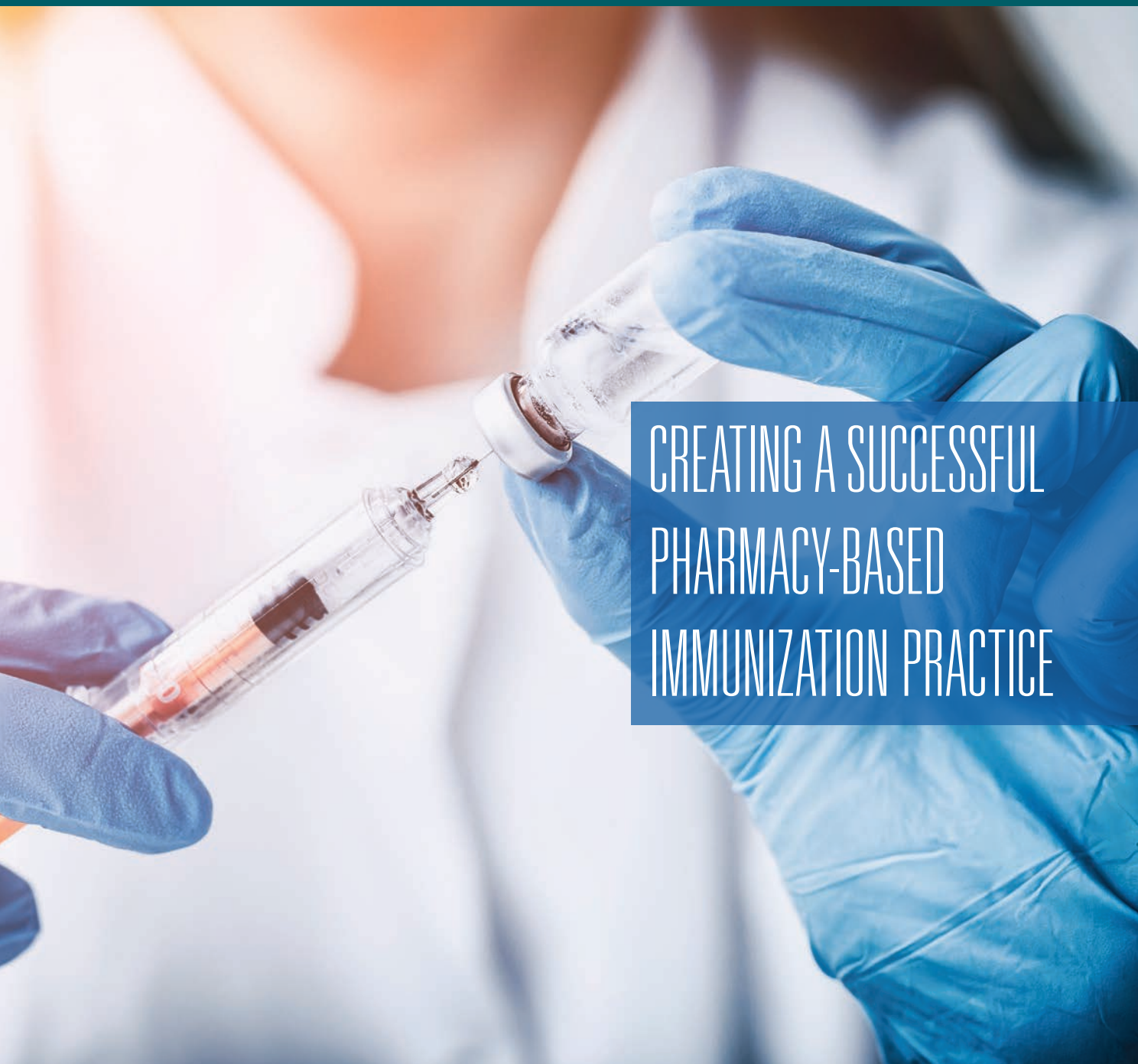


PRACTICE INSIGHTS

AUGUST 2019

GLOBAL EDITION



CREATING A SUCCESSFUL PHARMACY-BASED IMMUNIZATION PRACTICE

DEVELOPED BY THE AMERICAN PHARMACISTS ASSOCIATION



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Introduction

Pharmacists are well-positioned to deliver immunization services because of their accessibility, public trust, and high level of medication expertise and health care knowledge—and they can help improve public health by providing these services. However, the roles of pharmacists in delivering immunization services vary considerably around the world. In some countries, such as the United States, pharmacists have the authority to administer vaccines across the lifespan, and immunization services have become a routine component of pharmacy practice. In other countries, pharmacist-delivery of immunization services is less robust or not widespread, and in some others, pharmacists do not yet have the authority to administer vaccines. In these situations, pharmacists' roles may be focused on education, advocacy, and facilitating vaccine administration by other providers.

