The Role of Pharmacies

CHAPTER 8
Introduction

The number of pharmacies providing immunizations to adults has been increasing since the 1990s, and as of 2019 all 50 states allow pharmacists to administer vaccines to adults.¹ Pharmacies are familiar, convenient, and accessible immunization venues for adults, and have the potential for expanding immunization access to children and adolescents. State laws vary in age and other restrictions regarding administration of vaccines to children and adolescents.

Allowing pharmacies to participate in the Vaccines for Children (VFC) program has the potential to increase coverage rates, especially in populations who have reduced access to immunizations or those who would not seek care or interact with traditional health care providers who offer vaccination. Despite these benefits, pharmacy participation in the VFC program is low. Certain barriers to including pharmacies in the VFC program include concern from the pharmacies’ perspective relating to the volume of work needed to comply with VFC program requirements and billing and reimbursement differences with private insurance and/or Medicaid. Concerns from the VFC perspective include lack of standardization in immunization information system (IIS) reporting by pharmacies, and adherence to the strict vaccine storage and handling requirements.² Immunization Programs interact with pharmacies in ways other than VFC enrollment to help increase awareness of vaccines and improve coverage rates. Immunization Programs can share information about recent changes in Advisory Committee on Immunization Practices (ACIP) recommendations and requirements or other educational resources, work with pharmacies related to pandemic influenza preparedness, encourage pharmacies to share data with the IIS, and many others.

The activities highlighted in this chapter relate to pharmacies:

- **Getting Started:** Piloting expansion of VFC enrollment to pharmacies (Michigan)
- **Moving Forward:** Enrolling pharmacies in the VFC program (Nevada)
- **Taking It to the Next Level:** Evaluating impact of a new pharmacist vaccination law (Oregon)


National Resources: The Role Pharmacies

APhA HPV Immunization: Pharmacist Resource Center
A resource compiled by the American Pharmacists Association (APhA) and the National Association of Chain Drug Stores (NACDS) to support pharmacists’ activities, as part of the immunization neighborhood, focused on increasing public awareness, access to, and administration of HPV vaccine.
http://hpv.pharmacist.com/?dfptag=imz

American Pharmacists Association
State Pharmacy Laws - Pharmacist Administered Vaccines. (July 2016):

ASTHO Report
Key Considerations for Pharmacies and the VFC Program: Summary of Interview and Survey Findings (September 2015).

Pharmacist Vaccination Laws
A dataset, with maps, that explores laws that give pharmacists authority to administer vaccines, and laws that establish requirements for third-party vaccination authorization, patient age restrictions, and specific vaccination practice requirements, such as training, reporting, record-keeping, notification, malpractice insurance, and emergency exceptions (Jan. 1, 2016).
http://lawatlas.org/datasets/pharmacist-vaccination

American Immunization Registry Association
http://repository.immregistries.org/files/resources/5835adc2a9a72/survey_of_immunization_reporting_to_immunization_information_systems_by_major_u_s__pharmacies_.pdf

How Immunization Programs Collaborate with Pharmacies on Adolescent Vaccination Initiatives (n=54)*

- Share information and materials with pharmacies: 26
- Discussed topics with pharmacy board: 16
- Pharmacies enter data into IIS: 34
- Exchange data between Immunization Program and pharmacy: 27

Number of Immunization Programs Enrolling Pharmacists as VFC Providers (n=53)*

- Yes: 9
- No: 44

*Data from the 2017 AIM Annual Survey: 55 of 64 Immunization Programs responded to the survey.
Overview of activity
The Michigan Department of Health and Human Services (MDHHS) Immunization Program piloted expansion of VFC enrollment for pharmacies in areas where access for adolescent vaccination was limited.

