

Pharmacy Times

Many Benefit When Technicians Administer COVID-19 Vaccines

January 27, 2022

[Ashley Woodyard, PharmD Candidate](#), [Pareeksha Ramdeo, PharmD Candidate](#), [Shane P. Desselle, PhD, RPh, FAPhA](#)

But study results show some are not sold on performing the task; adequate training can build their confidence.

The COVID-19 pandemic has put further stress on the nation's health care system, shifting community pharmacies to the forefront in providing testing and vaccinations. This increase in workload is unsustainable without pharmacists and pharmacy technicians working as teams.

As pharmacies are burdened with increasing demands including vaccinations, there is the possibility of exacerbating burnout among store personnel. Retail pharmacies' efficiency can be optimized by delegating additional responsibilities—such as the ability to administer vaccinations—to technicians.

Technicians are on the front lines of community pharmacies, often with considerable direct interaction with patients and the ability to build positive relationships. These relationships are why technicians are an ideal choice for administering vaccinations.

Certifying technicians to administer vaccinations is not entirely new. Idaho, Rhode Island, and Utah began allowing technicians to administer vaccinations even before the pandemic.¹ The first cohort of 29 trained technicians in Idaho were able to administer 953 doses without any adverse events reported.² Technicians have demonstrated competency in this area. However, when technicians were surveyed in 2018 about willingness to perform this task, a low percentage (24.4%) welcomed the added responsibility.³ This statistic may not be surprising, because technicians historically have rarely been involved in the process of immunization. A similar survey in 1998 investigating pharmacists' willingness to administer vaccinations found the same results: Many were initially opposed to the idea.¹ But the accompanying analysis shows that any opposition or reticence likely stemmed largely from unfamiliarity with the task. Adequate training materials can increase confidence in performing new tasks. A follow-up survey of technicians initially hesitant to administer vaccinations showed that results changed once they completed a 4-hour immunization training course.² Attitudes toward vaccination evolved, with the post training survey showing greater confidence and enthusiasm among technicians regarding their ability to administer vaccinations following education and training.

The role of technicians has traditionally been limited to tasks that do not require clinical judgment. The American Society of Health-System Pharmacists defines advanced technicians as those who perform tasks more clinical in nature, such as administering medication reconciliation and patient self-report tools. The pandemic has placed community pharmacies at the forefront of innovation with the possibility of offering point-of-care testing and telehealth services. These added services will increase workload for pharmacists, possibly exacerbating frustration and stress despite excitement borne from new opportunities. These challenges can be overcome with effective delegation and optimization of roles for support personnel. Studies have shown that technicians are capable and competent when taking on advanced roles.⁴

This not only allows pharmacists to expand their offerings of direct patient care services but may also improve patient outcomes and satisfaction.

Under the eighth amendment to the declaration under the Public Readiness and Emergency Preparedness (PREP) Act for medical countermeasures against COVID-19, promulgated by the US Department of Health and Human Services in August 2021, technicians were granted the ability to vaccinate in all 50 states under certain conditions (Table^{5,6}). This order supersedes all other state laws regarding technician-administered vaccinations while the COVID-19 pandemic emergency declaration is in effect. A technician may administer vaccines under the supervision of a pharmacist in addition to other requirements detailed in the Table.