Efforts to promote pharmacy-based immunization services are important across the range of practice settings to increase vaccine access and improve immunization rates, ultimately contributing to improved public health by protecting individuals and communities from vaccine-preventable diseases. To support the expansion of pharmacy-based immunization services globally, the American Pharmacists Association (APhA) and the International Pharmaceutical Federation (FIP) partnered to conduct educational programming and convened an expert panel discussion on pharmacy-based immunizations at the 78th FIP World Congress of Pharmacy and Pharmaceutical Sciences in Glasgow, Scotland, on September 1–2, 2018. Goals of this initiative included:

- Expanding pharmacy-based immunization practice globally.

- Equipping participants with the knowledge, skills, and resources needed to establish a successful immunization practice.
- Increasing vaccine access, improving immunization rates, and protecting communities around the globe from vaccine-preventable diseases.

Educational programming consisted of APhA's Pharmacy-Based Immunization Delivery Certificate Training Program. The certificate training program included a 12-hour self-study learning activity that participants completed in advance of attending the 8-hour live seminar in Glasgow. The self-study was designed to ensure that all participants had a solid understanding of information required to implement a pharmacy-based immunization service. This program is the gold standard for immunization training in the United States and has trained more than 340,000 pharmacists.

Twenty-five pharmacists participated in the live portion of the training program and represented 19 countries, including Australia, China, Croatia, Ghana, Hong Kong, Hungary, India, Germany, Lebanon, Namibia, Nigeria, Norway, Romania, Saudi Arabia, Sweden, Tanzania, United Kingdom, United States of America, and Zimbabwe. The participants were actively engaged in this full-day program and provided very positive feedback on the value of the program. Whether currently able to administer vaccines in their countries, or planning for gaining the authority to vaccinate, the participants received the education and training necessary to become integral participants and advocates in the immunization initiatives in their countries.

Following the delivery of the APhA certificate training program,



APhA Chief Strategy Officer Mitchel C. Rothholz, RPh, MBA, facilitated an international, interprofessional panel discussion and roundtable to discuss strategies for pharmacists to use to create successful pharmacy-based immunization services and be recognized as valued members of their country's immunization neighborhood. The panelists were health care providers from countries that currently allow pharmacists to immunize, including:

- Kevin Connolly, MB, FRCPI, FRCPCH, Dip Pharm Med (physician from Ireland)
- Rita Lawlor, PhD, BNSCM RGN, RM (nurse from Ireland)
- Sara Sinclair, BPharm (pharmacist from Australia)
- Michael Hogue, PharmD, FAPhA, FNAP (pharmacist from the United States)
- Jean-Venable "Kelly" R. Goode, PharmD, BCPS, FAPhA, FCCP (pharmacist from the United States)

This session was open to all attendees of the FIP World Congress, including those who participated in the certificate training program. It began with slide presentations by Mr. Rothholz and Dr. Connolly; each of the other panelists also delivered opening remarks to provide the foundation for the discussion on pharmacy-based immunization practice in the United States and around the globe.

Pre-Program Survey

To gain insights regarding the current immunization practices of program participants and to provide direction to program planners, a survey was fielded before the conference to individuals who had registered for the certificate training program and those registered for the panel discussion and roundtable.

Survey respondents represented a variety of practice settings (n=34), including:

- Community Pharmacy: 30%
- Hospital/Institution: 18%
- Academia: 16%
- Association/Regulatory: 9%
- Managed Care: 7%
- Industry: 7%
- Other: 13%

Only about one-third of respondents were currently involved with vaccine administration; however, 59% were involved with educating the public about vaccines and 24% reported that other providers visited their practice sites to administer vaccines. Participants listed a variety of reasons for being interested in attending the certificate training program (n=41), including:

- I need guidance on dealing with challenges in implementing or growing immunization services: 37%
- I want a refresher course on immunization delivery: 37%
- I am contemplating offering an immunization service at my pharmacy: 12%
- I am looking for ways to expand my immunization services: 10%
- The program was recommended by a colleague or employer: 7%
- I received support from my organization to attend the program: 2%

Participants also indicated that they plan to engage in a variety of activities to advance the delivery of immunizations after attending the panel discussion and roundtable (n=39), including:

