

# **Recommendations to Increase Vaccination Rates by Improving Access to Pharmacist-Administered Immunizations**

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## Contributing Authors

Trey Jones

Tyler Albright

Erica Martin

## PSW Staff Contributors

Sarah Sorum, PharmD

Megan Grant

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## Contact

Comments and questions can be directed to [info@pswi.org](mailto:info@pswi.org).

## PSW Immunization Access Expansion Steering Committee

Ann Lewandowski, Southern Wisconsin Immunization Consortium

Christopher Klink, PharmD, BCPS, Advocate Aurora Healthcare

Kate Schaafsma, PharmD, MBA, MS, Froedtert & the Medical College of Wisconsin

Kristopher Cyr, PharmD, Ascension | Wisconsin

Megan Ose, PharmD, Children's Hospital of Wisconsin

Ryan Bender, PharmD, Forward Pharmacy

Tim Bartholow, MD, NeuGen

Sarah Sorum, PharmD, Pharmacy Society of Wisconsin

Erica Martin, Pharmacy Society of Wisconsin

Ryan Psyck, Pharmacy Society of Wisconsin

George MacKinnon III, PhD, MS, RPh, FASHP, Medical College of Wisconsin School of Pharmacy

Karen MacKinnon, BPharm, RPh, Medical College of Wisconsin School of Pharmacy

Rebecca Bernstein, MD, MS, Medical College of Wisconsin

Melissa DeNomie, MS, Medical College of Wisconsin

## Introduction

The Centers for Disease Control and Prevention (CDC) recommends expanding vaccine access as an evidence-based method to prevent the spread of disease.<sup>1</sup> However, vaccination rates remain below target figures.<sup>2</sup> Pharmacists are uniquely positioned within communities to support immunization efforts. Eliminating obstacles to pharmacist-administered vaccinations at the state and national levels may increase vaccination rates and protect the public from vaccine-preventable disease.

There are over 300,000 pharmacists across the United States (US) who are licensed and trained to administer vaccines, and over 90% of Americans live within five miles of a pharmacy.<sup>3,4</sup> Additionally, patients ranked pharmacists as the second-most honest and ethical healthcare workers, behind only nurses.<sup>5</sup> This primes pharmacists to be valuable immunizers. Approximately 28% of US adults received at least one vaccine from a pharmacy in 2017, but pharmacists can offer more.<sup>6</sup>

Although pharmacists are a great vaccination resource, other healthcare professionals have expressed concern of patients avoiding regular doctor's office visits due to pharmacist-provided vaccinations. However, evidence suggests that patients do not abandon their primary care visits after receiving immunizations at a different care setting such as a pharmacy.<sup>7</sup> Rather, pharmacies supplement other healthcare settings by providing services outside of traditional business hours, such as evenings, weekends, or holidays.<sup>8</sup> Additionally, pharmacists should leverage immunization visits to promote scheduling of well-child appointments and other primary care opportunities by recommending that each patient sees their physician at regularly scheduled intervals. Overall, pharmacists offer patients flexibility in their health choices which may improve vaccination rates.

## Key Recommendations

This paper outlines four recommendations to further engage pharmacists as immunizers in an effort to expand patient access to vaccines and increase immunization rates. These recommendations are:

- 1) Standardize vaccination-related scope of practice for pharmacists to help achieve consistent immunization offerings among pharmacies.
- 2) Leverage pharmacy-based record keeping systems to optimize the use of Immunization Information Systems.
- 3) Implement reimbursement structures that allow pharmacies to provide accessible and sustainable immunization services.
- 4) Collaborate with VFC programs to revise program requirements that hinder pharmacist participation.

**Recommendation 1:** Standardize vaccination-related scope of practice for pharmacists to help achieve consistent immunization offerings among pharmacies.

The pharmacist's ability to administer immunizations is governed by state statutes and regulations on pharmacy practice. Although many states allow pharmacists to administer vaccines, there is considerable variation in state laws that leads to inconsistent vaccine offerings among pharmacies. The number of ways in which a pharmacist can be authorized to administer vaccines introduces inconsistent vaccine offerings that may confuse or hinder patients. Depending on state laws, pharmacists may administer vaccines through a protocol, prescription order, or their legal scope of practice, which are described below.

