



Results from the California Pharmacists Survey

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Background

The California Department of Public Health, Immunization Branch was awarded a Centers for Disease Control and Prevention grant to increase adult vaccination coverage by supporting provider organizations and health systems to implement the adult immunization standards. One component of this grant is to expand pharmacists' role as immunizers.

Community pharmacies serve as convenient sites for adult immunization services, often offering extended hours and walk-in services.^{1,2} Under a 2014 state law, pharmacists may independently administer vaccines recommended by the Advisory Committee on Immunization Practices to persons 3 years of age and older.

This survey was administered in June 2016, two months before a new California Board of Pharmacy regulations went into effect requiring pharmacists to

- (1) notify administration of any vaccine to a primary care provider and prenatal care provider (if applicable and known) within 14 days,
- (2) report any vaccines administered to a California immunization registry within 14 days, and
- (3) document each vaccine administered, and
- (4) provide each patient with an immunization record.³

Objectives

1. Assess the current status of California pharmacists in implementing the standards for adult immunization practice, including the use of a registry
2. Identify any barriers to implementing the standards
3. Guide future interventions to reduce pharmacists' barriers to immunizing

Methods

Evaluation design

Confidential, electronic survey administered in June 2016.

Sampling method

A convenience sampling method was utilized; including a multi-mode approach of email, fax, phone, and social media.

Sample

106 immunizing pharmacists currently practicing in California were surveyed. The sample is approximately 70:30 chain to independent pharmacies (similar to actual ratio in California) Pharmacists practicing in both urban and rural counties were represented in this sample.

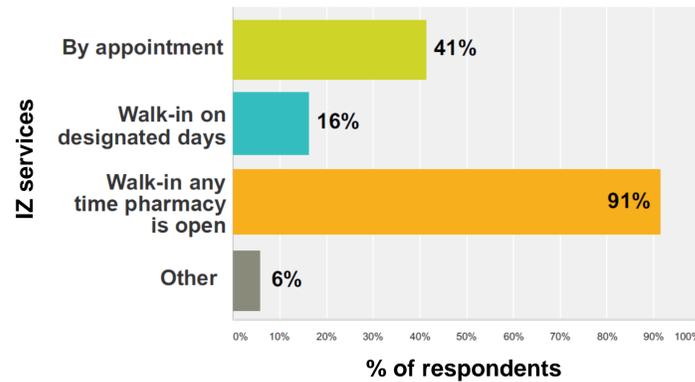
Statistical analysis

Descriptive analysis

Results

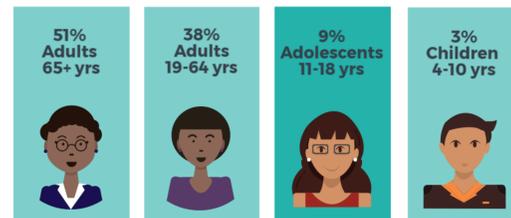
Figure 1. How pharmacy immunization services are provided

Answered: 104; Skipped: 2



- When participants were asked which vaccines are administered at their pharmacies,
 - 103 (99%) indicated influenza vaccine,
 - 90 (87%) said Zoster/Shingles vaccine, and
 - 89 (86%) answered Tdap and PPSV23, respectively.

Figure 2. Average % of Patients Immunized in Pharmacies Surveyed, by Age Group



Answered: 105; Skipped: 1

- Of those surveyed, an average of about half of patients immunized in their pharmacies are adults 65 and older.

Figure 3. Which sources are consulted to assess history when an immunization is requested

	Frequently	Some of the time	Never
Immunization registry	14% 13	20% 19	66% 62
Portal to the registry within pharmacy dispensing system	29% 27	15% 14	56% 53
Patient self-report	77% 74	21% 20	2% 2
Pharmacy profile in dispensing system	83% 79	15% 14	2% 2
Patient immunization record (Yellow Card)	31% 29	52% 49	17% 16
Their physician's (or other health care provider's) office	24% 23	52% 49	23% 22

- Pharmacists most frequently rely on the pharmacy profile in their dispensing system, which may not be a complete history, and patient self-report, which may not be accurate.