- Continue to stay up to date with immunization schedules and vaccine recommendations: 49%
- Work with my pharmacy professional association/society to advocate for pharmacist authority to administer vaccines: 36%
- Meet with legislators/decision makers regarding obtaining recognition, authority, and compensation of pharmacists providing immunization services: 33%
- Assess the vaccine needs of my patients and educate them regarding the importance of immunizations: 31%
- Educate other pharmacy staff and management about the benefits of offering immunizations to patients: 31%
- Consider steps that need to be taken to set up a pharmacy-based immunization service: 23%
- Implement a pharmacy-based immunization service at practice site: 18%
- Contact employer groups and other health care providers to inform them of immunization services: 8%

More than half (60%) of the survey respondents are from countries where pharmacists do not currently have authority to administer vaccines. Of those who do have the authority, 71% actually administer vaccines. Although a smaller number responded to this question (n=13), respondents indicated they have the ability to provide a variety of vaccines, including:

- Influenza: 69%

- Hepatitis B: 46%
- Hepatitis A: 31%
- Human papillomavirus (HPV): 23%
- Travel vaccines: 23%
- Meningococcal: 15%
- Herpes zoster: 15%
- Pediatric vaccines: 15%
- Tetanus, diphtheria, and acellular pertussis (Tdap): 8%
- Other: 15%

Survey respondents shared their primary challenges with delivering immunization services (n=16):

- Obtaining an authorizing prescriber to sign my protocol/standing order to vaccinate: 31%
- Gaining access to patient medical and/or immunization records: 19%
- Increasing patient demand for immunizations provided by pharmacists: 19%
- Being recognized by payers as an immunization provider: 19%
- Being recognized by other health care providers as an immunization provider: 6%
- Support from my employer and/or coworkers: 6%

Respondents also shared their primary challenge to gaining immunizing authority (n=23):

- Lack of recognition/support from legislators and public for pharmacists immunizing: 57%
- Need guidance on how to implement/provide a service: 17%
- Lack of access to training: 13%
- Difficulty in gaining physician and other health care provider support: 4%
- Lack of payer recognition or willingness to recognize pharmacists as immunizers: 4%
- Not a priority of organized pharmacy in the country: 4%



Panelist Perspectives on Advancing Pharmacy-Based Immunization Practices

The facilitated panel discussion and roundtable conducted at the 2018 FIP World Congress ensured that all panelists had the opportunity to share their experiences, insights, and perspectives on the gaps in immunization coverage, the value of improving access to immunizations through interprofessional collaboration, approaches to overcoming challenges, and steps toward effectively implementing pharmacy-based immunizations. The audience had the opportunity to ask questions of the panelists. The panelists generously shared their passion for protecting communities from vaccine-preventable illness and inspired the attendees to do the same.

There are several factors to consider when advocating

for pharmacists to provide immunizations. Some contributing factors and questions to answer include:¹

- *Community need:* What are the current vaccination rates and public health needs of the community that pharmacists could affect? How can pharmacists help address access issues?
- *Needs of other health care professionals:* What are the gaps and challenges that pharmacists could assist in addressing?
- *Patient perspectives:* What are the challenges that patients experience in obtaining desired vaccinations that pharmacists could address? How comfortable are patients with getting vaccinated by trained pharmacists?
- *Pharmacists' knowledge and ability:* What knowledge do

pharmacists currently have and what additional training is necessary? Could a small group of pharmacists be trained before seeking authority and have these pharmacists engage with other providers to advance immunization efforts in the community before seeking authority on a broad scale?

The expert panelists representing Australia, Ireland, and the United States shared their learnings from participating in the development of pharmacy-based immunization services and they provided additional insights on strategies that pharmacists can use to advance immunization services in other countries by addressing these and other factors. The information presented in this report is based on



the insights that were shared by the panelists during the FIP program and in follow-up interviews with the panelists from Ireland and the United States.

Making the Case for Pharmacists

When starting an immunization service, a critical first step is gaining the legal authority to administer vaccines. A key factor in gaining support for pharmacists to deliver immunizations is the dramatic benefit of vaccines for public health. Because vaccination rates are suboptimal in many countries, particularly for adult vaccines, there is an obvious public health need for increased emphasis on vaccinations across the lifespan. “I am a firm believer in the value of vaccines and their health benefit,” remarked Dr. Connolly, the physician panelist from Ireland. “I see pharmacists as highly regarded health professionals who can contribute to improving public health and they can provide immunization services that meet patients’ needs.”

Panel experts recommend that pharmacists examine immunization shortfalls existing within their own country and communities.

Identifying gaps and proposing pharmacy-based immunization services to address the gaps can be a persuasive argument for gaining authority. International data regarding immunization and disease rates is available from the World Health Organization (see Resources). Pharmacists can also contact the organization responsible for tracking health data in their country (e.g., the Ministry of Health) to obtain more detailed country-specific data. However, in some instances, national data on rates for all pertinent vaccines or infectious diseases may not be available. In these cases, pharmacists can consider contacting local health departments or other authoritative groups to research information about local disease transmission patterns. National associations of pharmacists or other health professionals may also be useful sources of this information.

