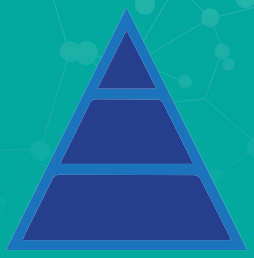

Taking it to Next Level

Program: Oregon

Activity: Evaluating the impact of a new pharmacist vaccination law

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 through2014) 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

- More details on the methodology for and results of the evaluation were published in the *Journal of the American Pharmacists Association* (Robison SG. Impact of pharmacists providing immunizations on adolescent influenza immunization. overdose simulation. J Am Pharm Assoc. 2016;56(4):446-449.: http://www.japha.org/article/S1544-3191(16)30027-9/pdf

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