Figure 4. Reports vaccine administered to primary care provider, when known

Answered: 103; Skipped: 3

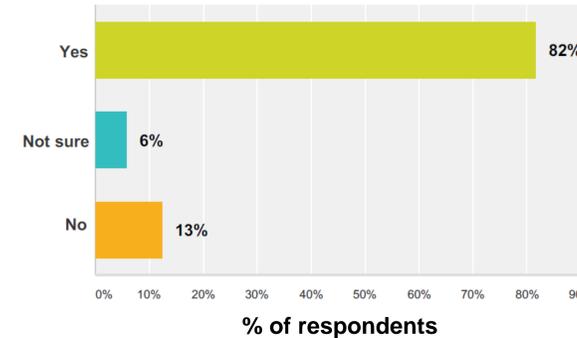
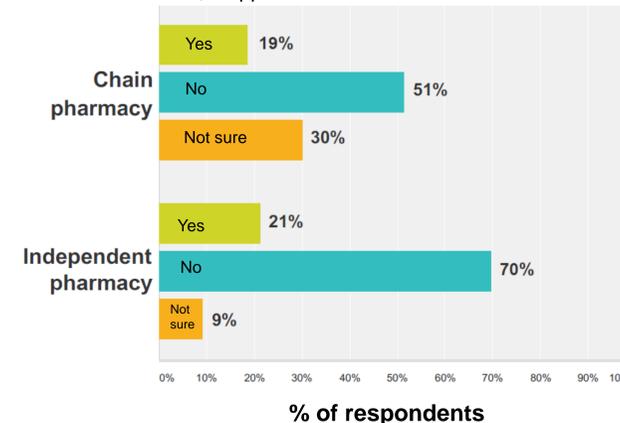


Figure 5. Use of an immunization registry

Answered: 103; Skipped: 3



- Only about 20% of respondents reported using an immunization registry; however, it is likely that some of the chain pharmacists who are unsure if they use a registry are working at pharmacies reporting to the registry through electronic submission.
- Eighty-seven percent of respondents indicated an interest in learning more about the registry, and none indicated that they would discontinue immunization services if they were required to report to the registry..

Table 1. Anticipated barriers if were to assess patients' immunization histories before every vaccine

Answer Options	Response %	Response #
Patient immunization history not readily available	77%	79
Not enough time	74%	76
Workflow	67%	69
Limited staffing	57%	59
Need registry integration into system	56%	58
Need to expand staff roles	33%	34

- As more pharmacists (and other immunizers) are utilizing the registry, many of these barriers will be addressed.

Summary

- Immunization services at these pharmacies are overall easily accessible.
- Pharmacists surveyed
 - (1) tend to coordinate with the patient's primary care provider to meet immunization needs,
 - (2) are interested in utilizing a California immunization registry for proactive vaccination (e.g., immunization history look-up and use of the forecasting tool to assess for vaccines due), and
 - (3) may benefit from support in incorporating immunization services into pharmacy workflow.
- The new California Board of Pharmacy regulations present a unique opportunity to increase pharmacists' access to a California Immunization Registry. Survey results indicate a willingness and interest in utilizing the registry to implement the standards for adult immunization practice.

Limitations

- Utilized a convenience sampling method as opposed to a random sampling method and so there is an inability to generalize research findings to the population as a whole.
- Relatively small sample size compared to the actual number of immunizing pharmacists in California.
- There is the danger of social desirability bias, where participants may attempt to project a positive self-image of themselves as immunizers.
- Participants who have an interest in immunizing may have been more inclined to participate.

Recommendations

- Provide outreach to and enroll pharmacists in an immunization registry. See <http://cairweb.org/home/pharmacies-and-cair/> for the California Immunization Registry webpage for pharmacies.
- Identify and share best practices with pharmacists in implementing the adult immunization standards and building referral relationships with non-immunizing medical providers. Visit <http://eziz.org/resources/pharmacy/> for ideas on creating a pharmacy-based immunization toolkit.
- Provide outreach to non-immunizing medical providers to strengthen medical provider/pharmacist referral relationship.

References

1. Goad, J. A., Taitel, M. S., Fensterheim, L. E., & Cannon, A. E. (2013). Vaccinations administered during off-clinic hours at a national community pharmacy: implications for increasing patient access and convenience. *The Annals of Family Medicine*, 11(5), 429-436.
2. Pliisuk, T., Goad, J., & Backer, H. (2010). Vaccination delivery by chain pharmacies in California: Results of a 2007 survey. *Journal of the American Pharmacists Association*, 50(2), 134-139.
3. 2017 Lawbook for Pharmacy. Retrieved April 27, 2017, from http://www.pharmacy.ca.gov/laws_regs/lawbook.pdf

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