Immunizing Healthcare Personnel Against Influenza

A Report on Best Practices



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Immunizing

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Introduction

Approximately 200,000 people are hospitalized each year in the United States because of influenza. Some 36,000 people succumb to the illness annually.¹

Because influenza is so easily spread by people who are asymptomatic—and because it can lead to severe illness and death—it is especially important to protect yourself and those around you. For most of us, especially those in high-risk populations such as healthcare personnel, that means receiving an immunization each and every year.

"Trying to put options out there and allow various healthcare settings to choose the thing that's going to work best for them locally is where we need to be right now, to make this a very inclusive process rather than a prescriptive process."

Dr. Susan J. Rehm

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Medical Director, National Foundation for Infectious Diseases

For a variety of reasons, however, most healthcare personnel don't receive an annual flu shot. In recent years, leading government agencies, biopharmaceutical companies and employee unions in the healthcare field have studied ways to improve upon the low immunization rates among healthcare personnel.

The effort to improve these rates began to gain momentum in 2003, when the National Foundation for Infectious Diseases (NFID) convened a roundtable discussion on the subject, leading to a call-to-action and a white paper.

More recently, the Joint Commission has recognized the importance of increased immunization rates for healthcare personnel by requiring institutions to implement immunization programs as part of the accreditation process.

In 2007, CSL Biotherapies provided an unrestricted educational grant to NFID in an effort to boost the nation's influenza vaccination rate among healthcare personnel. This report on best practices is one result of that initiative and is designed to be a blueprint to establish and maintain successful influenza immunization programs for healthcare personnel.

Much of the information included here is a direct result of an NFID-sponsored roundtable discussion held on October 20, 2007. Discussion participants included medical experts, infectious disease specialists and representatives from a diverse population of healthcare and employer organizations from around the country.

THE PROBLEM

Data show that the majority of healthcare personnel in America fail to receive an annual vaccination against influenza. While immunization rates vary from year to year and differ among various worker groups, studies show that only two out of five healthcare personnel get immunized in any given year.^{2,3} This leaves the majority of healthcare personnel largely unprotected against the illness, putting themselves, their patients, their colleagues and their families potentially at risk of a serious upper respiratory infection.

According to the 2000 National Health Interview Survey (NHIS), the nation's healthcare personnel vaccination rate was 38 percent. Among health-diagnosing professions including physicians and nurse practitioners, the rate was 46 percent; for health-assessing professions such as nursing, it was 37 percent; for health aides the vaccination rate was just 30 percent.⁴



A 2007 study (see graphic) showed that among healthcare personnel groups, physicians had the highest rate of vaccination while administrative workers had the lowest.⁵

Illustrating the wide variance in vaccination rates among healthcare personnel—and the need for greater consistency in immunization programs—a review of 32 studies on immunization rates across the United States, Canada and Europe between 1985 and 2002 revealed that rates ranged from 2.1 percent to 82 percent.⁶

Defining Healthcare Personnel

Any effort designed to raise influenza immunization rates among healthcare personnel begins with some understanding of who healthcare personnel are, and what kinds of jobs are held by them. To be sure, the healthcare field is a large one. The 2000 NHIS estimated 10.3 million healthcare personnel in the United States.⁷ How an organization defines the term "healthcare personnel" is pivotal to any immunization effort.

A recent survey of roughly 50 unionized healthcare personnel produced some noteworthy and revealing comments in that regard. Some see healthcare personnel as anyone who works in a hospital or related facility.⁸ Others consider healthcare personnel to be anyone who takes care of patients or is involved in direct patient care. Still others see healthcare personnel as being anyone who works in a healthcare setting, including administrative or professional personnel.

In general, the term "healthcare personnel" is used to describe people employed in any of a variety of jobs in the field, including:

- Health-diagnosing workers
- Health-assessing workers
- Health aides
- Health technicians
- Health care support staff
- Administrators and administrative support

These can include such specific roles as surgeons, family practitioners, medical students, nurses, nurses' aides, administrators, transportation and housekeeping staff, receptionists and home health workers.

In short, all staff who work in close proximity to patients, including those who provide either direct or indirect patient contact, are usually identified as being healthcare personnel.

This discussion takes on added significance when considering who should receive an annual influenza vaccination. For example, institutions that have begun internal programs designed to maximize worker immunization rates must decide whether all of their workers—such as outside contractors, students and volunteers—are to be included or whether they should only involve employed staff. Consider for a moment that an outside contractor working in the hospital finance unit would not, on a regular basis, have direct contact with many patients. That same worker, however, could regularly eat in the hospital cafeteria, thus coming into close proximity with visitors and other staff who do have direct patient contact. Understanding these interactions is vital to developing a comprehensive influenza control program.

