

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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getting vaccinated and so eager to do their parts for their community and slow the spread of the virus. Some of the facilities we visited created a party-like atmosphere during the vaccine clinics; excitement was high, and everyone was happy to finally be getting vaccinated. The long-term care facility residents were so grateful to be some of the first people in the country to receive the vaccine and make history. I also appreciated the more difficult conversations with some patients who were still hesitant about getting the vaccine. I felt that I made the most impact when I sat with patients and chatted about how the vaccine works and why vaccines are important, discussed specific clinical trial data and possible adverse effects of receiving the vaccine, and ultimately convinced them to get the vaccine.

As an added bonus, I reconnected with fellow student pharmacists and pharmacists I have worked with in the past in other capacities during the clinics. It was exciting to witness how we all answered the call to action and as a result, ended up working together to vaccinate the community. I met APhA Senior Manager of Student & New Practitioner Development Carly Harsha, PharmD, in person for the first time after working with her for more than a year virtually on the APhA-ASP Member Engagement Standing Committee. I also vaccinated past APhA-ASP Regional Delegate Nneka Okafor. So many fullcircle moments occurred during the vaccine clinics, with each confirming my path in pharmacy and why it is one of the best professions.

Fellow student pharmacists across the country have also been participating in vaccination efforts in their own local communities. Heather Garr, a secondyear student pharmacist at the Binghamton University School of Pharmacy & Pharmaceutical Sciences, recently provided the Moderna vaccine to employees and other front-line community members at the hospital where she interns. "I was just so grateful to be even a small part of the solution to this ongoing problem we have all been faced with," Garr said. "And as a student pharmacist in New York State, I am even more grateful for the opportunity to vaccinate as an intern, as we have only been allowed to do so for less than 2 years. All of the pharmacists I work with told me how they'd wished for the experience to immunize as an intern, and I feel lucky to be one of those who can."

I believe it is important for pharmacists and student pharmacists to get involved in the vaccination efforts because we are absolutely perfect for the job and have the opportunity to save hundreds of thousands of lives by curbing the spread and severity of COVID-19 infections. We are not only equipped with the technical vaccination skills, but our accessibility requires us to connect with people in a very unique way, whether it be other health care providers or the general public. That need for connection and understanding is one of the most essential aspects of the vaccination efforts. This is a monumental opportunity to show just how essential we are to public health. We took the Oath of a Pharmacist, vowing to "consider the welfare of humanity and relief of suffering" and vaccinating the public against COVID-19 is one way we can live up to our vows.

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APhA-APRS

A spotlight on pharmacists' skills

The coronavirus disease 2019 (COVID-19) pandemic has drastically affected the daily lives of people worldwide. Vaccination is one of the most effective protection strategies against viral infections,

hope

and

19.¹

and there is much

global development

numerous vaccines.

It has been esti-

mated that 80% of

the population must

be immunized to

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spotlighted to help lead vaccination efforts by both national² and international organizations,³ were well prepared to play a critical role owing to previous pandemic responses, accessibility, their role as educators, and extensive presence across the health care system.

Pharmacists vaccinating against previous virulent virus strains has been successful, and research shows that pharmacist involvement in vaccinations increases the likelihood of adults receiving vaccinations.⁴⁻⁶ During the 2009-2010 H1N1 outbreak, pharmacists in Washington State were found to have higher patient volumes as well as higher patient-to-practitioners ratios when comparing vaccination resources.⁷ A simulated model for pandemic influenza vaccination to forecast the potential impact of community pharmacy vaccinators resulted in increased numbers of vaccine doses administered and a reduction in the time to achieve 80% single-dose coverage.⁸ In addition, when the influenza season collided with the COVID-19 pandemic, more than 60% of the influenza vaccinations were administered in a pharmacy.⁹ Pharmacists are widely recognized and accepted as vaccination providers.

