pickups● Not available in Canada

Objectives



Eliminate unnecessary
patient interactions



Automate prescription
pick-up when safe



Cost-efficient



Easily-adoptable

Outcomes



Higher throughput - more customers can be served in a day.



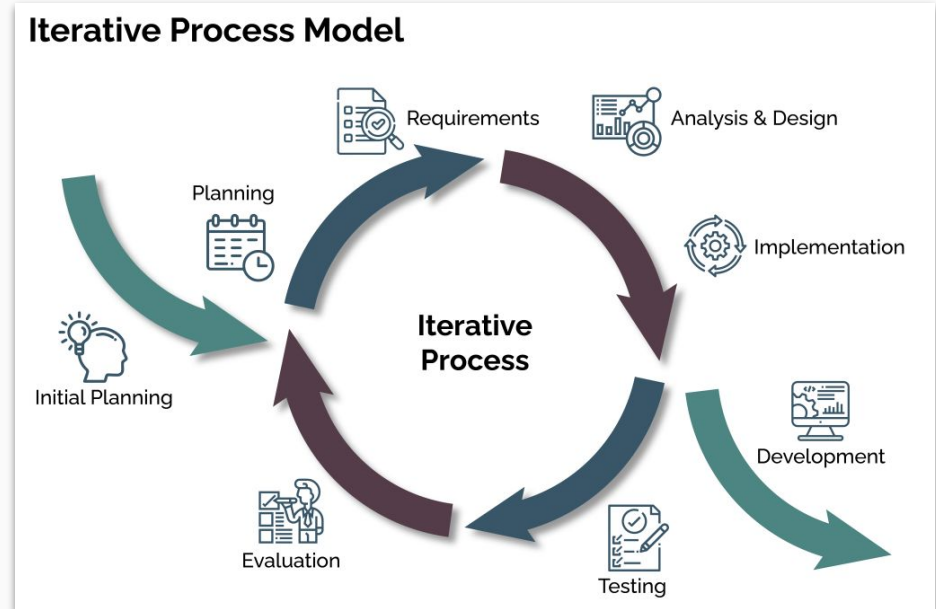
Improve care for patients who require more attention from pharmacists



Pharmacists can take on other responsibilities to reduce the load of other healthcare staff

Our Intended Approach

1. Understand the problem
2. Prototype a solution
3. Validate solution
4. Improve design
5. Repeat



Role of an Advisor

1. You have appropriate technical expertise in one main aspect of their proposed project.
2. You are available for regular meetings for the duration of the project, to be scheduled at minimum for 30 minutes every two weeks.
3. You can provide ongoing advice and direction related to technical aspects of the project.
4. You can provide feedback and grading for an early project proposal, an end of term conference-style paper, and panel exams each term.
5. You can participate in a 1-hour online panel exam held sometime between Nov 22nd to Dec 3rd. We will work to find a time that can fit in your schedule, but keep in mind there are 20 other teams that need to be scheduled during that time. If you can't attend the panel exam you will be asked to provide a qualified alternative to serve as replacement panelist.

Questions?

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2. Alam, S., Osama, M., Iqbal, F. and Sawar, I. (2018), "Reducing pharmacy patient waiting time", *International Journal of Health Care Quality Assurance*, Vol. 31 No. 7, pp. 834-844. <https://doi.org/10.1108/IJHCQA-08-2017-0144>
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10. Home. (2022, August 08). Retrieved September 18, 2022, from https://asteres.com/?fbclid=IwAR2RtFqkZ09YPVCUQvex5yeLZLt2GeJHCtp90nIMbzHcy7R10JWNOZ90M_o

11. Qudini. (June 24, 2021). How long were U.S. consumers willing to wait in lines for service or entry at pharmacies and drugstores? [Graph]. In Statista. Retrieved September 19, 2022, from <https://www-statista-com.proxy.lib.uwaterloo.ca/statistics/1259110/lenght-of-time-shoppers-were-willing-to-wait-at-pharmacies-and-d-rug-stores-in-the-us/>