Powerful evidence supports that the implementation of vaccination programs saves lives and that achieving optimal immunization rates is a public good. Data about immunization rates and disease transmission can be used to make the case for the need to have more immunizers in general as well as

to identify which vaccines might be a focus for pharmacists as immunizers. Additionally, ample data from the United States demonstrate the beneficial impact of immunization campaigns on vaccination rates and show that granting pharmacists authority to administer vaccines results in improved vaccination rates. “Look at the needs in the country and community that you are in and use these data to demonstrate the public health need for pharmacists as immunizers,” advised Dr. Goode, the pharmacist panelist from the United States.

“Look at the needs in the country and community that you are in and use these data to demonstrate the public health need for pharmacists as immunizers.”

Jean-Venable “Kelly” R. Goode,
PharmD, BCPS, FAPhA, FCCP

Global vaccination campaigns have primarily focused on pediatric vaccines rather than adult vaccines. As a result, pediatric vaccination rates are generally higher than adult vaccination rates. Pediatric vaccinations also may be considered an important component of primary care providers’ wellness practices for their patients. Therefore, it is generally easier for pharmacists to demonstrate that there is a need for the administration of adult vaccines. On the other hand, some countries have a severe shortage of health care providers, and there could be a greater need for additional health care providers to focus on both adult, adolescent, and pediatric vaccines. In these countries, pharmacist involvement with pediatric vaccine campaigns can

National Examples of Successful Pharmacy-Based Immunization Services

United States

Pharmacy-based immunization services in the United States began to develop in the 1990s. The American Pharmacists Association (APhA), which is the leading national professional association of pharmacists, played a critical role in supporting the development of these services. In 1996, the APhA House of Delegates adopted policy calling on pharmacists to assume at least one of three roles: educator, facilitator, or immunizer. In addition, APhA developed and adopted Guidelines for Pharmacy-Based Immunizations to support these services. The organization's support for immunizations continued to grow in subsequent decades.

APhA incorporated immunizations as a critical component of the organization's strategic plan that resulted in its inclusion across all aspects of APhA's work. APhA also provided tools to pharmacists to assist in implementation of immunization services and worked with the U.S. government's largest payer for health care (i.e., Medicare) to have pharmacists recognized and compensated as immunization providers, like other health care providers who immunize patients. Health care providers in the United States are regulated at the state level rather than the national level. Therefore, authority for pharmacists to administer vaccines must be approved by each state or territory. To address this situation, APhA worked with state pharmacy associations to expand scope of authority for pharmacists related to immunization activities, and state-level changes advanced. By 2009, the year of the H1N1

influenza pandemic, pharmacists with appropriate training in all 50 states and U.S. territories had the authority to administer at least one type of vaccine.

When states first authorized pharmacists to provide vaccination services, many placed limits on this authority. For example, some states limited pharmacists' authority to certain types of vaccines, required patients to have a prescription from another health care provider to receive a vaccination from a pharmacist, or restricted pharmacists' authority to immunize patients only older than a specified age or pursuant to a protocol with a prescriber.

As pharmacy-based immunization services expanded and were proven to be safe and effective, many of these restrictions have been eased, although some remain. As of April 2019, pharmacists have varying authority and processes to administer any vaccine (if they are appropriately trained to do so) in all states and territories except two. In some states, pharmacists may administer any vaccine to any appropriate patient. In other states, restrictions limit the vaccines that can be administered by pharmacists or set age limits so that pharmacist can immunize patients who are at least a certain age. Additionally, in some states, pharmacists must obtain a prescription prior to administering certain types of vaccines. Currently, more than 340,000 pharmacists in the United States have been trained to administer vaccines across the patient lifespan by completing APhA's Pharmacy-Based Immunization Delivery Certificate Training Program.

Ireland

Ireland's national professional association of community pharmacists, the Irish Pharmacy Union, played a pivotal role in advocating for pharmacists to administer vaccines. During the 2009 H1N1 influenza pandemic, the organization approached the Irish Department of Health to allow pharmacists to administer vaccines. This initiative led to the approval of pharmacists to administer influenza vaccine to adults in 2011. In 2015, the law was amended to allow pharmacists to also administer pneumococcal vaccine and herpes zoster vaccine. Trained pharmacists may supply and administer influenza vaccine at registered pharmacies without the need for a prescription. Pharmacists must participate in an initial training program and participate in refresher training every 2 years.

