

Wisconsin Pharmacies' Response to the COVID-19 Pandemic: Barriers, Successes, and Looking Forward

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The emergence of SARS-CoV-2, the novel virus that causes COVID-19, has put unprecedented stress on healthcare systems, transforming the way healthcare professionals deliver care. Although this stress poses unique challenges, it is also an avenue for innovation and process improvement. Clinicians have responded to this challenge by increasing the use of telemedicine and other methods for delivering care without transmission risk.¹ However, there are limited data describing how Wisconsin pharmacies have been affected by the new healthcare landscape. Initial exploration of this topic through personal testimony revealed that the spread of COVID-19 has affected many aspects of pharmacy practice, prompting the need for a closer evaluation of the barriers pharmacies face and the strategies they

have implemented to maintain high-quality delivery of care.

Methods

The Pharmacy Society of Wisconsin (PSW) developed an electronic survey to collect information from practicing pharmacists and pharmacy technicians in Wisconsin about their experiences during the pandemic. This survey was announced via the PSW newsletter to 4,266 PSW members and a special alert targeting PSW's pharmacy technician members. Responses were collected over a period of 12 days, between July 10 and July 22, 2020. Respondents were asked to report their primary practice setting, rank known barriers to pharmacy practice, self-report other barriers they face, and describe strategies they have implemented to address these barriers. Known barriers to pharmacy practice were identified through

preliminary analysis of anecdotal accounts from PSW members. When respondents ranked known pharmacy barriers, they were asked to rank on a scale of zero to five, where zero indicated "no difficulty with this barrier" and five indicated "high difficulty with this barrier." The means of the known barrier rankings were calculated to determine which barriers were perceived as most and least difficult.

Additionally, PSW followed up with six pharmacist respondents whose areas of practice included community pharmacies, inpatient care, ambulatory care, and primary care clinics to obtain personal testimony about the barriers they have faced and what they have done to overcome them. Additionally, one pharmacist who did not complete the survey on time was contacted for an interview due to their involvement with COVID-19 testing; this pharmacist worked in a community pharmacy.

Below: Hayat Pharmacy Staff Pharmacist bidding farewell to patients leaving Hayat Pharmacy after receiving COVID-19 point of care testing



Pharmacy Barriers & Successes

A total of 36 people responded to the survey; 25 respondents were pharmacists and 10 respondents were pharmacy technicians. One respondent did not report their profession. Respondents worked in a variety of practice settings, including community pharmacy (18), inpatient care (8), ambulatory care or primary care clinic (2), long-term care (2), specialty pharmacy (1), home infusion pharmacy (1), and mail-order pharmacy (1). One respondent worked in both long-term care and community settings; one worked both inpatient and outpatient at a Veterans Affairs hospital; and one worked at various settings, including a primary care clinic, a hospital, and a community pharmacy.

TABLE 1. Pharmacy Barrier Rankings

Pharmacy Barrier	No Difficulty	Low Difficulty	Medium-low Difficulty	Medium Difficulty	Medium-high Difficulty	High Difficulty	Mean Ranking
Maintaining adequate staffing	1 (4%)	9 (38%)	6 (25%)	4 (17%)	3 (13%)	1 (4%)	2.17
Pharmacists working remotely	8 (33%)	7 (29%)	4 (17%)	2 (8%)	1 (4%)	2 (8%)	2.19
Difficulty obtaining/lack of personal protective equipment	1 (4%)	4 (17%)	2 (8%)	11 (46%)	4 (17%)	2 (8%)	2.91
Drug shortages	0 (0%)	3 (13%)	5 (21%)	9 (38%)	4 (17%)	3 (13%)	2.96
Difficulty obtaining/lack of disinfectant supplies	0 (0%)	3 (13%)	5 (21%)	6 (25%)	7 (29%)	3 (13%)	3.08
Spread of misinformation about COVID-19	0 (0%)	0 (0%)	5 (21%)	5 (21%)	8 (33%)	6 (25%)	3.63

Barrier ranking by number of respondents (n = 24)

Among known pharmacy barriers, respondents ranked spread of misinformation about COVID-19, difficulty obtaining/lack of disinfectant supplies, and drug shortages as the most burdensome barriers affecting their pharmacies (Table 1). The most common self-reported obstacles were low patient compliance with public health safety guidelines (6), difficulty delivering care outside of the pharmacy (6), increased use of delivery services (3), difficulty allocating time to disinfect pharmacy surfaces (2), and reduced prescription volume and sales (2). Additionally, respondents expressed general frustration with newly implemented workflows related to these barriers that negatively affect pharmacy efficiency.

Follow-up with one pharmacist revealed that disinfecting surfaces was especially difficult to complete in a timely manner. Pharmacists followed Centers for Disease Control and Prevention (CDC) guidance to prevent the spread of COVID-19 by cleaning and disinfecting counters, waiting areas, and other spaces within the pharmacy thoroughly and frequently.² However, routine deep cleaning is a time-consuming activity, and pharmacists noted that diverting staff to complete this duty puts additional stress on their workflow. Additionally, some pharmacies experienced difficulty obtaining disinfectants from their suppliers and were impelled to explore other channels of distribution. Similarly, some pharmacists noted a shortage of personal protective equipment, requiring

pharmacy workers to reuse equipment that typically would not be reused.

