#### AMERICAN PHARMACISTS ASSOCIATION

# Annual Pharmacy-Based Influenza and Adult Immunization Survey 2013

U.S. Department of Health and Human Services

National Vaccine Program Office

Final Report — December 15, 2013













# I. Methodology

The American Pharmacists Association (APhA) conducted a national survey regarding pharmacy-based immunizations on behalf of the U.S. Department of Health and Human Services National Vaccine Program Office. The Internet-based survey was e-mailed to 32,603 pharmacists across all pharmacy practice settings from August 24 to September 14, 2013. Among the 6,702 pharmacists who viewed the e-mail invitation to participate, the survey yielded 2,351 responses for a 35% response rate.

## II. Demographics

Eight in 10 survey respondents (81%) are employed at practice sites encompassing chain pharmacy (38%); supermarket pharmacy (19%); independent pharmacy (14%); hospital/institutional (inpatient) pharmacy (6%); or massmerchant pharmacy (4%). The remaining 19% of respondents are employed in a college or school of pharmacy (5%); clinic (outpatient) pharmacy (3%); federal, military, or Department of Defense pharmacy (2%); consultant pharmacy (1%); mailservice pharmacy (1%); managed care pharmacy (1%); long-term care pharmacy (1%); specialty pharmacy (1%); or other practice setting (6%). Overall, 3 in 4 respondents (75%) practice in a community pharmacy setting.

Most survey respondents (95%) answered the survey as an individual pharmacist, while 5% responded for multiple pharmacy locations. Pharmacists responding for multiple locations report an average of 228 practice sites. More specifically, 29% of pharmacists are reporting for 2 practice sites, 40% are reporting for 3 to 20 practice sites, and 31% are reporting for more than 20 practice sites. Overall, those responding as individuals represent 2,112 practice sites, while those responding for multiple locations represent 21,172 practice sites.

Among pharmacists responding for multiple locations, 40% of practice sites have 5 or fewer immunizing pharmacists. Pharmacists report an average of 728 pharmacists at the practice sites for which they are responding. Overall, those responding as individuals represent 2,112 immunizing pharmacists, while those responding for multiple locations represent 66,225 immunizing pharmacists. Chain and supermarket pharmacies are most likely to have more immunizing pharmacists in comparison with other practice settings due to a greater number of practice sites.

#### III. Pharmacists' Own Vaccination Status

Among individual pharmacists, 92% have received an annual influenza vaccination. Pharmacists in hospital/institutional

pharmacies (94%) and clinic pharmacies (96%) are more likely to receive an influenza vaccine because of their direct patient interaction and the potential for nosocomial infections. Among pharmacists responding for multiple locations, 21% of practice sites require immunizing pharmacists to receive an annual influenza vaccine. Another 20% of practice sites require pharmacy personnel to receive an influenza vaccine, while 10% require influenza vaccination for student pharmacists and interns. Eight in 10 practice sites (80%) provide the influenza vaccine to employees at no charge.

In addition to receiving an annual influenza vaccination, more than 8 in 10 pharmacists have received vaccinations for hepatitis B (86%) and tetanus, diphtheria, and pertussis with Tdap (83%). Independent pharmacists were least likely to receive hepatitis B (78%) and Tdap (78%) vaccinations.

#### IV. Immunization Activity

Overall, 75% of practice sites responding to the survey have pharmacist-provided vaccinations. Pharmacists provide vaccinations in 86% of community pharmacy settings, with hospital/institutional pharmacies having the lowest pharmacist involvement, deferring to nurse-administered vaccines. The majority of practice sites screen patients for needed vaccines (55%) and offer other needed vaccines to patients (53%). In addition, nearly 6 in 10 practice sites (58%) provide immunization education to the public.

The immunization experience of pharmacists represented in these results has increased. Among all practice sites, 9% report that 2013 is the first year immunization services have been offered. Only 8% of independent pharmacies report that this is their first year offering immunization services, which has decreased significantly since 2012 (22%) and 2011 (18%). Three in 10 practice sites (29%) have been offering vaccine services for 2 to 3 years, while 36% have been offering immunizations for 4 to 5 years. Practice sites offering immunization services for 6 to 10 years have increased significantly to 20% in 2013 from only 5% in 2012. Similarly, practice sites offering vaccinations for more than 10 years have increased to 14% in 2013 from only 6% in 2012. Only 3% of pharmacy practice settings do not currently offer immunization services.

The availability of immunizations in pharmacy practices has increased, with 77% of practice sites currently offering immunizations on a walk-in basis (without requiring an appointment). The use of appointment-based or time-restricted access has decreased, although over one-third of practice sites (36%) offer vaccinations by appointment. Hospital/institutional pharmacies are less likely to allow

non–appointment-based vaccinations with only 30% of these settings offering a walk-in immunization service. Overall, 29% of practice sites offer walk-in immunization services during designated times and days, and 32% offer walk-in immunization services during certain times or seasons of the year. Only 18% of practice sites offer immunization services through their in-store clinic.