**Protocol:** A protocol, often referred to as a standing order or collaborative practice agreement, is a way for pharmacists to administer immunizations. A protocol authorizes pharmacists to administer vaccines delegated by a prescriber according to the criteria of the protocol. Protocols may be difficult to establish between a prescriber and pharmacy as the prescriber may be prohibited from entering into an agreement by their workplace. Protocols may also include burdensome record keeping requirements for both the pharmacist and the physician. Further, protocols can be inconsistent and cause confusion for patients and prescribers. For example, one pharmacy's protocol may include influenza, meningococcal, pneumococcal, and zoster vaccines. The protocol of the pharmacy two blocks away may only allow influenza vaccines to be administered.

**Prescription Order:** A prescription order is another way pharmacists can administer immunizations. The prescription must be written by a prescriber, such as during a patient visit to the prescriber's office. This method may be cumbersome to patients who have to obtain a prescription and then go to the pharmacy to receive the immunization.

**Scope of Practice:** Pharmacists may administer vaccines per their scope of practice. In some states, pharmacists are authorized to administer vaccines per recommendations without a protocol or prescription. Other states do not allow this.

To best serve patients, pharmacists' legal scope of practice must include administering recommended vaccines to adults and children without the need for a protocol or prescription. This intervention would increase patient access to vaccinations and unify pharmacy practice, allowing pharmacists to offer and administer a consistent menu of immunizations. One study found that the introduction of a pharmacy-based immunization services resulted in significant increases in the odds of receiving a vaccination and an estimation of millions of pharmacist-administered vaccines.<sup>9</sup> This would allow pharmacists to focus on quality of care rather than the scope of their immunization authority.

**Recommendation 2: Leverage pharmacy-based record keeping systems to optimize the use of Immunization Information Systems**

Accurate and timely communication of patient immunizations between patients, pharmacists, and other health care professionals is key to team-based care. Pharmacists and other immunizers may use state-specific Immunization Information Systems (IIS) to keep track of immunizations, but these systems are only effective if they are updated in a timely and accurate manner.

The major pharmacy-specific barrier to timely reporting is the inability to seamlessly upload information into an IIS from a pharmacy record keeping system. Typically, immunization records are uploaded manually by a pharmacy staff member. Immunization records that are manually uploaded to IIS are significantly less likely to be uploaded in a timely manner compared to other data sharing methods, such as automatic upload via HL7 data sharing.<sup>10</sup> This poses a logistical dilemma for pharmacists, as their team may spend an excessive amount of time manually uploading IIS data. This also introduces the possibility of the IIS being temporarily inconsistent with a patient's actual immunization record. Further, the ability for pharmacists to leverage the IIS for assessments provides significant benefits; pharmacies that leveraged IIS records recommend an additional 1.45 vaccines per patient.<sup>11</sup>

Another underlying issue with state-specific IIS is their inability to track vaccinations on a national stage. Most states do not share patient immunization records with other states due to concerns of sharing their citizen's private health information. However, this information is essential to ensure each patient receives the vaccinations they need.

To best serve patients, there needs to be a nation-wide push to integrate individual pharmacy-based record keeping systems with their respective state's IIS. First, this integration should include auto-upload of immunization records to the IIS to ensure all records are updated in a timely manner. Next, we need to develop systems that allow bi-directional communication between the pharmacy record keeping system and an IIS. This would allow pharmacies to access a patient's immunization record through their own record keeping system and more easily recommend needed vaccines. Additionally, states should explore capabilities to share immunization data with other states to ensure all patient's immunization records are available to immunizers.

**Recommendation 3:** Implement reimbursement structures that allow pharmacies to provide accessible and sustainable immunization services

Low reimbursement rates and difficulty with insurance coverage are among the most common financial barriers to pharmacists administering immunizations.<sup>12</sup> The complexity of pharmacy reimbursement partly stems from how health plans classify immunization services.