Reasons For and Against Immunization

Financial considerations certainly play a role in the overall design and implementation of an immunization program. Specifically, the more people you vaccinate, the more costly it is. At the same time, failure to properly protect workers and patients from an outbreak of influenza has certain financial ramifications for a healthcare organization. Some healthcare organizations have found it beneficial to undertake a rigorous cost-benefit analysis regarding influenza. While immunization programs do indeed require resources in the form of educational expenses and vaccine doses, they can often result in cost savings due to a reduction in the number of sick days and an improvement in productivity as "presenteeism" (employees coming to work while ill) diminishes. The direct and indirect benefits of reducing influenza among patients may be more difficult to determine but they are clearly important to both the institution and the individual.

Increasing influenza vaccination rates for all Americans, including healthcare workers, is "... a critical public health need."

Dr. Garrett E. Bergman *Medical Director, CSL Biotherapies* The Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP) recognizes the effectiveness of an annual flu vaccination for anyone who wants to reduce the risk of becoming infected with influenza. In particular, members of high-risk populations and individuals who take care of people at risk of serious complications from flu should get vaccinated every year.

Among the reasons most commonly cited by healthcare personnel for accepting an annual flu vaccination are:

- A desire to protect themselves
- A desire to protect their patients
- The convenience of getting the vaccine
- Peer influence
- Prior positive experiences with receiving the flu vaccine

For healthcare personnel who reject an influenza vaccination, the most commonly cited reasons are:

- Concerns about the safety or efficacy of the vaccine
- A sense of not being personally at risk (including a perception of having a healthy immune system)
- A lack of understanding of transmission of flu
- Fear of needles
- Inconvenience of getting a vaccination

The reasons for getting or rejecting an annual vaccination can be quite varied among healthcare personnel by such factors as the kind of job they hold, the type of institution they work at, their age, their level of knowledge about influenza and the vaccine and their level of trust in the vaccine.⁹ "When looking at reasons for rejecting the vaccine among the different healthcare worker groups ... technicians or aides had the most concern about side effects and physicians the lowest."

Dr. Gina T. Mootrey

Centers for Disease Control and Prevention

MODELS THAT WORK

While vaccination rates remain low for healthcare personnel across the country, programs to boost these rates are achieving success. Though a one-size-fits-all approach is undesirable, some common elements can be adapted and applied to many practice settings. The goal of this report is to bring together elements of successful immunization programs so that more organizations can develop their own plans to fight the flu.

Hospitals and healthcare organizations in the United States traditionally have employed an immunization strategy that fits into one of the following categories:

- A program that features worker education about flu, easy access to vaccine, and incentives to encourage immunization. Workers may passively refuse to participate.
- A program featuring worker education, access to vaccine, and incentives for participation, with mandatory participation either by vaccination or documentation of declination of vaccination. Workers who decline to be immunized must sign a declination statement or otherwise actively refuse to participate.
- A mandatory program in which workers are required to be immunized.

The following case studies illustrate healthcare personnel immunization efforts at four diverse, dynamic medical facilities around the country. Each has witnessed improvement in immunization rates by understanding its own unique barriers and obstacles to success, implementing a thorough, sometimes entertaining education plan and analyzing ways to continue to improve on its efforts.

Case Study #1: MANDATING IMMUNIZATION

Virginia Mason Medical Center

A private, nonprofit organization based in Seattle, Washington, Virginia Mason Medical Center offers an integrated network of health services. Virginia Mason decided to implement a mandatory employee immunization program after a 2004 review found that vaccinating its healthcare personnel for influenza could result in a safer environment for its patients, and that voluntary immunization programs were not working very well.

As a leading health facility that puts the health and safety of the patient as its primary goal, Virginia Mason was dissatisfied with its internal immunization rates. In 2002, only 38% of its workforce had been immunized against the flu, roughly even with the national average. And in 2003, after a voluntary immunization program, the rates climbed, but only to 54%.



So, the organization decided to include everyone on its workforce in the immunization program. Only those who had requested an accommodation on the basis of religious or medical needs were granted an exemption; those employees were required to wear a surgical mask for the duration of flu season as part of the hospital's respiratory health campaign to protect patients and staff. Those who otherwise initially declined to get immunized were also provided with educational information and discussions and directed to internal Web sites to gather additional information on influenza.

Ultimately, anyone who failed to get vaccinated by the hospital's deadline was subject to termination of employment. Seven people were terminated that first year, none in the years since.

Immunization rates in 2005, the first year the mandatory program was fully implemented, rose significantly. Nearly the entire staff, 98%, was immunized.

Education is a main focus of the Virginia Mason immunization program. The effort to educate workers about influenza includes informational kiosks around the hospital, question-and-answer sessions with staff, information on the internal Web site and links to external sites with more information, such as the CDC Web site.