Ages targeted
All adolescents (and young adults)

Background/impetus for the activity
While considering ways to increase access to vaccines for adolescents, the Program wanted to explore the idea of pharmacists enrolling as VFC providers in areas with a limited number of vaccine providers. At the time, the Michigan Medicaid program (ie, the Medical Services Administration, or MSA) allowed reimbursement to pharmacies only for influenza vaccine administered to Medicaid-enrolled adults. The Program initiated discussions with MSA regarding expanding pharmacist administration of vaccines; this would require MSA to reimburse pharmacies for administration of adolescent vaccines and for the pharmacies to obtain vaccines through the VFC program. MSA’s pharmacy provider liaison group also encouraged MSA to allow pharmacists to bill Medicaid for vaccines.

Description of activity
Effective June 1, 2015, MSA announced a Medicaid policy allowing reimbursement to pharmacies for administration of all ACIP-recommended vaccines to individuals age 19 and older, including HPV vaccine for both males and females through age 26. In addition, a provision was included for adolescents age 11 to 18, whereby pharmacy providers selected by the MDHHS could enroll in VFC to provide vaccines to Medicaid-enrolled adolescents. Per this new Medicaid policy, selection into the VFC program was to be based on location in underserved areas and ability to meet the VFC program’s requirements.

To identify candidate pharmacy providers, the Immunization Program asked its local health departments (LHDs), which are responsible for VFC providers in their jurisdiction, to identify pharmacy providers in geographic areas of need with whom they had an established relationship. To reduce the burden on LHD staff for enrolling pharmacies in VFC, a state-level field representative was responsible for VFC enrollment activities for any selected pharmacies.

An initial pharmacy provider was identified and enrolled in VFC. Subsequently, once this provider started billing Medicaid for vaccines administered, the Program learned that the new Medicaid policy allowed reimbursement for vaccine administration only for Medicaid beneficiaries enrolled in fee-for-service (FFS), not those enrolled in Medicaid managed care plans. Nearly all Medicaid enrollees age 18 and under are enrolled in managed care plans, making the reach of this policy unexpectedly very limited. Once the Immunization Program learned the pharmacy policy applied only to Medicaid FFS, the Program went back to its
MSA contacts to make the case for including Medicaid managed care. These contacts then went to their administration, which rejected expansion of the policy in order to keep Medicaid managed care enrollees in their medical homes.

**Role of Immunization Program and other agencies/groups involved**
The Immunization Program initiated discussions with MSA about the expansion of VFC to pharmacy providers, and helped a state-assigned representative with VFC enrollment tasks. LHDs were responsible for identifying candidates for VFC enrollment among pharmacy providers in their jurisdiction.

**Dissemination**
The Immunization Program communicated with LHDs about the new Medicaid policy and requested they identify any potential candidate pharmacies for VFC enrollment. Enrollment activities were handled by a state-level field representative to eliminate overburdening the LHDs.

**Intersection with other program activities**
In January 2016, the Immunization Program created a two-page information sheet to educate pharmacists about HPV vaccination in Michigan. The Michigan Pharmacy Association (MPA) distributed the information sheet to its members via their electronic newsletter. MDHHS sent the sheet to key immunization stakeholders, presented the information at partner meetings and posted it on its website.

**Funding**
The Program’s work on this activity was funded through its regular cooperative agreement with CDC.

**Staffing**
The Immunization Program Manager and Education and Outreach Section Manager were involved with this activity, such as interfacing with MSA and the LHDs. A field staff person conducted the VFC enrollment activities for the one pharmacy provider that was enrolled.

**Implementation status**
The Medicaid policy remains in place. Given the limitations of this policy, and lack of LHD identification of other potential pharmacy provider candidates, the Immunization Program has not pursued VFC enrollment of any additional pharmacy providers.

**Successes**
- The one VFC-enrolled pharmacy continues to participate in the VFC program, at its own cost, despite the major policy limitation. The pharmacy is a local, independent hometown pharmacy that was already a community vaccinator. They chose to continue their
participation in VFC and offer adolescent vaccines with the understanding that they would most likely lose money. Since enrolling in 2015, they have administered 18 doses of HPV, 14 doses of influenza, 18 doses of Tdap, 22 doses of MCV4, and six doses of hepatitis A vaccine. They even offer extended hours for parents to allow them an opportunity to have their adolescents vaccinated. The MDHHS considers them to be a great vaccination partner. The Program continues to allow them to re-enroll and has not had any VFC compliance issues with this pharmacy.