TABLE. PREP Act Requirements Enabling Pharmacy Technicians to Vaccinate^{5,6}

Pharmacist requirements	<ul style="list-style-type: none"> • The vaccination must be ordered by the supervising qualified pharmacist. • The supervising qualified pharmacist must be readily and immediately available to the immunizing qualified pharmacy technicians.
Vaccine requirements	<ul style="list-style-type: none"> • Vaccine must be FDA authorized or licensed. • COVID-19 vaccines must be ordered and administered according to the ACIP's COVID-19 vaccine recommendations. • For pediatric vaccines, the vaccination must be ordered and administered according to the ACIP's standard immunization schedule.
Pharmacy technician requirements	<ul style="list-style-type: none"> • Qualified technicians and state-authorized pharmacy interns must complete a practical training program approved by the ACPE. The program must include a hands-on injection technique and recognition, as well as treatment of emergency reactions to vaccines. • Qualified technicians and state-authorized pharmacy interns must have up-to-date certification in basic cardiopulmonary resuscitation. • Qualified technicians must complete a minimum 2 hours of ACPE-approved, immunization-related continuing pharmacy education during state licensing periods.
Reporting and record keeping requirements	<ul style="list-style-type: none"> • The supervising qualified pharmacist must comply with record-keeping and reporting requirements of the jurisdiction in which he or she administers vaccines, including informing the patient's primary care provider when available and submitting the required immunization information to the state or local immunization information system (vaccine registry). • The supervising qualified pharmacist is responsible for complying with requirements related to reporting adverse events. The supervising qualified pharmacist must review the vaccine registry or other vaccination records prior to ordering the vaccination to be administered by the qualified technician or state-authorized pharmacy intern. • The qualified pharmacy technician and state-authorized pharmacy intern must, if the patient is 18 or younger, inform the patient and the adult caregiver accompanying the patient of the importance of a visit with a pediatrician or other licensed primary care provider and refer patients as appropriate. • The supervising qualified pharmacist must comply with any applicable requirements (or conditions of use) as set forth in the CDC's COVID-19 vaccination provider agreement and any other federal requirements that apply to the administration of COVID-19 vaccine(s).

ACIP, Advisory Committee on Immunization Practices; ACPE, Accreditation Council for Pharmacy Education; PREP, Public Readiness and Emergency Preparedness

Over the past year, technicians have been integral to the pharmacy team.

They will likely continue to be involved in vaccinations even after the pandemic winds down. Pharmacists are moving toward more clinical roles with the incorporation of value-added services.

As such, technicians can assume greater responsibilities in support of these services. Previous literature supports the advancement of technicians, and there is a clear productivity and economic benefit to incorporate advanced technicians.⁷ A pilot “tech-check-tech” program in community pharmacy settings found technicians to be as accurate as pharmacists in verifying prescriptions.¹ This study concluded that use of this program had the potential to save pharmacists 23 working days per year.¹

There is much evidence supporting both the economic benefits and productivity of technicians. The results of one study showed annual savings ranging from \$4526 to \$88,719.89 when incorporating advanced-role technicians into the workflow.⁷

A 2-phase study was conducted to investigate the benefits of technicians performing immunizations over 3 years to gauge opinions over time.⁸ Pharmacists involved in stores using technician immunizations were interviewed in 2017 and again in 2020.⁸ Pharmacists involved reported technicians administering vaccinations from 50% to 100% of the time.⁸ Key findings demonstrate that pharmacists perceived an improvement in workflow flexibility and time prioritization. Pharmacists unanimously expressed that adequate training materials for technicians were key to success.⁸ Pharmacists reported technician-administered immunizations to be most beneficial during the flu season, because they free the pharmacist to verify therapeutic regimens, provide consultations, and focus more acutely on problem-solving as it relates to the medication use process and patient needs, among other tasks.⁸

A pharmacist specifically spoke to this point, as part of a study, results of which were published in Pharmacy (Basel).⁸ “Having to stop workflow to go and give a whole family of 5 people flu shots tends to be difficult. Once [my technicians] were able to [immunize], it saves a lot of time. It makes it so that workflow doesn’t have to stop if I’m the only pharmacist here. I say, ‘We need an injection,’ and we keep on rolling.”⁸

Instead of beginning a task and having to take a break to provide immunizations, pharmacists overwhelmingly preferred having the option of a technician to administer vaccinations.⁸ This made the workflow more efficient because pharmacists were able to use their time more productively.⁸ Although this study focused on the benefit of technicians providing influenza vaccinations, similar results would be expected during the COVID-19 pandemic and beyond. With COVID-19 booster shots becoming more prevalent, pharmacies will need even more help in the coming months.