Virginia Mason also utilizes people it refers to as "flu champions." These are staff volunteers from various units throughout the organization who speak with co-workers one-on-one about the benefits of getting immunized.

In addition to informing and educating its workers, Virginia Mason also introduced an element of fun into its immunization campaign. The hospital sponsored a slogan contest with prizes. The winning slogan in 2005, "Save Lives—Immunize" was printed on rubber bracelets and distributed to staff. There was also an annual tailgate kickoff party that included members of the Seattle Seahawks football team, who showed up for food, prizes and vaccinations. In 2006, Virginia Mason vaccinated 750 employees in three hours at its tailgate party.

Convenience for all workers and support from across the institution are also critical elements of the Virginia Mason plan. The hospital goes out of its way to make the vaccine easily available. That means taking mobile carts around to different departments, using peer vaccinators to help immunize colleagues and administering shots through clinics with extended hours. Virginia Mason reimburses any of its employees who prefer to get their flu vaccine elsewhere. Support comes from the highest levels of hospital administration; the hospital's chief executive and president attend meetings of the hospital flu team, encouraging their efforts.

"The greatest rewards: the vaccine success rate, and being part of a ground-breaking team effort, and of course, protecting our patients, our families and our community." Beverly A. Hagar

Virginia Mason Medical Center

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Case Study #2: TOP-DOWN MANAGEMENT INVOLVEMENT

St. Jude Children's Research Hospital

A pediatric research and treatment facility in Memphis, Tennessee, St. Jude Children's Research Hospital is world-renowned for the care it provides to children with cancer, immunodeficiency disorders or HIV.

Because all of its patients are considered high-risk for influenza, immunizing its workers is a priority for St. Jude's. In years past, however, St. Jude's immunization rates had been too low. In fact, some of the lowest rates were seen among its staff with direct patient care responsibility.

So, in attempting to raise staff immunization rates, the hospital began to look at the issue more closely. St. Jude's officials realized that from the institution's point of view, receiving a flu vaccine made sense in terms of occupational health and infection control, as well as being a smart business strategy. In other words, it had ramifications for keeping the employees healthy, protecting the high-risk patients, and promoting the hospital's overall business interests.

Perhaps not surprisingly, the employees' main concern was keeping themselves healthy. St. Jude's concluded that in order to improve upon its low immunization rates, they would need to appeal to workers on a more personal level. Officials therefore set out to learn more about staff concerns about influenza immunization by reviewing the published literature and interviewing employees.

In determining why the hospital's general medical staff had been rejecting the vaccine, the following reasons were most commonly cited:

- A fear that the vaccine will make me sick
- I don't get sick so I don't need the vaccine
- The shot is painful and doesn't work

Physicians in general had slightly different reasons for rejecting the vaccine, with the following being most significant:

- I'm too busy to get the shot; it's inconvenient
- A fear of rare side effects
- I don't need the vaccine because I don't get the flu

Conversely, those among the general medical staff who accepted the flu vaccine cited the following reasons:

- I don't want to face a lengthy period of absenteeism
- It's convenient and free
- I don't want to put my patients at risk of contracting influenza

Among the doctors, these were the main reasons for getting immunized:

- I don't want to get sick
- I don't want to put my patients, family, and contacts at risk

St. Jude's found that for members of the hospital's general medical staff, the decision whether to get immunized was often a personal one. Many who rejected the vaccine based their decision on incorrect information or beliefs. Often the doctors who rejected the vaccine did so on the basis of time constraints; they tended to possess more accurate knowledge and information about influenza and immunization but felt that getting immunized wasn't always convenient or took too much time.

"If I had a doctor who said, 'Well, I can't make it to any of your 50 different vaccination opportunities,' we would go to the office and vaccinate him while he was working at his desk—we really tried to make this as easy as possible in every way we possibly could."

Dr. Jonathan A. McCullers St. Jude Children's Research Hospital

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From this information, St. Jude's was able to develop a comprehensive approach to immunizing its workers against influenza, centered on education, availability and what they refer to as "feedback & follow-up."

For St. Jude's, the immunization education campaign needed to be employee-focused, at least as it related to the general medical staff, in order to overcome some long-held fears and misinformation. Specifically, the hospital used available evidence to show the efficacy of the vaccine and how it could be instrumental in preventing workers from getting sick and using up sick leave. These educational messages were delivered in a variety of ways: at staff meetings, through e-mail, company newsletters, and on informational posters.

As the staff became better educated about influenza and the immunization process, St. Jude's set about to make the vaccine more accessible to staff. Beginning early in the flu season and continuing throughout the fall, they made it available to all healthcare personnel including those who worked outside of normal business hours and outside of its main location. To do so, they often used intermediaries to help deliver flu shots. And they made special accommodations for populations that could be difficult to reach, including physicians.