Challenges
- When the Immunization Program first began to explore the option of enrolling pharmacies in VFC, it ran into opposition from the state chapter of the AAP and the School Community Health Alliance of Michigan (SCHA-MI). Their position was that adolescent vaccination should happen in the medical home; the Program’s counterargument was that sufficient vaccination was not happening in the medical home, especially in areas of geographic need, and that additional points of access could help improve adolescent vaccination rates, especially for HPV vaccine.
- Given the very low proportion of Medicaid beneficiaries enrolled in FFS in Michigan, pharmacy providers participating in VFC would be unable to bill Medicaid for vaccine administration fees for most Medicaid-enrolled adolescents.
- Before the limitations of Medicaid’s policy were understood, some pharmacy representatives were advocating for very broad pharmacy enrollment in VFC (e.g., all pharmacies in the state, all branches of a particular retail chain). However, the Immunization Program contracts with its LHDs to conduct VFC compliance visits and oversee VFC compliance, which would be impossible for them to manage for all of the large “big box” pharmacies. MDHHS would have to determine an alternative way to manage the influx of thousands of chain pharmacies into the VFC program.

Other lessons learned/Advice to other programs
- Other programs may have more success with enrolling pharmacies as VFC providers, if they have a much larger proportion of Medicaid beneficiaries enrolled in FFS or their Medicaid program allows reimbursement for vaccine administered to adolescents enrolled in Medicaid managed care plans.

Relevant resources

For more information
Contact Terri Adams, RN, BSN, MM, Education and Outreach Section Manager, at (517)284-4872 or adamst2@michigan.gov.
Overview of activity
The Nevada Department of Health and Human Service Immunization Program enrolled pharmacies in the VFC program in response to a new state Medicaid requirement.

Ages targeted
All adolescents

Background/impetus for the activity
Effective April 17, 2012, the Nevada Medicaid and S-CHIP (called Nevada Check Up) programs began allowing reimbursement to pharmacies for administration of adult and childhood vaccines. Pharmacies were required to enroll in VFC to obtain vaccine product (at no cost to the administer), which was to be offered to Medicaid/Check Up enrollees age 18 and younger.

Description of activity
In response to this policy, the Nevada State Immunization Program (NSIP) contacted several pharmacies about participating in VFC. Interest was limited, but included a local, independent pharmacy in southern, rural Nevada, and several stores from a national retail pharmacy company.

The pharmacy in southern, rural Nevada enrolled in VFC in part to address health care provider shortage issues in that area of the state and has been the main vaccine provider in that area. This provider successfully participated in VFC for about 5 years, but recently dropped out when its ownership changed.

NSIP worked with the national pharmacy company to select several stores in zip codes serving lower income individuals that also had buy-in among staff, most of which were in urban Clark County (Las Vegas). The stores operated as “specialty providers” under VFC, and the focus of their participation was to serve as an access point for adolescents. The stores stocked HPV, MenACWY, and Tdap vaccines, and influenza vaccine in season; a few stores also stocked varicella and MMR vaccines. Several issues arose during their VFC participation—including conflict/duplication between VFC and corporate requirements (eg, for temperature logs), turnover among retail pharmacists, and confusion regarding Medicaid billing and reimbursement (eg, FFS vs managed care policies). The NSIP determined the stores were not using their VFC vaccines because store staff said they were not receiving Medicaid reimbursement for adolescent vaccines. After participating for about 1.5 years, the pharmacy chain dropped out of VFC, and the NSIP redistributed its remaining doses of VFC vaccines to other VFC providers.