As more than 90% of Americans live within 2 miles of a community pharmacy and patients see their pharmacist nearly 12 times more than their primary care physician, pharmacists continue to be listed as the most accessible health care provider.^{10,11} In rural areas, pharmacists may be the only immediately accessible health care providers.¹² These familiar, convenient locations are well established for vaccinations. The pharmacy is not limited to its 4 walls, as highlighted by the federal partnership with community pharmacies. Through the partnership, the U.S. Department of Health & Human Services (HHS) acknowledged the important role pharmacies will play in the public health efforts of vaccinations with their partnership with CVS Health and Walgreens to administer vaccines to long-term care facility residents.² Local community pharmacies have also hosted vaccine clinics in the community to allow for even greater access to the COVID-19 vaccines.

In addition to location access, pharmacists have increased access to patients. The Centers for Disease Control and Prevention federal community pharmacy program for COVID-19 vaccinations website recognizes pharmacists as "highly trusted and trained health care providers who have direct access to and knowledge of their patient populations."¹³ COVID-19 has been shown to unequally affect those with comorbidities. As many comorbidities require chronic medications, pharmacists can use their monthly or quarterly touch points with patients to discuss and offer COVID-19 vaccinations.

Pharmacists are often listed as one of the most trusted health care providers. During the COVID-19 pandemic, news and social media have played a large role in the communication of disease and vaccine information. A 2012 study of health care workers during the Middle East respiratory syndrome (MERS) outbreak found that the main sources of MERS information pharmacists used were books, articles, seminars, posters, and pamphlets rather than social media, radio, and television.¹⁴ Using their knowledge of evidence-based with medicine. along practiced. patient-friendly communication skills, pharmacists can assist in the reliable, accurate spread of COVID-19 vaccine information. The continuous contact with patients allows for the building of trusting relationships that may establish a more meaningful conversation with those who are vaccine hesitant. It is imperative that COVID-19 vaccine misinformation continues to he combated: pharmacists are prepared, suited, and have strong patient relationships to aid in this effort.

Specific ways pharmacists have assisted in vaccination efforts so far include:

- Answering questions regarding vaccine development, mechanism of action, and potential interactions with therapy.
- Training team members on the proper management and handling of the COVID-19 vaccines.
- Leading education opportunities for patients, providers, health care administrators, and business partners.
- Assisting in patient identification and prioritization for COVID-19 vaccines.
- Managing and coordinating mass vaccination sites.
- Volunteering at local vaccine clinics.

State laws vary across the United States regarding the scope of vaccination. pharmacist-administered With the COVID-19 pandemic, many restrictive states expanded their laws to pharmacist-administered allow for COVID-19 vaccines. The scope of practice expansion should not have needed to be prompted by a pandemic and should not be limited to the pandemic situation. During the COVID-19 pandemic, there

was a decrease in pediatric immunization owing to limited medical office visits. HHS recognized the integral role pharmacists play in vaccination efforts with their recent approval of pharmacist-administered pediatric vaccines.¹⁵ This is a reminder that pharmacists must not forget about other immunization opportunities for both pediatric and adult populations. The current energy and efforts toward COVID-19 vaccinations should be carried forward for all vaccine-preventable diseases. Pharmacists should continuously be a part of comprehensive vaccination efforts and take the opportunity of COVID-19 to continue the expansion of vaccination scope of practice.

There is hope for an end to the devastating COVID-19 pandemic. Pharmacists have proven their success in previous efforts, and they must continue to be used in the current vaccination plans. A silver lining of the COVID-19 pandemic is the opportunity it provides pharmacists to spotlight their skills when they are needed most.

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APhA-APPM

Never prouder to be a pharmacist

The coronavirus disease 2019 (COVID-19) pandemic has affected both the professional and personal lives of pharmacists.



APhA–APPM members have shifted the way they care for patients during this pandemic to ensure that their patients received the care that they need in a safe manner. Many of our members, along with many other pharmacists, pharmacy technicians, and student

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pharmacists across the country, are on the front lines providing COVID-19 vaccinations.

I have seen so many pharmacists stepping up to help with this vaccination effort. Pharmacists who have been stay-