Two of the main barriers to improving immunization rates in Ireland are (1) perceived lack of opportunity for vaccine-hesitant people to discuss their concerns and (2) access to vaccination sessions "out of hours." Pharmacists are well-suited to address both of these issues. Today, 10% to 15% of influenza and pneumococcal vaccines given to adults in Ireland are provided by pharmacists. This development has expanded the overall number of vaccines administered and has not reduced the number of vaccines given by physicians.

Vaccines in Ireland are funded by the government for eligible high-risk patients, and other vaccines are paid for by patients.

be essential for promoting public health. Pharmacists should assess the specific needs in their country and then develop a plan to advocate to meet those needs. Pharmacists can assume one or several roles—educator/advocate, facilitator, and immunizer—to advance their country’s efforts across the lifespan, including childhood, adolescent, and adult vaccines.

The accessibility of pharmacists and convenience for patients are key reasons for utilizing pharmacists to administer vaccines. Pharmacists are often available during evening hours, weekends, and holidays, and generally they do not require patients to schedule an appointment in advance. Particularly in rural and remote areas, it may be much easier for patients to travel to a pharmacy than to distant health care centers. According to Dr. Connolly, “Two of the main barriers to improving immunization rates in Ireland are perceived lack of opportunity for vaccine-hesitant people to discuss their concerns, and access to vaccination sessions ‘out of hours.’ Pharmacists can address these barriers.”

In addition to their accessibility and medication expertise, enlisting pharmacists in immunization services can be an efficient use of health care providers by allowing physicians and other primary care providers to focus their efforts on other patient needs.

According to Dr. Hogue, a pharmacist panelist from the United States, “In countries where storage and handling of vaccines is a concern, pharmacists are often the ones who can correctly store vaccines. This ability of pharmacists is a real advantage to the health care system.”

Collaborate, Collaborate, Collaborate

The immunization experts comprising the panelist noted that an organized multi-year

advocacy effort with legislators and regulators is sometimes required to gain, maintain, and/or expand authority. They emphasized the value of collaborations in advancing immunization services and passing favorable laws and regulations; they also observed that non-pharmacist advocates can have a powerful impact. Developing relationships with national organizations and decision makers, other health care providers, and immunization coalitions (where available) is critical for advancing pharmacists as immunizers, expanding vaccine access, and improving immunization rates.

In 2012, APhA coined the term “immunization neighborhood” to refer to a community of immunization stakeholders that collaborates, coordinates, and communicates to meet the immunization needs of patients and protect the community from vaccine-preventable diseases. Central to this approach is the patient, with providers of care focused on serving patient and community needs. The approach could be used for any patient care area and works effectively in developing a team approach to immunizations. Pharmacists who form relationships around supporting immunization efforts can develop immunization neighborhoods in their community.

National Organizations and Decision Makers

Most countries have a national organization or association of pharmacists that represents the profession. Contacting and collaborating with that organization is an effective strategy for leveraging existing relationships and building new ones. The national professional association is well positioned to approach entities in the country that have decision-making authority over the practice of pharmacy as well as immunizations and infectious disease issues. Such entities could

include legislative bodies, regulatory bodies, health departments or ministries, and other health professional societies. Connecting with the national organizations that represent pharmacy is an effective strategy when seeking to initiate or develop any pharmacy-based service and facilitate collaborations with other groups. In addition to national organizations, engagement of state and local professional and regulatory organizations is important as well. These entities may have influence on practice authority. Gaining support within the profession is critical to developing a unified advocacy approach on behalf of the profession.

Other Health Care Providers

It is also important for pharmacists to develop collaborative working relationships with other primary care providers, such as physicians and nurses, and with patient advocacy groups. Receiving support from these organizations and individuals is valuable both when working with decision makers to grant pharmacists authority and for supporting the development of services once authority is granted. According to Mr. Rothholz, “If the stakeholders are focused on protecting the public from vaccine-preventable diseases, then collaboration, coordination, and communication among the patient’s health care team is crucial, and concerns about who administers the vaccine are lessened.”

Pharmacists with experience initiating immunization services report having strong working relationships with other health care providers as a result of previous collaborations to address patient care. “Getting to know other health care providers personally and acting as a knowledgeable resource can serve as the foundation for collaborations and support for implementing a new service,” noted Dr. Goode.



Pharmacists should seek to form relationships with prescribers who treat patients who visit the pharmacy. Experts recommend that pharmacists start by introducing themselves and asking what they could do to help. When preparing to approach physicians, it is helpful to investigate their current patient population and seek information about their current immunization priorities to determine how the pharmacy's services could complement their existing activities. In particular, health care providers who are concerned with meeting established patient care quality measures might welcome pharmacists' assistance in meeting those metrics.