Role of Immunization Program and other agencies/groups involved
NSIP worked closely with its immunization coalition (Immunize Nevada) to initiate and implement this activity.
Dissemination
NSIP communicated directly with pharmacy providers about the option of enrolling in the VFC program. NSIP was familiar with several pharmacy providers from H1N1 response activities. In addition, the Nevada Board of Pharmacy disseminated information to its members and facilitated teleconference Q&A calls between its members and NSIP.

Intersection with other program activities
NSIP/Immunize Nevada produced an educational handout to give parents at back-to-school time that included information on where they could receive vaccines, including at pharmacies. Also, NSIP coordinates community-based vaccination clinics that bring together both a VFC vaccinator (for VFC eligible children) and pharmacies (for privately insured children and adults).

Funding
NSIP’s work on this activity was funded under its regular cooperative agreement with CDC.

Staffing
The VFC Coordinator was the main NSIP staff person involved with this activity.

Implementation status
The Medicaid policy remains unchanged. Pharmacies may participate in VFC, but no pharmacies are currently enrolled. Answers to Medicaid reimbursement issues are still unclear.

Successes
- NSIP was able to enroll several pharmacies in the VFC program after the Medicaid requirement was implemented.
- Though not able to sustain a pharmacy presence for vaccinating Medicaid-enrolled adolescents, NSIP actively partners with pharmacies in a variety of other areas (eg, adult vaccination, community clinics), and pharmacies are involved in vaccinating adolescents not covered by VFC.

Challenges
- It has been difficult to communicate with Nevada Medicaid on vaccine reimbursement challenges, as these challenges are a lower priority for Medicaid than other issues.
- Also, Medicaid managed care vs fee-for-service reimbursement policies may have a differential impact on pharmacies depending on where they are located; most Medicaid managed care organizations (and large retail pharmacies) are concentrated in the urban areas of the state.
• Vaccines are not the primary focus of the pharmacy retail environment, and therefore the burden of meeting VFC provider requirements may seem out of scale with their day-to-day priorities. As younger pharmacists, who are more likely to have experienced vaccine training as part of their curriculum, enter the workforce, providing vaccines to publicly insured patients may become a higher priority.

**Other lessons learned/Advice to other programs**

• Before recruiting pharmacies to the VFC program, Immunization Programs should ensure that their Medicaid program’s reimbursement and billing policies are clear, including whether both FFS- and managed care-enrolled Medicaid populations are covered. This may require working directly with Medicaid MCOs to understand their policies.

• Enrolling pharmacies in VFC may work best in health care provider shortage areas, where taking adolescents out of a medical home is less of a concern and pharmacies may be more accustomed to taking on a bigger health care load (eg, chronic disease management and counseling).

**Relevant resources**

• Announcement of Medicaid and Nevada Check Up reimbursement for pharmacist-administered vaccines (May 2, 2012): [https://www.medicaid.nv.gov/Downloads/provider/NVRx_Admin_IDs_20120502.pdf](https://www.medicaid.nv.gov/Downloads/provider/NVRx_Admin_IDs_20120502.pdf)


**For more information**

Contact Shannon Bennett, Immunization Program Manager in the Bureau of Child, Family and Community Wellness of the Nevada Division of Public and Behavioral Health, at (775) 684-2225 or [sbennett@health.nv.gov](mailto:sbennett@health.nv.gov).
Overview of activity
The Oregon Immunization Program evaluated the impact of a change in Oregon pharmacy law on adolescent influenza vaccination.

Ages targeted
Adolescents 11 to 17 years

Background/impetus for the activity
Prior to 2011, pharmacists in Oregon could vaccinate children younger than 18 years only by prescription. Changes to Oregon pharmacy law effective in 2011 allowed eligible pharmacists to vaccinate adolescents 11 years and older under a statewide protocol covering all ACIP-recommended vaccines. The protocol was developed jointly by the Oregon Board of Pharmacy (BOP) and the Oregon Public Health Division. Immunizing pharmacists are certified by BOP, and are required to report vaccines administered to adolescents through Oregon’s ALERT immunization information system (ALERT IIS). The Oregon Immunization Program wanted to assess whether adding pharmacists to the mix of providers who immunized adolescents would increase the total number of adolescent immunizations, rather than simply shift immunization venues.