Health plans may cover vaccines as a medical benefit, a pharmacy benefit, or both. This is true for commercial, Medicare, and Medicaid health plans. If vaccines are covered on the medical benefit, a pharmacy must develop a separate contract with the health plan to be reimbursed for immunization services. If vaccines are covered on the pharmacy benefit, the pharmacy must be contracted with the pharmacy benefit manager (PBM) to be reimbursed. To further complicate this process, a health plan may cover the vaccine product but not the administration fee,<sup>12</sup> or a plan may only cover vaccines administered at specific pharmacy locations. This can be beneficial as a cost savings measure, but also unnecessarily limits a patient's access to care. As many patients are forced to pay out of pocket or cannot pay at all, health plans effectively shift the cost of pharmacist-administered vaccinations to patients and pharmacies.

A way to improve pharmacy engagement in immunization services is to ensure that health plans cover all recommended vaccines at all pharmacies. Additionally, pharmacists should be able to seek reimbursement for both the vaccine product and its administration. This could be achieved by working with health plans to institute policy change with the goal of increasing immunization access for all patients. Consistent reimbursement policies will encourage patients to seek immunization services at pharmacies and will incentivize pharmacists to administer vaccines to more patients.

**Recommendation 4:** Collaborate with VFC programs to revise program requirements that hinder pharmacist participation

The VFC program is a valuable public utility that covers the cost of immunizations for disadvantaged children under the age of nineteen. According to the CDC, approximately 50% of children are eligible for VFC vaccines.<sup>13</sup> However, there are aspects of VFC that disincentivize pharmacists who are interested in engaging with this program. These aspects include administrative, inventory, and documentation requirements that were not designed for the pharmacy environment.

Adhering to VFC program requirements poses unique challenges for healthcare providers, including pharmacists. For pharmacies, such challenges arise due to unique workflow, staffing, and spatial needs. Essentially, a pharmacy's participation with VFC hinges on its ability to meet program requirements that were designed for non-pharmacy places of care. A review of the literature and feedback from pharmacists revealed specific VFC program requirements that pharmacists believe hinders their ability to participate:

- Some states do not allow pharmacists to participate in their VFC programs<sup>14</sup>
- Completing VFC eligibility screening each time a patient returns for a vaccination
- Retaining eligibility screening documentation for at least three years
- Segregating VFC vaccine supplies from other vaccine supplies<sup>15</sup>
- Delivering temperature log documentation to VFC<sup>16</sup>
- General difficulty meeting VFC record keeping requirements<sup>16</sup>
- Requirement to have a backup VFC coordinator on staff

Pharmacy professionals can collaborate with representatives of the VFC program to address some of these issues and create parity in the value of VFC services. The issues that should be addressed first are those that hinder pharmacies from feasibly administering vaccines to VFC-eligible patients. For example, screening for VFC eligibility each time a patient returns to the pharmacy is challenging to integrate into the workflow due to the time intensity of this repetitive service and financial investment in staff time. This requires staffing resources that are not necessary, considering that a pharmacy can document a patient's eligibility during the patient's first visit.

Further, state public health departments and immunization programs will need adequate staff resources to onboard and verify an influx of new VFC providers.<sup>14</sup> Provision of state resources should be considered as VFC programs are expanded to incorporate more immunizers.

## **Conclusion**

Pharmacists are a valuable immunization resource, primed to help bridge the immunization gap through their proximity to patients and flexible business hours.<sup>6,8</sup> However, there are barriers that prevent pharmacists from offering the most effective immunization services. Barriers include inconsistency in vaccine-related scope of practice, lack of resources to increase pharmacist proficiency with IIS, inadequate reimbursement for immunization services, and unsustainable VFC program requirements. These barriers must be addressed before pharmacists may realize their true potential as immunizers in the United States.

There are limitations to the utility of this document, including the broad nature of some of the recommendations. However, before change can be realized it is pragmatic to ensure key stakeholders in the vaccine space agree that certain issues hold significant importance to public health. These recommendations are a basis for conversation and commentary on some of the more complex issues that may spur system change to improve vaccine access and overall immunization rates.

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