The study noted that pharmacy managers were initially hesitant to allow technicians to administer vaccinations but eventually accepted and enthusiastically promoted the practice once they experienced the benefits of this innovation. When interviewed, a pharmacist in the aforementioned study spoke to the hesitancy of others: “Take advantage of it. I mean, I’m sure that some of them might feel hesitant allowing the tech to be able to do that, because we’ve all [thought], ‘Oh, no, it’s the pharmacist’s job.’ But you have to jump on board and trust your teammates.”⁸

Through implementation of the PREP act, pharmacists have gotten the reinforcements they desperately need to keep pace with the overwhelming demand for not only COVID-19 vaccinations but flu shots as well. Immunization workload has become overwhelming. As of mid-December 2021, 201.3 million individuals had been fully vaccinated against COVID-19 in the United States, and 28.6 million had received a booster dose, not to mention flu shots being administered concomitantly.⁹

This would not have been possible without the support of technicians. As pharmacy services continue to expand in response to providing optimal patient care, respect and trust for technicians are key and they should be leveraged to their full potential.

Ashley Woodyard and Pareeksha Ramdeo are PharmD candidates at the Touro University California College of Pharmacy in Vallejo.

Shane P. Desselle, PhD, RPh, FAPhA, is a professor at the Touro University California College of Pharmacy in Vallejo.

REFERENCES

1. Adams AJ, Desselle SP, McKeirnan KC. Pharmacy technician-administered vaccines: on perceptions and practice reality. *Pharmacy (Basel)*. 2018;6(4):124. doi:10.3390/pharmacy6040124
2. McKeirnan KC, Frazier KR, Nguyen M, MacLean LG. Training pharmacy technicians to administer immunizations. *J Am Pharm Assoc (2003)*. 2018;58(2):174-178.e1. doi:10.1016/j.japh.2018.01.003
3. Doucette WR, Schommer JC. Pharmacy technicians' willingness to perform emerging tasks in community practice. *Pharmacy (Basel)*. 2018;6(4):113. doi:10.3390/pharmacy6040113
4. Mattingly AN, Mattingly TJ 2nd. Advancing the role of the pharmacy technician: a systematic review. *J Am Pharm Assoc (2003)*. 2018;58(1):94-108. doi:10.1016/j.japh.2017.10.015
5. Hohmeier KC, McKeirnan KC, Akers JM. Pharmacy technicians are valued more than ever: insights into a team-centered immunization approach. *Pharmacy Times*[®]. July 19, 2021. Accessed November 13, 2021. <https://www.pharmacytimes.com/view/pharmacy-technicians-are-valued-more-than-ever-insights-into-a-team-centered-immunization-approach>
6. Eighth amendment to declaration under the Public Readiness and Emergency Preparedness Act for medical countermeasures against COVID-19. *Fed Regist*. 2021;86(147):41977-41982. Accessed December 6, 2021. <https://www.federalregister.gov/documents/2021/08/04/2021-16681/eighth-amendment-to-declaration-under-the-public-readiness-and-emergency-preparedness-act-for>
7. Banks VL, Barras M, Snoswell CL. Economic benefits of pharmacy technicians practicing at advanced scope: a systematic review. *Res Social Adm Pharm*. 2020;16(10):1344-1353. doi:10.1016/j.sapharm.2020.01.007
8. Bertsch TG, McKeirnan KC. Perceived benefit of immunization-trained technicians in the pharmacy workflow. *Pharmacy (Basel)*. 2020;8(2):71. doi:10.3390/pharmacy8020071
9. Reporting COVID-19 vaccinations in the United States. CDC. Updated December 14, 2021. Accessed December 14, 2021. <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/reporting-vaccinations.html>