Health Care Workers and Influenza Vaccination: Do You Need a Mandate?

By John B. Lynch, Kathy Mertens, Estella Whimbey, Timothy H. Dellit

Influenza infection leads to more than 200,000 hospitalizations and up to 40,000 deaths per year in the United States. With the highest risk among the elderly and those with co-morbidities, these same populations are those most often in need of health care and found in health care settings. Consequently, many have called for increased vaccination of health care workers (HCW) to protect vulnerable populations.

As early as 1981, the Centers for Disease Control and Prevention (CDC) recommended influenza vaccination of HCWs, but this recommendation was not widely implemented. Since the 2009 H1N1 pandemic, national organizations have become more vocal about HCW vaccination, with some recommending influenza vaccination as a condition of employment. Yet mandating influenza vaccination for HCWs may interfere with workplace morale and lead to legal actions.

Harborview Medical Center (HMC) and the University of Washington Medical Center (UWMC) (located in Seattle, Washington and part of the UW Medicine Health System) have offered influenza vaccine free to all HCWs, volunteers, and community partners for many years. In 2006, approximately 45 percent of HCWs underwent voluntary vaccination. This rate increased to 62 percent for the seasonal vaccine during the 2009 season, although only 37 percent received the H1N1 vaccine.

In 2010, given the importance of influenza prevention and the slow improvement in vaccination rates, HMC and UWMC implemented a formal vaccination program.

HMC and UWMC leadership were aware of a successful program using mandatory influenza vaccination of HCWs at Virginia Mason Medical Center in Seattle, Washington. At that facility, influenza vaccination was a requirement for continued employment, leading to more than 98 percent vaccination coverage of HCWs.

Following the experience at Virginia Mason Medical Center, other medical centers have used similar policies with excellent outcomes. In addition, national organizations including the Infectious Disease Society of America, the American Academy of Pediatrics, and the American Academy of Family Physicians, have published recommendations in favor of mandatory vaccination. In these programs, alternatives to vaccination are generally limited to medical contraindications and, in some non-mandatory programs, a recommendation for unvaccinated HCWs to wear surgical masks during the influenza season.

Due to concern about employee-employer relationships and lack of data on patient outcomes in mandatory programs, leadership of HMC and UWMC chose not to implement an influenza vaccination mandate before investigating the effectiveness of other strategies. In the fall of 2010, HMC and UWMC held concurrent two-week “health fairs” that offered free influenza vaccination to all attendees. The fairs also provided required annual tuberculosis screening and respirator fit testing. The goal was to have “one-stop shopping” for HCWs to meet all their yearly employee health screening requirements and encourage influenza vaccination.

The campaign was accompanied by an advertising campaign and electronic messages. HCWs could
attend public meetings or individualized sessions. Compliance in the program was mandatory at both centers and was accomplished by one of the following:
• Vaccination at the hospital or another facility
• Completion of an online educational module and a declination form. This option included both medical declinations and declinations for all other reasons (philosophical, religious, etc.)

As a result of the health fairs, HCW influenza vaccination increased from 62 percent in 2009 (for the seasonal vaccine) to 83 percent at both centers, with approximately 1,600 HCWs out of 12,000 declining vaccination for non-medical reasons. Influenza vaccination of the faculty physician groups was approximately 95 percent at both centers.

Building on Success

Although influenza vaccination rates among HCW improved with formalization of the process and a requirement for compliance with the program (either vaccination or completion of the declination process), the number of total declinations for all reasons remained high. For the 2011–12 season, HMC and UWMC added one-on-one education, data collection on declinations, and teams of vaccinators who roamed throughout the hospitals, increasing the convenience of vaccination for HCWs and decreasing the overall cost of implementation. With this model, nurses on wards could spend part of a shift roaming instead of dedicating entire shifts to the fair.

Unlike the prior year, vaccination was not linked to respirator fit testing or tuberculosis screening, both of which require additional time and funding. For the 2011-12 season, HCW compliance could be achieved by one of the following:
• Receipt of influenza vaccination and documentation of vaccination
• Written documentation of medical contraindication by a primary care provider or evaluation by employee health nurse or physician using CDC guidelines
• Completing an online influenza educational module followed by a 10–15 minute appointment with an employee health nurse or physician

The one-on-one session used a structured data collection instrument that included questions about influenza vaccine safety, ethical responsibilities of health care workers, and protection of patients. After completing the form, employees were asked if they wanted to be vaccinated. If they continued to decline, they were asked to explain why. All reasons were accepted and recorded, and the employee was considered compliant with the program. Data on declinations will be used to modify future online trainings and one-on-one education. The reasons given for declinations were diverse, but most commonly focused on concerns about the safety and efficacy of the vaccine.

The addition of the one-on-one education session led to a 50 percent decrease in declinations for non-medical reasons and an overall HCW vaccination rate of 93 percent at both centers. An increase to over 90 percent HCW vaccination, in the absence of a mandate and in a large medical center, has not been previously documented in the literature. The use of a novel one-on-one education session appears to be a viable alternative to influenza vaccination as a condition of employment.

Prevention of influenza infection remains a high priority at HMC and UWMC. Accrediting bodies, such as The Joint Commission, are increasingly aware of HCW vaccination rates at individual hospitals. In January 2013, the Centers for Medicare and Medicaid Services will begin to require reporting of HCW vaccination status at all hospitals via the CDC National Health Surveillance Network. In the coming years, HMC and UWMC will continue to refine vaccine program policies that are both effective and acceptable to employees.

Influenza vaccination rate at Harborview Medical Center from 2006 to Spring 2012. Rates were similar at University of Washington Medical Center.

Authors
John B. Lynch, MD, MPH, is the Medical Director of Employee Health at Harborview Medical Center.
Kathy Mertens, RN, MPH, is the Administrative Director of Employee Health at Harborview Medical Center.
Estella Whimbey, MD, is the Medical Director of Employee Health at the University of Washington Medical Center.
Timothy H. Dellit, MD, is the Medical Director of Infection Control at Harborview Medical Center.