Once pharmacists start demonstrating that they can be helpful and are willing to do what needs to be done, the other providers will begin to value the pharmacist's role as part of the health care team and start to rely

on pharmacists for additional tasks. Having good working relationships with providers who recognize pharmacists' knowledge and expertise forms the foundation for having potential partners who will support pilot programs and implementation of new programs.

Immunization Coalitions

Collaborations are important for driving efforts to communicate with the public about the value of vaccines. Some countries have immunization coalitions—such as

the Immunization Action Coalition in the United States (see Resources)—which act as essential sources of information about immunizations and can champion the role of pharmacists in immunization services. Additionally, local and regional coalitions of health care providers who are committed to promoting vaccinations operate on a more limited level. These coalitions help bring community stakeholders together to focus on a public health need by increasing immunization rates and preventing disease in

“If the stakeholders are focused on protecting the public from vaccine-preventable diseases, then collaboration, coordination, and communication among the patient's health care team is crucial, and concerns about who administers the vaccine are lessened.”

Mitchel Rothholz, APhA Chief Strategy Officer



their communities, states, and/or countries.

Many countries lack an immunization coalition and rely on global vaccine advocacy efforts that are coordinated by the World Health Organization (WHO). If no coalition is currently active, pharmacists could spearhead efforts to initiate one to support consistent messages about vaccines. This is important because “consistent messages are important for successful vaccination campaigns,” noted Dr. Lawlor, the nurse panelist from Ireland. Although such activities can be challenging because funding may be required to operate an effective organization, coalitions often start with small groups of multidisciplinary volunteers. However, their impact may be limited by the scope of their skills and resources and a sustained effort over time is needed for

maximum impact.

Identifying and collaborating with public health organizations, as well as the national health department or ministry, could be an effective strategy for garnering ongoing support for pharmacists and could potentially provide access to resources. For example, in Ireland, the national messaging campaign encourages patients to receive vaccines from doctors or pharmacists. Dr. Lawlor said, “This consistent messaging and collaboration is important for communicating that the pharmacist is a trusted source of vaccines.”

Training to Administer Immunizations

A training program to administer vaccines is a generally accepted practice to ensure that pharmacists

have the necessary knowledge and skills to provide immunization services appropriately. Pharmacists are generally required to receive initial training about vaccines. In some countries, pharmacists may also be required to participate in regular continuing education about vaccines. Expert panelists

“This consistent messaging and collaboration is important for communicating that the pharmacist is a trusted source of vaccines.”

Rita Lawlor,
PhD, BNSCM RG, RM

emphasized the need for a training program that will appropriately prepare pharmacists to administer vaccines when implementing immunization services. In addition, engagement as an immunization provider requires ongoing education and training as vaccine recommendations, schedules, technology, and other concerns are ever changing. Pharmacist organizations should develop and maintain pharmacy-based immunization guidelines, consistent with recognized existing guidelines for other health professions, that articulate expectations of pharmacists engaged in immunization activities. (see *Resources on p. 13*)

In most cases, student pharmacists in the United States receive training to administer vaccines as part of their pharmacy school curriculum. In other countries, pharmacists must participate in a post-degree training program. The training

should include information about disease patterns in their country, immunology and vaccines, injection technique, bloodborne pathogens, and practice management.

The training should prepare pharmacists to locate the immunization recommendations for their country and apply them in the delivery of patient care. Many countries follow the WHO recommendations for routine immunization (see *Resources*).

Vaccination training should ensure that the pharmacist learns the skills necessary to administer the vaccine correctly and to manage emergency situations (e.g., cardiopulmonary resuscitation training). Practice management aspects of training should include ordering vaccines and inventory management, vaccine storage, and operational considerations such as workflow and roles of each pharmacy team member, regulatory and documentation requirements, and how to market the service.

Starting an Immunization Service: Practice Management Considerations

Once pharmacists receive authority to administer vaccines and participate in appropriate vaccine administration training, they must take a number of steps to prepare to implement a service in their practice.

Selecting Vaccines to Administer

Expert panelists recommended that pharmacists start their services with influenza vaccine. Countries typically first grant pharmacists the authority to administer influenza vaccine. However, even when pharmacists have the authority to administer multiple vaccines, the panelists recommend that pharmacists start with the administration of a single vaccine, rather than attempt initially



to implement a comprehensive immunization service.

Patient demand for influenza vaccine is typically robust and can establish the pharmacy as a location for patients to receive vaccines. Starting with a single type of vaccine allows the pharmacy to develop relationships, marketing strategies, and processes for evaluating patients, implementing vaccines in the pharmacy workflow, billing, ordering, and storage. Once pharmacists gain experience and confidence with influenza vaccine, they can expand their services to meet the needs in their community, as allowed by law. The training pharmacists receive should cover the patient's lifespan to allow pharmacists to expand their vaccine offerings, meet community needs in a timely manner, and help their public health entities educate the public.