The work didn't stop there. St. Jude's utilized a process they call "feedback & follow-up." On a weekly basis, the infectious control staff reviewed the list of workers who hadn't been vaccinated. Those names were then referred to supervisors for follow-up reminders, a process that lasted about three months as the number of non-compliant employees was whittled down.

Because of the complexity of this three-pronged approach, St. Jude's needed acceptance at all levels of the hospital, including the top members of the administration, and central authority figures within each department, which they were able to accomplish. In the end, workers who failed to get immunized made an active decision to do so, rather than being allowed to passively avoid being immunized. And that gave the hospital the impetus to persevere until it reached its immunization goals for each year.

In 2004, the first year of the immunization program, St. Jude's goal was an 80% vaccination rate, which it reached in early January. The same goal was set and realized in 2005. And in 2006, St. Jude's exceeded its goal with a 96% vaccination mark, reaching this peak with little additional effort compared to the challenges experienced in the first two years of the program.

In trying to improve upon its worker immunization rates, officials at St. Jude's began to ask some hard questions about why so few employees were getting immunized each year. They determined that many workers didn't recognize influenza as a serious problem. And since flu shots had not been mandated at the hospital, it wasn't seen in the same light as other diseases, such as measles and hepatitis B, for which they did have mandatory vaccination. St. Jude's also found that while immunizations are important to the hospital as an occupational health issue and an infection control measure, their employees didn't necessarily see it that way. It then became apparent that employee attitudes about flu shots needed to be considered, and that an appropriate education program would have to be developed.

What did St. Jude's learn from this whole process? First, that an increase in its immunization rate is directly related to the amount of energy put into the program. Second, that acceptance and endorsement from hospital administration is crucial. Third, the culture of acceptance helps improve immunization rates from year to year.

Additionally, the hospital has found that use of different delivery methods, such as the flu nasal spray, can help increase rates of immunization. And finally, through education and information, patients can be some of the biggest advocates for healthcare personnel immunization.

Case Study #3: STATE LAW FACILITATES ACTION

Kaiser Permanente of Northern California

An integrated healthcare system, Kaiser Permanente Northern California is part of the largest nonprofit health plan in the United States. Impressing upon patients the need to be immunized annually against influenza has been relatively easy compared with convincing staff members of that same need.

Kaiser's staff immunization efforts recently have been aided by new state legislation and by national healthcare standards. Specifically, California has a new law requiring that acute care hospital workers either receive an annual influenza immunization or sign a statement indicating that they have declined to

"As I conceptualize employee vaccination programs, I really think they fall into three categories ... the influence category, where we want to educate, where perhaps we provide incentives ... the active refusal category, that the default is getting the vaccine versus not getting the vaccine ... and the mandatory category."

> Dr. Randy E. Bergen Kaiser Permanente of Northern California

be immunized. In addition, Kaiser officials see the new Joint Commission standards regarding influenza immunizations as further reinforcing its immunization efforts.

In years past, Kaiser has employed a number of methods designed to make it easier for its employees to receive an influenza vaccine, including expanded hours for its flu clinics, setting up informational tables outside department meetings, using nursing supervisors to help deliver vaccinations and even holding lunchtime events or other socials that include opportunities for immunizations.

Despite these efforts, Kaiser Permanente Northern California's immunization rates have not been as high as officials would like, ranging from 36% to 53% of all employees between 2001-02 and 2006-07.



Immunization rates at Kaiser peaked in the 2004-05 season before easing back slightly in the subsequent two years. Given the size and type of the facilities, officials are generally pleased that their influenza rates are higher than in previous years, but they feel more work needs to be done.

One aspect of the program at Kaiser that has been effective has been its endorsement by top officials within the organization. That leadership is exemplified by an e-mail that is sent out each year to the entire staff stressing the importance of being immunized against influenza.

Kaiser is hopeful that with the force of the new Joint Commission standards and state legislation behind them, additional improvement will take place. In addition, Kaiser is looking at a slight alteration in the message it delivers to its healthcare personnel. Rather than encouraging them to be "flu fighters," Kaiser officials believe that in the future it might be more effective to appeal to employees on a personal level, by encouraging them to protect themselves, their families and those around them from the flu.

Case Study # 4: LEVERAGING TECHNOLOGY

Cleveland Clinic

A not-for-profit multi-specialty academic medical center based in Cleveland, Ohio, the Cleveland Clinic is using technology as a basis for implementing its influenza immunization program.

In 2003, the Cleveland Clinic's immunization rate among healthcare personnel was a modest 34%. Raising that rate was seen as one function in its larger program designed to maximize patient safety, employee health and infection control, known as the Cleveland Clinic's Quality and Patient Safety Institute.

