

Support Pharmacy Infrastructure to Strengthen US COVID-19 Vaccination Efforts and Beyond

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Recently, the Biden administration announced the Centers for Disease Control and Prevention (CDC) Federal Retail Pharmacy Program for COVID-19 vaccination to increase COVID-19 vaccine accessibility to local communities. Although pharmacies and pharmacists have already administered COVID-19 vaccines through state-initiated programs, this program sends COVID-19 vaccine supply directly to community pharmacies.¹ The CDC states that as vaccine supply increases, the federal government plans to expand this program to include 40 000 pharmacies across the United States.¹ Nine of 10 people live within five miles of a pharmacy, making pharmacies a natural and accessible point for vaccine administration.² Providing COVID-19 vaccination at local community pharmacies can increase vaccine accessibility, especially in underserved areas, where health care clinics and hospitals are limited. Pharmacists and pharmacy staff have stood on the frontlines of the COVID-19

pandemic, carrying out vital medication-related services while performing COVID-19 testing, offering telehealth services, and vaccinating the public against the flu and other vaccine-preventable diseases. They are ready, willing, and able to protect public health by administering COVID-19 vaccinations.

PUBLIC HEALTH PRACTITIONERS

In 2006, the American Public Health Association (APHA) published a policy statement describing the role of pharmacists in public health.³ This statement identified pharmacists as practitioners who provide high-quality patient care by counseling patients about their medications and health conditions, providing advice on over-the-counter medications, calling insurance companies to resolve medication cost problems, and administering routine vaccines.³ APHA has continued to recognize pharmacists'

role in public health and established an official APHA Pharmacy Section in 2018 containing a broad membership of pharmacists, pharmacy technicians, researchers, drug information experts, and other disciplines.

Since the publication of the 2006 policy, pharmacists have also gained prescribing rights for oral contraceptives in several states, strengthened collaborative practice for tobacco cessation and disease-state management with prescribers, and increased availability of naloxone at the pharmacy counter among many other public health activities.⁴ Embedded within communities, community pharmacists are a trusted and accessible source of health information. Several studies demonstrate that with the involvement of pharmacists, medication use and health outcomes improve, and health care utilization, such as emergency department visits, decrease.⁵

PRIORITIZING MEDICATION SAFETY

As the federal government and state and local communities look to community pharmacists to carry out these important COVID-19 vaccination efforts through the Federal Retail Pharmacy Program, we must ensure that safe medication practices are maintained. Before the pandemic, a series of events shed light on the stresses experienced by understaffed and overburdened community pharmacists and technicians who are routinely asked to manage several competing responsibilities with little staffing and operational support.

To initiate a plan to address these workplace concerns, a collaboration conference with diverse pharmacy stakeholders was held in July 2019 titled Enhancing Well-being and Resilience Among the Pharmacist Workforce. The

goal of this conference was to develop actionable recommendations to address issues and concerns associated with burnout, stress, work overload, and moral injury.⁶ Among their 50 recommendations for improvement was that

employers must prioritize patient safety, quality of care, and pharmacist well-being when setting workload expectations and ensure the pharmacy workforce is adequately staffed, trained, and utilized to complete the expected work volume.⁶

In January 2020, a series of articles by the *New York Times* further illustrated the urgency of these pharmacy workplace and staffing issues.⁷ A recent study by Beal et al. confirmed these reports by surveying more than 1200 community pharmacists. This study found that pharmacists working in national chain and grocery store pharmacies continue to have workplace concerns in several ways and are in favor of addressing prescription volume-based metrics as one contributor of moral injury.⁸

Addressing prescription volume metrics and understaffed work environments remains a complex issue, as pharmacy payment models still favor payment focused on prescription volume over payment for patient care provided by pharmacists. A multilevel approach addressing systems changes at the national and state levels through laws and policies as well as at the employer-employee level through policies and procedures will be necessary. At present, the pandemic has only reinforced these pharmacy workplace concerns through increases in responsibilities including COVID-19 testing and vaccination services without addressing the underlying issues. Recent news coverage has highlighted the impact of the

pandemic on these continued workplace concerns in pharmacies as well as other health care settings.⁹

The Institute of Medicine published *To Err is Human: Building a Safer Health System* over twenty years ago which described the impact of poorly designed medical systems on patient safety in the clinical hospital setting with applicable information for outpatient consideration.¹⁰ This highly cited report describes the significant financial and emotional toll that medical and medication errors have on communities.¹⁰ Recognizing that unintentional medication errors are a result of poorly designed medical systems and not the individual health care provider, this report also advocated the design of systems that prioritize safety and human factors considerations. Ensuring appropriate staffing ratios, reducing workplace distractions, developing and maintaining reasonable work hours and break time, and examining medication use processes and procedures are ways the pharmacy profession and associated employers can protect patient safety by design.

Research pertaining to the rate of medication errors in the community pharmacy is limited, but pharmacists performing multiple verification steps in conjunction with medication barcode scanning and patient counseling assures patients that their safety is being prioritized.¹¹ As pharmacists are tasked with additional responsibilities to vaccinate the population against COVID-19, it is good practice to reassess the components of the medication system, including staffing and prescription volume in community pharmacies to ensure that safety and well-being for patients and pharmacy personnel remains at the center.

SUPPORT AND SUSTAIN INFRASTRUCTURE

Numerous community pharmacy businesses have publicized plans to hire more pharmacists, technicians, and support staff to administer COVID-19 vaccinations, but whether adequate staffing levels can be achieved is not yet known. To meet the vaccine demand while preserving a pharmacy's high standards for medication safety, pharmacies must ensure that pharmacy staffing and operations are prioritized. Pharmacists need support through adequate staffing levels and technical and operational assistance to store, reconstitute, and administer COVID-19 vaccines and continue typical medication dispensing and counseling processes. Pharmacists and pharmacy staff also work closely with patients to provide vaccinations and patient counseling and need personal protective equipment to protect themselves against COVID-19 exposure. These supplies should be readily available.

In addition, messaging about COVID-19 vaccine eligibility by state officials must be made clear so pharmacists are not caught between patient demands for vaccination and state guidance limiting eligibility. Public health and state officials should work directly with pharmacists to provide information to patients seeking COVID-19 vaccination. Because pharmacies traditionally adopt a walk-in vaccination model, clear communication about the need for patient appointments, based on vaccine eligibility, is imperative.¹²

Finally, the CDC must collect data from pharmacists, technicians, patients, and pharmacy corporations to study the Federal Retail Pharmacy Program for COVID-19 vaccinations and its impact on

COVID-19 vaccination access and system-mediated medication safety. These data can be used to inform the effectiveness and safety of using community pharmacists to address large-scale public health emergencies and help the United States prepare for future public health needs.

SUPPORT COVID-19 VACCINATION

As we collectively call on pharmacists as vital public health practitioners during the COVID-19 pandemic, let's go one step further by investing in pharmacists and pharmacy infrastructure to ensure that they have the resources they need to safely care for and vaccinate the public during the COVID-19 pandemic and beyond. **AJPH**

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CONTRIBUTORS

K. K. Marwitz led the drafting of the editorial. All authors conceptualized, revised, edited, and prepared the editorial.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to declare.

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