Another major obstacle that pharmacies encountered was the spread of misinformation about COVID-19. Four respondents reported that patients had either shared misinformation regarding COVID-19 or were not following public health guidelines such as social distancing. One pharmacist reported that their efforts to educate patients still resulted in low acceptance of the recommendations. Additionally, one pharmacist believed that some patients became apprehensive after hearing the recommendations, which was an unintended consequence of patient education.

How Pharmacies Adapted

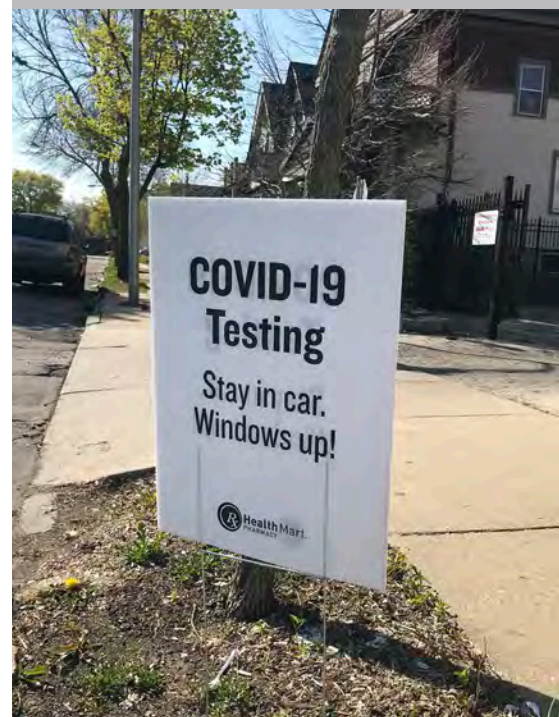
Although COVID-19 has presented unforeseen challenges, some of those challenges are opportunities for improvement and growth. Thus, the seven pharmacists who completed follow-up interviews were asked to describe strategies they have employed to overcome the challenges they face.

Curbside Service

The emergence of public health policies intended to prevent the spread of the virus has put additional emphasis on care delivered outside of the traditional pharmacy setting. Cassie Levetzow, a pharmacist at Aurora St. Luke's Hospital, laid out details of the new curbside prescription pickup program St. Luke's

Hospital has put in place. The service was designed to decrease in-person exposure for both patients and pharmacy staff. Along with the implementation of curbside pickup, the pharmacy also created a new triage communication system. The new system uses color coordinated stickers to notify staff which patients require a consultation because of a new prescription or change in medication, when there is pertinent information that needs to be shared with the patient, or which patients can be offered a consultation because they are simply picking up a medication with

Below: HealthMart COVID-19 Testing sign located outside of Hayat Pharmacy parking lot





Above: Pharmacy Staff member at Aurora St. Luke's Hospital delivering patient prescriptions via curbside pickup

no changes. Since these programs were implemented, the pharmacy has received overwhelmingly positive feedback from patients. Curbside pickup is a service that the pharmacy plans to keep in place for the foreseeable future.

Similarly, Dr. Thad Schumacher, of Fitchburg Family Pharmacy, has optimized immunization delivery by employing a curbside model. Approximately 28% of adults in the United States received at least one vaccine from a pharmacy in 2017.³ Community pharmacies are key immunizers, especially during a pandemic when other healthcare settings are shifting to remote care. Administration of vaccines in a drive-through setting might be one of the more innovative ways pharmacists can promote social distancing, because there is no need for the patient to enter the pharmacy or even leave their vehicle. At Dr. Schumacher's pharmacy, patients call ahead to schedule curbside immunization visits. When the patient arrives, they complete all necessary paperwork in their vehicle while pharmacy staff prepares all necessary supplies. Then, the pharmacist administers the vaccine through the window or opened door of the patient's vehicle. The introduction of curbside immunizations might prove to be a valuable addition to

pharmacy practice, especially as public health authorities continue to emphasize the importance of social distancing.

Mail-order Pharmacy

Mail-order pharmacy is another service that has expanded substantially since the beginning of the COVID-19 pandemic. Jessica Battaglia, a pharmacist at Aurora Sinai Hospital, shared how mail-order pharmacy has expanded within her practice. Aurora already had a fully functioning mail-order system that was used mainly for patients with specialty medications; Aurora was able to expand this service to accommodate more patients during the pandemic. Although some patients were hesitant to use the mail-order pharmacy at first, the longer COVID-19 precautions and restrictions were in place, the more receptive patients became. With time, mail-order pharmacy through Aurora Sinai hospital was used by the vast majority of patients. Curbside pickup is still available with minimal contact for patients whose needs cannot be met by mail-order pharmacy.