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This institute includes such things as education and procedures for hand hygiene, the first line of defense against a hospital-acquired infection. The Clinic also employs various surveillance mechanisms for multidrug resistant organisms. In addition, there is a focus on immunizing workers against influenza.

One particular facet of the Cleveland Clinic's influenza immunization program is the use of technology. Specifically, the Clinic utilizes the hospital's intranet to increase immunization among workers, and to educate and inform the entire staff. Because the Cleveland Clinic consists of a system of hospital and family health centers spread out over the metropolitan area, it began to develop and encourage the use of a sophisticated electronic means of employee communication. It also put in place an electronic medical record for its outpatients.

In looking at some of the reasons that its healthcare personnel immunization rates were too low, the Cleveland Clinic came to realize that many of its employees simply didn't perceive influenza to be a serious problem. For some, it was a matter of believing that they don't tend to get sick, or hadn't



contracted influenza in the past, so they weren't at risk. This realization sparked an awareness of the need for improved education and an understanding that all employees—everyone who works at the Cleveland Clinic—should be immunized.

The Cleveland Clinic's commonsense approach to worker immunization is based on the realization that immunizing healthcare personnel against influenza makes sense on several levels. On a personal level, getting sick, especially with influenza, isn't pleasant. It is a serious, sometimes deadly illness. Institutions also see it as a patient safety issue. Studies show that by immunizing healthcare personnel, transmission of influenza from workers to patients can be mitigated. So, in addition to asking employees if they've had their flu shot, the Cleveland Clinic also reminds workers to wash their hands properly in a further effort to prevent infectious disease transmission.

The Cleveland Clinic has implemented mandatory intranet participation as part of its program; whether or not the employee actually gets immunized, he or she must visit the hospital's influenza homepage. There they find practical information, including clinic locations and hours, information about the disease, and a Frequently Asked Questions section. Also included are explanations for the hospital's policy regarding influenza immunizations. All employees are required to complete an online immunization form by December 1st of each year.

The Cleveland Clinic has seen its healthcare personnel immunization rates increase since implementing the program and requiring intranet participation. In 2004 its worker immunization rate, while just above the national average, was still at only 38%. The rate jumped to 55% in 2005 before a slight decline in 2006, when the methodology was implemented system-wide. Nearly nine out of ten workers (89%) participated in 2005, about eight in ten (81%) in 2006.

As with any healthcare facility, the Cleveland Clinic faces its own unique challenges as it attempts to increase its worker immunization rates. Because it comprises numerous facilities spread out over a broad area, geography represents a hurdle. The Clinic has chosen to address this through the use of its intranet system. Workplace culture is also an issue in terms of convincing the hospital population of the importance of new practices and behaviors to battle an old foe.

For the Cleveland Clinic it comes down to doing a better job of linking processes with outcomes showing how certain actions lead to specific, positive results. This is where technology comes in. In addition to using the intranet for documentation of participation in the influenza immunization program, the hospital utilizes a computer-based form of feedback, called a dashboard, providing individuals and administrators a tangible means of process measurement. This has proven to be effective at shaping the behavior of healthcare personnel in a variety of settings.

"We use a fairly sophisticated intranet ... for items like staff announcements and educational purposes ... and so for a variety of required educational materials, that's where we go."

Dr. Susan J. Rehm Cleveland Clinic

KEY CONSIDERATIONS

Obstacles/Barriers to Immunization

Healthcare personnel who choose not to get an annual immunization against influenza cite many reasons for failing to do so. Nonetheless, two main themes repeatedly appear:¹⁰

- A misperception of influenza and its risks, the role that healthcare personnel play in transmitting the infection to patients, and the importance and safety of vaccination; and
- A lack of, or perceived lack of, a conveniently available vaccine.

Among the more common misperceptions is that the vaccine itself can cause illness, or that large numbers of people can't receive the vaccine because of egg allergies. In fact, the injected vaccine cannot cause infection. And only a few people have severe allergic reactions to eggs that prevent them from being immunized. Those who do have verified medical reasons for deferring immunization, as well as individuals who have religious reasons for doing so, should be allowed to decline. Even in those cases, however, certain measures are appropriate including thorough education about influenza, the vaccine and other prevention methods and a signed statement from the worker detailing why he or she declined to be immunized.

"Maybe if we could put out three examples of those differentiated strategies, that might help infection control folks and administrators to choose what would work best with their facility and what they're willing to commit to."

> **Louise Kuhny** The Joint Commission

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In overcoming that first barrier, healthcare organizations and others must debunk existing myths about influenza and incorporate a comprehensive information and education program. To overcome the second barrier, adequate steps must be taken to make the vaccine available to all workers.