The source of immunization protocols or standing orders varies with regard to the type of physician who enters into the agreement. One-third of practice sites (33%) report that pharmacists who administer vaccines have a protocol or standing order with a corporate physician, 29% with a family physician, 21% with an internal medicine physician, 9% with a public health department, and other authorized prescribers. As pharmacists have expanded their scope of immunization offerings, an increasing number of vaccinations are administered after receiving a prescription from a prescriber (30%). This is driven by state law and rule requirements.

#### V. Referrals

Pharmacists report an increase in patient referrals from physicians (88%). Referral to pharmacists for immunizations could be the result of numerous factors ranging from vaccine availability, cost, reimbursement, time, and other factors. Twenty-nine percent of responding pharmacists report referring patients to physician offices to address immunization issues. In an average week, pharmacists refer 4 patients to their primary care provider to address immunization issues. Pharmacists refer another 7 patients to their primary care provider per week to address medication symptoms and 7 patients per week to address other medication issues.

Among all practice sites, 22% refer patients to other immunizing pharmacists if access is not available at their primary pharmacy practice site. The majority of practice sites (56%) report that patients have been referred to them by other pharmacists. Another 16% of practice sites refer patients to the in-store clinic practitioner. Referrals to the in-store clinic practitioner increase to 21% among chain pharmacies, which are more likely to have an in-store clinic compared with other practice settings. Lack of recognition as an immunization provider may be a reason for these referrals.

Nearly one-quarter of practice sites (24%) refer patients to the public health department. Independent pharmacies (32%) are more likely to refer patients to the public health department than other practice settings. One in 10 practice sites (9%) report that their immunizing pharmacists have a protocol or standing order with the public health department. In comparison, the public health department has referred

patients to the pharmacy for immunization services at 28% of practice sites.

#### VI. Recognition and Payment

Pharmacists rate the acceptance of their immunization activity by patients as 9.0 on a scale of 1 to 10. Pharmacists give a slightly lower rating of 8.1 to acceptance by local physicians. Similarly, pharmacists report that only 6% of patients are not receptive to recognizing pharmacists as providers of immunization services. Among insurance providers, pharmacists report that only a small percentage of insurance companies (9%) and HMOs (15%) are not receptive. In addition, pharmacists report low levels of non-receptivity among Medicaid (17%), Tricare (14%), the Medicare Advantage Program (12%), PBMs (11%), Medicare Part B (10%), Medicare Part D (9%), and community employers (9%). However, even with these impressions of pharmacists' low levels of non-receptivity from payers, there are still barriers to the inclusion of pharmacists as "in-network/ recognized" providers.

More than 3 in 4 practice sites (77%) receive compensation for influenza immunization services directly from the patient. Nearly 8 in 10 practice sites (79%) receive compensation from insurance companies. Additionally, pharmacies receive compensation for influenza immunization services from Medicare Part B (72%), Medicaid (50%), Tricare (46%), the Medicare Advantage Program (44%), community employers (44%), HMOs (43%), and PBMs (42%).

In comparison, 74% of practice sites receive compensation for non-influenza immunization services from patients. More than 7 in 10 practice sites (73%) receive compensation from insurance companies. Here too, pharmacies receive compensation for non-influenza immunization services from Medicare Part D (60%), Medicare Part B (51%), Tricare (40%), the Medicare Advantage Program (36%), Medicaid (35%), HMOs (35%), PBMs (34%), and community employers (22%).

## VII. 2012–2013 Influenza Season

During the 2012–2013 influenza season, pharmacists responding to the survey administered an average of 10,989 doses of the intramuscular influenza vaccine, 1,320 doses of the intranasal influenza vaccine, 1,362 doses of the intradermal influenza vaccine, and 1,482 doses of the high-dose influenza vaccine.

Only 1% of the vaccines administered by pharmacists in the 2012–2013 influenza season were to infants younger than 2 years of age. Nine in 10 practice sites (91%) refer patients

aged 2 years or younger to their primary care physician, 64% refer to the public health department, and 25% provide education for this patient population. Only 3% of practice sites provide immunization services to infants younger than 2 years of age.

Only 2% of the vaccines administered by pharmacists in the 2012–2013 influenza season were to children aged 2 to 9 years. Eight in 10 practice sites (79%) refer patients aged 2 to 9 years to their primary care physician, 58% refer to the public health department, and 37% provide education for this patient population. Overall, 28% of practice sites provide immunization services to patients aged 2 to 9 years.

Another 8% of vaccines administered by pharmacists in the 2012–2013 influenza season were to adolescent patients aged 10 to 18 years. More than half of practice settings provide education (61%), vaccine administration (64%), and referral to primary care physicians (51%) for this patient population.

More than 9 in 10 (91%) vaccines administered by pharmacists in the 2012–2013 influenza season were to adult patients over 18 years of age. Nine in 10 practice sites provide education (90%) and administer vaccines (93%) to adult patients ranging from ages 18 to 65 years old. Similarly, for patients older than age 65 years, 89% of practice sites provide education and 94% administer vaccines.

