Influenza vaccination by pharmacists in a health sciences center: A 3-year experience

Tracy M. Hagemann, Eric J. Johnson, and Susan E. Conway

Abstract

Objective: To assess the design and implementation of influenza vaccination clinics across campus, assess participant satisfaction with the pharmacist-led clinics, and educate and increase visibility of the role of pharmacists as vaccinators.

Setting: University of Oklahoma Health Sciences Center (OUHSC), a comprehensive health sciences center.

Practice innovation: The College of Pharmacy on the OUHSC campus developed and implemented a vaccination program to increase influenza vaccination of OUHSC employees.

Main outcome measures: Number of employees receiving influenza vaccination, employee satisfaction with the pharmacist-led clinics, and employee awareness of the pharmacist's role in vaccination.

Results: Reported OUHSC employee influenza vaccination rates increased from approximately 35% before implementation of the pharmacy-based program to 54% in 2012 after implementation. The increase was attributed to maintaining no out-of-pocket costs for employees, offering various clinic locations, and using media resources to educate employees about influenza infection and vaccination. Employees reported high satisfaction with the influenza vaccination clinics and with receiving vaccinations from pharmacists and student pharmacists. In the first 2 years of the program, the percentage of surveyed employees "very familiar" with the pharmacist's role in vaccinations increased from 23% to 66%.

Conclusion: A college of pharmacy on a large health sciences center developed and successfully implemented an influenza vaccination program, providing an accessible and convenient route for influenza prevention to employees, as well as enhanced the visibility of pharmacists as vaccination providers.

Keywords: Employee health, influenza vaccination, pharmacists, preventive care.

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Influenza vaccine is recommended for annual administration to all adults, especially those in high-risk categories. Studies consistently show poor influenza vaccination rates among health care workers even though direct patient contact places them at high risk. Vaccination reduces influenza infection risk by 88% in health care workers and decreases mortality by 40% among patients receiving their care.[1]

Individuals infected with influenza virus can shed the virus and transmit infection to others as early as 1 day before symptom onset and for 5 days afterwards.[2] This may lead to unintentional transmission of influenza virus by health care workers, contributing to increased patient morbidity and mortality. To prevent this, health care workers should receive influenza vaccinations.

Studies have indicated that workers in health settings without direct patient-care responsibilities are also at risk of transmitting influenza virus to patients. Many such employees have contact with patients, including unit clerks, radiology technicians, transporters, physical and occupational therapists, housekeeping staff, social workers, food services personnel, and security officers.[3,4] This population is often overlooked in targeted campaigns, yet is at increased risk for both contracting influenza and transmitting it to patients. However, influenza vaccination rates are lower among these workers than among their direct-patient-care colleagues.[5]

The Healthy People 2020 initiative has a goal of increasing influenza vaccination in health care workers to 90% by 2020.[6] The most recent data from the Centers for Disease Control and Prevention (CDC) showed an influenza vaccination rate of 63% to 67% for health care workers during the 2011–12 season.[7] To achieve the 2020 goal, substantial improvement is needed. Health care workers report that they have not received influenza vaccinations due to concerns about vaccine safety or efficacy, belief that they are not at risk, poor understanding of transmission, fear of needles, and inconvenience (e.g., requiring time away from work or their work area to receive the vaccination).[8]

The University of Oklahoma College of Pharmacy is part of a comprehensive health sciences center encompassing seven colleges (pharmacy, medicine, dentistry, nursing, allied health, public health, and graduate), two hospitals, numerous adult and pediatric specialty clinics, and various research centers. All physicians on campus are OUHSC employees and have patient privileges within the campus-wide hospitals and clinics. Because of the collaborative nature of research and interdisciplinary teaching, clinicians, research faculty, and university staff interact regularly.

Due to budget cuts, OUHSC discontinued offering influenza vaccinations to faculty and staff after the 2009–10 season. Before these budget cuts, the reported employee influenza vaccination rate averaged only 35% annually. The dean of the College of Pharmacy decided it was feasible to pay for the cost of influenza vaccinations for pharmacy faculty and staff if their college colleagues administered the vaccines. Once other colleges learned of our willingness to provide the vaccinations, administrators at those schools volunteered to fund the vaccines for their employees too. Ultimately, a representative from the University's Healthy Sooners office initiated discussions with our health insurance carriers to cover the influenza vaccine and administration, and they agreed to make payments to our College under the prescription plan. The College of Pharmacy took the opportunity to fill this void and developed campus-wide, pharmacy-delivered influenza vaccination clinics for OUHSC faculty and staff.

At a Glance

Synopsis: After budget cuts eliminated coverage for influenza vaccinations for faculty and staff on the health sciences center campus of the University of Oklahoma (OU), the OU College of Pharmacy implemented a highly successful pharmacist-led immunization program. In its first 3 years of operation, the program increased the percentage of employees vaccinated for seasonal influenza, provided more accessible and convenient locations for vaccine administration, and increased the visibility of pharmacists as vaccination providers.

Analysis: *Other health science centers may be facing similar challenges to influenza prevention and may benefit from a similar approach or may be able to partner with an area college of pharmacy to provide this patient care service. Through such efforts, pharmacists can help interrupt the transmission of influenza virus among faculty, staff, students, and patients, and increase the visibility of an important patient care service in the eyes of influential members of the community.*

Objectives

A "Stop the Flu!" campaign was developed with three primary objectives: design and implement a pharmacist-led vaccination program for health care workers in a health sciences center to increase influenza vaccination rates; assess participant satisfaction with a pharmacy-delivered influenza vaccination program; and educate and increase awareness for pharmacists' role as vaccinators of a health sciences center population.

Practice innovation

The target population included all OUHSC employees on the Oklahoma City campus in the first year (2010), with expansion to the Tulsa campus in the second and third year (2011 and 2012). The Oklahoma City campus has nearly 5,000 employees: 1,300 faculty (clinical and nonclinical/research), 3,000 staff, and 665 residents. The