Facilities interested in instituting a mandatory immunization program have further considerations, such as teaming with employees and their union representatives. An inability to do so could negatively affect program goals through strained management-labor relations.

Mandatory Immunization Policies

A certain amount of controversy surrounds the issue of mandatory worker immunizations. Studies have shown that, in a hospital setting, immunizing healthcare personnel is a better preventative measure against influenza than immunizing patients.¹¹ Part of the controversy centers on what measures, if any, should be instituted for those who refuse to be immunized. Some healthcare facilities have found themselves faced with lawsuits from worker groups after mandating immunizations. Other institutions have opted to allow workers to take alternative measures if they decline immunization, such

as wearing a surgical mask or respirator for the duration of influenza season. But even that solution raises questions, such as whether the wearing of a mask unfairly singles out those healthcare personnel who refuse immunization.

Healthcare personnel who agree that institutions should implement a mandatory immunization program view prevention and protection as outweighing any concerns about being required to get the vaccine. Those who disagree believe the choice should be left to the individual worker,

particularly after they have been educated about influenza and the vaccine. Curiously, some healthcare personnel simply don't see the need for immunization, believing that influenza is not as significant a threat as smallpox or polio. In fact, influenza has far and away the highest rate of mortality among vaccine-preventable diseases in the United States, outpacing all other diseases combined.¹²

In order to overcome one potential legal hurdle involving its plans for mandatory immunization, St. Jude Children's Research Hospital has included details of its program in the contracts of newly hired workers. The hospital, seeking 100% compliance, plans to require workers either to be immunized or to wear a mask. Given its population of high-risk patients, St. Jude's cannot afford not to have a stringent anti-flu program. Similarly, Virginia Mason Medical Center discusses its worker immunization program during pre-employment interviews with job candidates, as well as in offer letters sent to those candidates.

The Cleveland Clinic has implemented an alternative to mandatory immunization, namely, mandatory participation. In other words, employees must participate in the institution's overall flu education program by visiting its influenza intranet homepage.

Who Benefits Most From Immunization: Healthcare Personnel or Patients?

Immunizing healthcare personnel protects workers and patients alike. It is important to note that infectious disease experts identify both populations as being in the high-risk category: patients because of possibly compromised immune systems or underlying diseases that put them at risk for influenza complications, and healthcare personnel because of their role in aiding the well-being of those patients.

Many health organizations have, as part of their mission statements, a primary focus on improving the health and well-being of their patients. Immunization of healthcare personnel certainly aids in that overall mission, most notably by decreasing the worker-to-patient transmission of influenza. Helping prevent worker infection is an added benefit.

A survey of healthcare personnel found the group split into three camps. About a third of respondents believed influenza immunization programs were meant to protect workers. Another third stated that such programs were instituted to protect patients. The final group believed that immunization equally served both parties.

From the provider standpoint, healthcare personnel influenza immunization programs should not be categorized as serving one population over another. Instead, such programs serve the broader purpose of assuring that medical environments—whether in acute or post-acute care setting—provide the safest, most effective means of keeping people well and helping those who are ill get better.

Common Challenges

Implementing any large-scale program such as influenza immunization will have its own challenges and difficulties. An analysis of programs already in place has identified several common challenges for hospitals and other healthcare facilities. Those challenges include:

LEADERSHIP BUY-IN

It is of paramount importance to ensure that workplace leadership is fully behind the effort and involved in the actual implementation. Infection control officials should meet with administrators

"The vast majority of our members are small businesses, literally mom and pop operations ... so there are some big hurdles ... [in terms of resources available to] the small business owners to go through this additional step [of educating staff and ensuring they get the immunization]."

Michael Reinemer American Association for Homecare to familiarize them with the many reasons that a full-scale influenza immunization program is necessary. Without question, increased costs, while generally minor, are a function of such a program. In the end, many healthcare settings realize an overall cost savings for their efforts.

HEALTHCARE PERSONNEL BUY-IN

Administrators are not the only members of the team that need to commit to an immunization plan. The healthcare personnel themselves, particularly those with direct patient care responsibility, need to buy in to the effort as well. That may involve using nurse volunteers or team leaders as vaccinators. It also includes, because of the numbers of workers usually involved, a thorough multi-phase employee education program.

ONE SIZE DOES NOT FIT ALL

There is no single formula for implementing a successful influenza immunization program. The program design depends on the type of healthcare facility or setting. Some settings, in particular, present unique challenges. For example, home health settings present challenges related to geographic and potential language barriers. Additionally, it is difficult to implement educational outreach programs among home health aides—a group of healthcare personnel that typically work independently, often without access to the same resources available in an institutional setting.

