Evaluating the Impact of a Vaccine Improvement Plan on Immunization Provision in a Community Pharmacy Setting

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Background: Pharmacist intervention increases overall vaccination rates; however, missed opportunities for vaccination occur when healthcare professionals encounter a variety of barriers. A better understanding of strategies to increase immunization provision is essential to establish lasting, effective delivery systems in the community pharmacy. In a district of 16 supermarket pharmacies in central Virginia, 11 were identified by internal pharmacy data as candidates for implementing a new Vaccine Improvement Plan (VIP).

Research Objectives: To evaluate the impact of a Vaccine Improvement Plan (VIP) on non-influenza vaccine provision in a community pharmacy setting and to describe the types of interventions that resulted in the greatest improvement in immunization provision.

Methods: This retrospective, observational study evaluates the impact of a 16-week VIP on number of non-influenza vaccinations provided in central Virginia supermarket chain pharmacies. Over the period of September 2016 to January 2017, a VIP was implemented in 11 pharmacies in central Virginia.

The VIP documented the pharmacy’s year-to-date numbers of administered immunizations and determined site-specific barriers and interventions to providing immunizations. Staff signified acceptance of the VIP and all aspects of immunization incorporation into workflow through a Vaccine Procedure Acknowledgement form.

Sixteen weeks after implementation, the number of non-influenza vaccines (Hepatitis B, Herpes Zoster, Pneumococcal conjugate [PCV13], Pneumococcal polysaccharide [PPSV23], Diphtheria and Tetanus Toxoids [Td], Diphtheria and Tetanus Toxoids, Acellular Pertussis Vaccine [Tdap], and other non-influenza vaccines) were collected and compared to the number of non-influenza vaccines administered during the same 16 week time period in 2015.

Data were analyzed using descriptive statistics and paired T-tests.

Results: Six of 11 pharmacies (55%) improved in number of non-influenza vaccines provided in 2016 versus 2015. When comparing the 2015 non-influenza vaccine count to 2016, a statistically significant improvement was found in PPSV23; Td and Tdap; and other non-influenza vaccines (p < 0.05).

Conclusions: Barriers to vaccine provision vary depending on location and patient population. Interventions implemented in successful VIP stores include technician training and involvement, reviewing vaccine indications, and implementing best practice wait times. A VIP may increase pharmacist and technician motivation and lead to increased provision of non-influenza immunizations.