Pharmacy Support Staff

Obtaining the support of the pharmacy staff is important to the success of the service. Pharmacy support staff require training on the purpose of the vaccination service and the public health goals associated with the delivery of the service as well as the individual benefits that patients and the community will experience. They also should be trained regarding proper vaccine handling and management along with expectations of their roles so that they are prepared to support the operations of a vaccination service. For example, when influenza vaccine becomes available in the pharmacy each year, pharmacy support staff can be trained to ask every patient who picks up a prescription whether they have had their flu shot yet. "Pharmacy personnel should also 'walk the walk' and receive recommended vaccinations, and where

appropriate, inform patients that they have received the vaccinations recommended," noted Mr. Rothholz.

Documentation

Determining how administered vaccines will be documented is another important consideration. An immunization record that is accessible to all health care providers is useful for identifying unmet vaccination needs while helping to avoid duplicated vaccines. For example, some countries have national or state-level immunization registries (sometimes called immunization information systems [IIS]) that are a centralized tool for maintaining patients' immunization records. Ideally, these systems are accessible to all providers of care for patients.

"Pharmacists should investigate processes that are currently in use to record vaccinations in their country and work to integrate themselves within existing systems,"



advised Dr. Hogue. If a registry exists in the country, pharmacists should work to obtain read/write access to the system so that they can evaluate patient vaccine needs and record any vaccines that are administered. Pharmacists should also research and implement any country-specific regulations and requirements. These registries also help address provider concerns about coordination of care.

If there is no national registry, pharmacists should record the vaccine in the pharmacy's records and record it on an immunization card or similar document for patients to carry with them. In some countries, it is common for patients to carry a personal immunization card. Any vaccines that are administered should be recorded on the card. Patients should be educated about the importance of maintaining vaccine records over their lifespan and instructed to keep their card in a safe place.

Documentation of the vaccination should also be sent to the patient's primary care provider, if known. For medical providers who are compensated on meeting established immunization quality measures, obtaining this documentation helps them to achieve the measures and positions pharmacists as a collaborating team member versus competition.

Finally, pharmacists can contact the national body regulating health care (e.g., the Ministry of Health) to advocate for the creation of a registry as a tool for advancing immunization efforts and improving efficiency by potentially reducing duplicated vaccines.

Payment

For a service to be successful, pharmacists must receive payment for administering vaccines. Countries have a variety of mechanisms for paying for health care services. In some cases, there is a single national payer and

once services are authorized, it is relatively straightforward to obtain payment. In other cases, obtaining payment may be more challenging.

Regardless of payment structures, pharmacists should carefully investigate the process and ensure that all requirements are met when preparing to implement an immunization service. Additionally, pharmacists should investigate whether they will be paid a single fee or paid separate amounts—one to reimburse for the cost of the vaccine and another to compensate for the administration of the vaccine. In situations where patients are expected to self-pay for vaccines, costs should be clearly communicated to the patient and payment collected before administering the vaccine. For more expensive vaccines, determining and communicating to the patient about payment coverage and out-of-pocket costs prior to preparing the vaccine for administration will help avoid frustration and vaccine wastage.

Storage and Handling

Maintaining the cold chain is essential when managing vaccines because they must be kept at specific temperatures. Panelists observed that pharmacists have experience with medication management and are generally adept at implementing these requirements, which supports pharmacist engagement in this area. Pharmacists who are implementing immunization services should investigate both manufacturer recommendations and any country-specific requirements regarding storage and handling. For example, a separate refrigerator and/or freezer and regular monitoring of temperatures may be required for storing vaccines.

When working with needles, pharmacists must follow universal precautions for infection control. Plans for appropriate disposal of

used needles are needed and must comply with national requirements.

Patient Communication About Immunization Services

In general, pharmacists receive a high level of trust throughout the world. Initially, some patients may be hesitant about receiving a vaccine from a pharmacist. However, as more pharmacists become trained and offer the immunization service, more patients experience the benefits of the service, patient comfort levels increase, and trust is established over time. "As services mature and become widespread, it becomes a patient expectation that vaccines will be available for administration in the pharmacy," observed Dr. Hogue.

"As services mature and become widespread, it becomes a patient expectation that vaccines will be available for administration in the pharmacy."

Michael D. Hogue,
PharmD, FAPhA, FNAP

Lack of awareness of vaccination needs and hesitancy to receive vaccines contribute to suboptimal immunization rates in adults in many countries. As trusted medication experts who are accessible to patients, pharmacists are well-positioned to educate patients about their vaccine needs and help to counter myths and misperceptions that some patients may harbor about vaccines. "Because pharmacists receive more training about vaccines than most other health care providers, they are often seen as the immunization



expert in the community,” observed Dr. Goode. “Pharmacists are very effective at overcoming vaccine hesitancy,” concurred Dr. Connolly.