EMPLOYEE TURNOVER

Employee retention is an ongoing battle faced in all healthcare venues. Facilities with high employee turnover are challenged by a regularly changing worker population that requires ongoing education. Similarly, facilities that have recruitment and retention issues may have greater difficulty implementing a mandatory immunization policy. To combat this challenge, some groups have instituted their immunization education program as part of the new employee orientation process.

CONCLUSION

Immunizing healthcare personnel against influenza makes good clinical sense and is the right thing to do. A successful influenza immunization program for healthcare personnel protects employees and patients, their families and colleagues. The benefits of such programs have been shown to far outpace the associated human and financial resources it takes to get these efforts off the ground. But successful programs don't happen independently. A confluence of factors have helped the institutions highlighted in this report to implement working immunization programs, including dedicated staff, comprehensive education programs, a convenient supply of vaccine, and the dedication and teamwork needed to make a difference.

¹ National Foundation for Infectious Diseases, Bethesda, MD. Immunization: Promoting Prevention for a Healthier Life—National Adult Immunization Awareness Week 2007 Campaign Kit.

² National Foundation for Infectious Diseases, Bethesda, MD. Immunization: Promoting Prevention for a Healthier Life—National Adult Immunization Awareness Week 2007 Campaign Kit.

³ Influenza Vaccination of Health-Care Personnel—Recommendations of the Healthcare Infection Control Practices Advisory Committee (HICPAC) and the Advisory Committee on Immunization Practices (ACIP). MMWR 2006 Feb 24; 55(RR02):1-16.

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⁷ As cited by Gina T. Mootrey, DO, MPH, Centers for Disease Control and Prevention. Influenza Vaccination of Healthcare Workers, Roundtable on Best Practices for Vaccinating Healthcare Workers against Influenza, Washington, D.C. October 2007.

⁸ SEIU Survey on Influenza and Immunization, 2007, unpublished.

⁹ As cited by Gina T. Mootrey, DO, MPH, Centers for Disease Control and Prevention. Influenza Vaccination of Healthcare Workers, Roundtable on Best Practices for Vaccinating Healthcare Workers against Influenza, Washington, D.C. October 2007.

¹⁰ Hofman F, Ferracin C, March G, Dumas R. Infection 2005;34:142-147.

¹¹ Influenza Vaccination of Health-Care Personnel—Recommendations of the Healthcare Infection Control Practices Advisory Committee (HICPAC) and the Advisory Committee on Immunization Practices (ACIP). MMWR 2006 Feb 24; 55(RR02):1-16.

¹² ANA's Best Practices in Seasonal Influenza Immunization Programs for Health Care Personnel, unpublished.

APPENDIX

Legislative and Regulatory Round-up January 2008

INFLUENZA VACCINATION FOR HEALTHCARE PERSONNEL			
STATE	STATUS	LEGISLATION	DESCRIPTION
Alabama	Adopted	Ala. Admin. Code r. 420-5-7- .04, Code of Ala. 22-21-10	• It is required of each hospital to establish vaccination requirements for employees that are consistent with current recommendations from the Federal Centers for Disease Control and Prevention and the Federal Occupational Safety and Health Administration (at a minimum to require annual influenza vaccinations). These requirements apply only to those facilities covered by Alabama's definition of a hospital.
			• Each long-term care facility in this state shall conduct an immunization program as provided in this section which gives residents the opportunity to be immunized annually against the influenza virus and to be immunized against pneumococcal disease and employees the opportunity to be immunized against influenza virus.
			 A long-term care facility shall notify the resident upon admission of the immunization program provided by this section and shall request that the resident agree to be immunized against influenza virus and pneumococcal disease.
			 No individual, resident, or employee shall be required to receive the vaccine under this section if the vaccine is medically contraindicated, if the vaccine is against the individual's religious beliefs, or if the individual refuses the vaccine after being fully informed of the health risks of not being immunized.
Arkansas	Adopted	Senate Bill No. 346	 Each nursing home facility in this state shall: Obtain consent from residents or their legal guardians upon admission to participate in all immunization programs that are conducted within the facility while that person is a resident of that facility, and not in violation of the resident's right to refuse treatment. As a condition of their employment, require all employees to participate in immunization programs conducted while they are employed at the facility, unless the employee meets the qualifications for exemptions. Qualifications for exemptions include medical contraindications or religious beliefs.
California	Adopted	Senate Bill No. 739	 It is required to annually offer on-site influenza vaccinations, if available, to all hospital employees at no cost to the employee. In general acute care hospitals, it is required that all employees are vaccinated. If they choose not to be vaccinated, it must be declared in writing that he/she has declined the vaccination.