Telehealth

Pharmacists have expanded their use of telehealth considerably, similarly to other health professions.¹ Cathy Lea, a registered ambulatory care pharmacist at the Mayo Clinic Health System in Eau Claire, shared her telehealth experience with PSW. Ms. Lea's clinic has seen a notable increase in demand for telehealth visits due to COVID-19. During the governor's "safer at home" order, all clinic visits were transitioned to either video or phone appointments, where both healthcare providers and patients attend appointments from their own homes. This posed unique challenges, as telehealth had never been used in such a capacity at this clinic before. At first, some patients thought their telehealth calls were solicitors, because they did not recognize the clinic's phone number. However, this issue subsided as patients became more familiar with telehealth and were notified that they might receive calls from unknown phone numbers. Additionally, it was difficult for pharmacists to demonstrate proper medication use, because patients could not adequately view the demonstrations in

live-video or telephone formats. In response to this concern, Ms. Lea and her colleagues began sharing open-access medication use videos with patients. Pharmacists also asked some patients to attend the telehealth visits with family members to increase the likelihood that vital information was remembered.

These strategies proved to be successful; patients were generally satisfied with their telehealth experience, and some shared that they began to prefer telehealth over in-person visits. In fact, some patients saw their healthcare providers more often, ostensibly due to the convenience of telehealth. Now that telehealth has become a staple of patient care, Ms. Lea and her colleagues hope to expand this service by shifting as many patients as possible from telephone appointments to live-video appointments.

COVID-19 Point of Care Testing

Testing for COVID-19 is regarded by public health officials as one of the most useful tools we have to prevent the spread of COVID-19 by asymptomatic and symptomatic individuals.⁴ Dr. Hashim Zaibak of Hayat Pharmacy was approached by McKesson Healthmart to work with Health and Human Services (HHS) as an independent pharmacy for COVID-19 testing. In mid-May of 2020, COVID-19 point of care testing began at a Hayat location in a Milwaukee zip code that experienced a high rate of COVID-19 infections early on. The partnership with McKesson Healthmart provides Hayat Pharmacy with personal protective equipment and daily overnight shipments of completed samples to the lab, while HHS pays for the self-swab tests and the cost of administration.

The process for point of care testing begins at home for patients, where they register online for a test, take a brief survey, pick an appointment time, and print an appointment voucher. Once patients arrive at Hayat Pharmacy, they call the pharmacy phone number from their car, notifying staff that they are present for their visit. The pharmacist then retrieves the patient voucher and assembles a testing kit for the patient that includes a test tube with the

patient's name and date of birth on it. The pharmacist then walks the patient through the steps of the self-test, including how to seal their sample bag. Throughout the process, the patient is advised to have their car window 80% closed to help protect both the patient and pharmacy staff.

While providing point of care testing was a unique service that pharmacies were excited to be a part of, it did not come without challenges. Dr. Zaibak shared some of the major barriers that his staff overcame to make the service successful, many of which stemmed from socioeconomic-related health inequities. This particular Hayat Pharmacy location delivers care to underserved communities in the inner city of Milwaukee. Dr. Zaibak shared that approximately half of his patients did not have an email address, which was required to register for point of care testing. The staff at Hayat Pharmacy created a generic email address that patients were able to use to register. Another major hurdle for the staff at Hayat Pharmacy was that many of their patients did not have computers or printers at home. For patients without a printer, the pharmacy staff was able to print vouchers at the pharmacy, and patients without a computer were advised to return to the pharmacy three days after their test so a staff member could assist them with checking their results online and provide appropriate counseling. Dr. Zaibak shared the story of one older, high-risk patient who tested positive for COVID-19 but was unable to be reached by Hayat staff members. Dr. Zaibak drove to the patient's home to inform him of his positive test and provide consultation. In spite of the challenges they faced, Dr. Zaibak and the staff at Hayat Pharmacy have worked effortlessly to ensure that this service is available to any patient looking to receive point of care testing.

This is one of several HHS-sponsored COVID-19 point of care testing sites in the state. A similar operation was spearheaded by Franklin LaDien and his team at Walgreens Pharmacy in Milwaukee. This indicates that mass testing is an important goal within HHS.

Conclusion

Pharmacies in Wisconsin have employed unique and innovative strategies

to continue providing high-quality care during the COVID-19 pandemic. Barriers that pharmacies face during this time include the spread of misinformation, difficulty delivering care outside of the pharmacy, and increased reliance on delivery services. Strategies for working through these challenges included new workflows for the delivery of medications to patient's homes, curbside pharmacy service, and increased use of telehealth. Additionally, pharmacies are helping to keep communities safe by sharing public health information with patients and by contributing to COVID-19 testing efforts. Pharmacies will continue to play an important role in the COVID-19 response and should continue to try novel workflows and ideas that aim to improve patient care. PSW thanks the survey respondents for their time and the valuable information they have provided.

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