# VIII. 2013-2014 Influenza Season

During the 2013–2014 influenza season, pharmacists responding to the survey anticipate administering an average of 247 doses as individual practitioners, 917 doses for their practice, and 33,105 doses for their corporation. To meet this demand, pharmacists report ordering an average of 8,935 doses of non–high-dose trivalent intramuscular influenza vaccine. Additionally, pharmacists report ordering 857 doses of high-dose influenza vaccine, 297 doses of intradermal influenza vaccine, 151 doses of non–high-dose quadrivalent intramuscular influenza vaccine, and 130 doses of intranasal influenza vaccine.

More than one-third of practice sites received the influenza vaccine from their corporation (38%) or purchased the influenza vaccine from a drug wholesaler (37%). In addition, vaccines were purchased from vaccine distributors (27%), manufacturers (25%), and through group purchasing programs (7%).

During the 2013–2014 influenza season, 77% of practice sites plan to educate the public about influenza and influenza vaccines. More than 6 in 10 practice sites (63%) plan to

conduct influenza vaccine clinics. Only 6% of practice sites do not plan any influenza vaccine-related activities for this time period. Pharmacists report that their practice or corporation will spend an average of \$243,600 on marketing immunization services and educating the public. The majority of practice sites (56%) plan to increase vaccine marketing efforts for the 2013–2014 calendar year.

From August 2013 through April 2014, 70% of practice sites plan to administer high-dose influenza vaccine to adults older than 65 years of age. Nearly all practice sites (97%) plan to administer intramuscular influenza vaccine to adults, while 35% plan to administer intradermal influenza vaccine, and 31% plan to administer intranasal influenza vaccine. For adolescent patients aged 10 to 18 years, 56% of practice sites plan to administer intramuscular influenza vaccine and 27% plan to administer intranasal influenza vaccine. For pediatric patients 2 to 9 years of age, 22% of practice sites plan to administer intramuscular influenza vaccine and 14% plan to administer intranasal influenza vaccine. Only 4% of practice sites plan to administer intramuscular influenza vaccine to infants younger than 2 years of age.

#### IX. Other Vaccinations

In addition to influenza vaccines, the majority of practice sites currently administer pneumococcal (77%), herpes zoster (75%), and tetanus (57%) vaccines. Fewer than half of practice sites currently administer vaccines for hepatitis B (47%), hepatitis A (43%), meningococcal (43%), human papillomavirus (37%), international travel (25%), and pediatrics (10%).

To successfully expand immunization services beyond influenza, pharmacists rank their highest priorities (on a 10-point scale) as obtaining the support of public health (7.02), pharmacy management (6.35), and medicine (6.32). Other priorities include training pharmacists on how to counsel or offer patients additional vaccinations (6.25) and aligning or including incentives in immunizing pharmacists' performance evaluations (6.19).

#### X. Documentation

Nine in 10 practice sites (91%) maintain documentation of a patient receiving a vaccination in the pharmacy. More than two-thirds of practice sites (69%) provide patients with a copy of their consent form and 53% enter the vaccination into the patient's medical record.

Pharmacists report that 58% of patients provide contact information for their primary care physician in order to send immunization information, thus impacting pharmacists' ability to report vaccinations to the patient's medical provider. More than 6 in 10 pharmacy practice sites (63%) provide documentation of the patient's vaccinations directly to the patient's physician. Six in 10 pharmacists (62%) believe physicians place immunization information shared by the pharmacy in the patient's chart; only 18% of pharmacists think physicians discard this information (14%) or do not want to receive it (4%).

Overall, 35% of practice sites enter a patient's vaccinations into an immunization registry. More specifically, 28% of practice sites submit all immunizations to state or local immunization registries. A small percentage of practice sites submit adult (7%), childhood (6%), adolescent (5%), and influenza (5%) immunizations to state or local registries. Another 11% of practice sites are not permitted to access state and local immunization registries.

# XI. Information Sources and Immunization Coalitions

Pharmacists cite the Centers for Disease Control and Prevention (77%), APhA (63%), and vaccine manufacturers

(53%) as the top resources of up-to-date information on immunizations. Other resources include state pharmacy associations (36%), the Immunization Action Coalition (35%), local health departments (13%), and local media (7%). Most pharmacists find value in the information provided by APhA's Immunizing Pharmacist Listserve (92%) and Immunizing Pharmacist Special Interest Group e-Community (86%).

More than one-third of practice sites (36%) have access to state (14%) or local (4%) immunization coalitions, or both (18%). In comparison, 28% of practice sites participate in immunization coalitions. Pharmacists rate the acceptance of their immunization activities by state and local immunization coalitions as 8.4 on a scale of 1 to 10, and 8% have had patients referred to their practice from immunization coalitions.

Nearly one-quarter of practice sites (23%) collaborate with their state or local public health department and another 35% would like to collaborate.