Having a unified message regarding vaccines and promoting it through a variety of patient education channels by all health care providers are strategies recommended by experts. Partnering with other health professionals and national health entities is also an effective strategy for developing and promoting consistent messages and improves efficient use of resources.

In addition to public education campaigns, integrating vaccination services into all patient care processes is an effective strategy for educating patients about immunizations. For example, patient health history/intake forms can include questions about prior immunizations. An example of

strategies and other information for integrating immunization services is available in the JCPP Pharmacists’ Patient Care Process (see *Resources on p. 13*).

Expanding Vaccine Offerings

Pharmacists should embrace the authority to administer vaccines when it is granted and commit to demonstrating their value to public health and team-based care. Successfully accomplishing these elements will support expansion of immunization authority and will attract non-pharmacist advocates for pharmacists’ expanded roles. As the community becomes comfortable with the pharmacist as a source of vaccinations, authority may be expanded to include other vaccines and patient care activities.

“When seeking to advance

authority and vaccine offerings, evidence of a successful vaccine service can support arguments for expanding services,” said Dr. Goode. When seeking authority to administer additional vaccines, it is important for pharmacists to investigate disease trends and immunization rates in their country and community in order to demonstrate the need for additional

“I see pharmacists as highly regarded health professionals who can contribute to improving public health and they can provide immunization services that meet patients’ needs.”

Kevin Connolly, MB, FRCPI,
FRCPCH, Dip Pharm Med

services. Available data indicate that expanding the number of immunizers improves vaccination rates and therefore is a benefit to public health.

In some cases, immunization services may be limited by legislative and regulatory barriers. There are numerous approaches to obtaining expanded immunization authority ranging from authority coming from a law or regulation, to the authority being delegated from a prescriber via a protocol or prescription. Evidence of safe and effective practices can be useful when advocating to have these restrictions eased or lifted. As services grow, pharmacists should continue to seek authority to administer all recommended vaccines as valued members of the health care team and to position themselves as knowledgeable and valued health care providers working to improve public health and access.

“When seeking to advance authority and vaccine offerings, evidence of a successful vaccine service can support arguments for expanding services.”

Jean-Venable “Kelly” R. Goode,
PharmD, BCPS, FAPhA, FCCP

Receptivity to expanded authority is typically greater for adult vaccines such as pneumococcal, herpes zoster, Tdap/Td, HPV, hepatitis A, and hepatitis B. From there, based upon the needs of the community

and existing vaccination rates, pharmacists can impact adolescent and childhood immunization rates or improve access to pre-travel vaccines. Pharmacists should assess the public health challenges that communities are facing and explore how pharmacists and pharmacies can increase public education and access to immunizations to meet these challenges.

Notably, an influenza vaccine service not only supports expansion of vaccination services, but a successful pharmacy-based immunization service can act as a springboard to support the development of other pharmacy-based patient care services. These services can elevate the status of the pharmacy profession and make others increasingly aware of the potential for pharmacists to positively impact public health. Dr. Goode observed that, in the United States, “The immunization movement has enabled pharmacists to be more confident and comfortable working with patients and this has led to the development of many other patient care services and has elevated the profession.”

Summary

Immunizations are a year-round patient care activity and pharmacists’ unique combination of attributes—knowledge, skills, public trust, and accessibility—make them ideal providers of comprehensive immunization services. Achievement of this vision typically takes time, development of strategic partnerships, and a demonstration of the value of pharmacist engagement in this critical area of health care.

Reference

- 1 International Pharmaceutical Federation. *An overview of current pharmacy impact on immunisation. A global report*. 2016. Available at: <https://www.fip.org/file/162>. Accessed July 23, 2019.

Resources

American Pharmacists Association

JCPP Pharmacists’ Patient Care Process

www.pharmacist.com/sites/default/files/Pharmacists%20Patient%20Care%20Process%20Module%20for%20Immunizations%20Services%20-%20FINAL.pdf

Guidelines for Pharmacy-Based Immunizations

https://www.pharmacist.com/sites/default/files/files/Guidelines_for_Pharmacy_Based_IMZ_Advocacy_Approved_Jan_26_2019.pdf

Immunization Action Coalition Advocacy and information on vaccines and increasing immunizations

www.immunize.org

World Health Organization International data on immunization and disease rates

www.who.int/immunization/monitoring_surveillance/data/en/

Recommendations for routine immunization

www.who.int/immunization/policy/immunization_tables/en/



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