Description of activity
In 2015, the Immunization Program designed a two-part study to explore the impact of the revised law on adolescent immunization rates and site of vaccination. For the first part, the Program looked at changes in influenza immunization volume and rates across multiple influenza seasons (2007 through 2014) among adolescents ages 11 to 17. To control for externalities that could impact immunization rates (eg, season-to-season variation), rates for the 11- to 17-year-old population were compared with those for children ages 7 to 10 years before and after the change (2007–2010 vs 2011–2014). For the second part, the Program examined adolescent vaccination in the 2013 to 2014 influenza season to explore whether vaccinations administered at pharmacies added to overall immunization totals or shifted the venue from non-pharmacy (ie, clinic) sites. Data for these analyses were pulled from ALERT IIS for the region designated for CDC Sentinel Site activity (a contiguous six-county area surrounding Portland, which captures more than 95% of the state’s population of both children and immunization providers).

The Program found an overall upward trend in influenza immunizations between 2007 and 2014 for both age cohorts studied (ages 7–10 and 11–17). The increase was much greater among those ages 11 to 17. Adolescent influenza immunizations also increased for both pharmacy and non-pharmacy sites, with a large increase among pharmacy sites following implementation of the revised pharmacy law. Analyses showed that pharmacies added to the total of influenza vaccines administered to adolescents rather than shifting administration away from other sites.
Role of Immunization Program and other agencies/groups involved
This activity was conducted within the Immunization Program.

Dissemination
The Program published the results of this study in the Journal of the American Pharmacy Association, and has presented the findings to various stakeholders, including the Oregon BOP, state provider conferences, and Medicaid managed care plans (called Coordinated Care Organizations).

Intersection with other program activities
The Immunization Program has also examined the role of family versus individual patterns of immunization, and has found strong evidence that having a common immunization venue for parents and (older) children, such as at pharmacies, is supportive of increased immunization.

Funding
This evaluation was funded as part of the Immunization Program’s Sentinel Site cooperative agreement with CDC.

Staffing
This study was designed and completed by the Program’s Sentinel Epidemiologist, with strong support from other Immunization Program staff.

Implementation status
This activity has been completed and the results have been published. Note that Oregon pharmacy law has been further amended to allow pharmacists to vaccinate children age 7 years and older (effective in 2015).

Successes
• The findings support the Immunization Program’s communications to stakeholders regarding the importance of including pharmacists as adolescent immunization providers, such as by countering the argument that pharmacist-administered vaccines will take the place of those administered in the medical home.

Challenges
• This study focused on administration of influenza vaccination to adolescents. Expanding pharmacist administration of non-influenza vaccines to adolescents faces different and stronger barriers. For example, ALERT IIS data show that 12% of seasonal influenza vaccine received by adolescents is administered at pharmacies, versus less than 1% of HPV vaccine.
Even with data showing the value of utilizing pharmacies to increase access to vaccines for adolescents, pharmacist vaccination is hindered by the lack of insurance coverage, among both private insurance and CCOs, for vaccines administered by pharmacists. It has been a major challenge to convince health plans to include pharmacists as vaccinators (i.e., allow pharmacists to be reimbursed for administering vaccines). CCOs would also need to get their participating pharmacists enrolled in VFC so that they could obtain VFC vaccine for Medicaid-enrolled adolescents.

Other lessons learned/Advice to other programs
- This activity was possible in part because ALERT IIS data were available to support it.
- Pharmacist authority to immunize differs across states, and may impact the extent to which pharmacists are involved with immunizing adolescents in a particular state.
- Insurers may apply different considerations to paying pharmacists to immunize than they do for medical clinics.

Relevant resources

Contact Steve Robison, Sentinel Epidemiologist in the Oregon Immunization Program, at (971) 673-0306 or steve.g.robison@state.or.us.

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