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STATE	STATUS	LEGISLATION	DESCRIPTION
Florida	Adopted	Fla. Stat. 400.141	 It is a requirement of administration and management of nursing home facilities to: Annually encourage and promote to its employees the benefits associated with immunizations against influenza viruses in accordance with the recommendations of the United States Centers for Disease Control and Prevention. The agency may adopt and enforce any rules necessary to comply with or implement this subsection.
Kentucky	Adopted	K.R.S. 209.552	 Every long-term care facility shall require each employee to be immunized against pneumococcal and influenza virus. The employee may be exempt from the immunization if: The vaccine is medically contraindicated; The employee, resident, or resident's legal guardian objects to the immunizations due to religious beliefs; or The employee or resident refuses the vaccine after being fully informed of the health risks.
Maine	Adopted	Code Me. R. 10- 144-264(2)	 Designated Healthcare Facilities have a policy that recommends and offers annual immunizations against influenza to all personnel who provide direct care for residents of the facility. Designated Healthcare Facilities are defined as: licensed nursing facility, residential care facility, intermediate care facility for the mentally retarded, multi-level health care facility, hospital, or home health agency. An employee may choose not to receive the immunization due to medical, religious, or philosophical reasons, but must disclose these reasons in writing. An employee may be permitted to attend work where he/she presents a physician's written statement that the immunization is medically inadvisable.
Maryland	Adopted	Md. Health- General Code Ann. 18-404	 All long term care workers must be vaccinated. A resident or employee is not required to receive a vaccine under this section if: The vaccine is medically contraindicated for the resident or employee; The vaccine is against the resident or employee's religious beliefs; or After being fully informed by the related institution of the health risks associated with not receiving a vaccine, the resident or employee refuses the vaccine. Must document reason for refusal.
New Hampshire	Adopted	N.H. Rev. Stat. Ann. 151:9-b, Bill SB 438, Bill HB 1741	 It is required that before November 30th of each year hospitals, residential care facilities, adult day care facilities and assisted living facilities shall provide to its consenting employees annual immunizations against influenza. Exemptions to the immunization requirements include medical contraindications or religious beliefs.

STATE	STATUS	LEGISLATION	DESCRIPTION
New York	Pending	Bill 4601, Bill 4904, NY CLS Pub Health 2192	• It is required that a general hospital with a neonatal intensive care unit offer to every parent, person in parental relation, and person who is reasonably anticipated to be a caregiver in the household of a newborn being treated in such neonatal intensive care unit a vaccination against influenza virus.
			 It is required that health care providers are immunized against influenza virus and pneumococcal disease.
			 Medical contraindication allows for exemption to the immunization requirements.
			• Every long-term care facility in this state shall require residents and employees to be immunized for influenza virus and pneumococcal disease in accordance with regulations of the commissioner.
			 No individual shall be required to receive either an influenza vaccine or pneumococcal vaccine if the vaccine is medically contraindicated, or if it is against his or her religious beliefs, or if he or she refuses the vaccine after being fully informed of the health risks of such action.
North Carolina	Adopted	Bill 122, NC Gen. Stat 131D-9, Bill SB 1234	 It is required that hospitals provide the influenza vaccine at no cost to all employees having direct patient contact, to report influenza vaccination rates of employees to the state, and to provide education to hospital employees about the risks of influenza and benefits of immunization; and to require nursing homes and adult care homes to report influenza vaccination rates of employees. It is required that nursing homes and adult care homes ensure both residents and employees of nursing homes and adult care homes receive an annual influenza vaccination. The facilities are required to document the influenza immunization status of
			 each resident and employee. Every long-term care facility in this state shall require residents and employees to be immunized for influenza virus and pneumococcal disease in accordance with regulations of the commissioner.
			• No individual shall be required to receive vaccine under this section if the vaccine is medically contraindicated, of if the vaccine is against the individual's religious beliefs, of if the individual refuses the vaccine after being fully informed of the health risks of not being immunized.
Oklahoma	Adopted	OKLA. ADMIN. CODE 310:675-9- 31 (2003	 Each facility shall document evidence of the offering of annual vaccination against influenza for each resident and for each employee, in accordance with the Recommendations of the Advisory Committee on Immunization Practices for the Centers for Disease Control and Prevention most recent to the time of vaccination. The immunization provided for in this section may be waived because of medical contraindication or may be refused.

STATE	STATUS	LEGISLATION	DESCRIPTION
Oregon	Adopted	Or. Rev. Stat. 433.416	• There is no statute or regulation requiring any hospital to ensure that any employee is vaccinated with the influenza vaccine. However, if during the course of employment the healthcare worker is at risk of contracting an infectious disease, the employer shall provide at no cost to employee preventative immunization if available and medically appropriate.
Pennsylvania	Adopted	Act 95, 35 P.S. 632.5	 It is required that long-term care facilities offer residents and employees influenza immunizations and to provide educational materials on the flu vaccine.
Rhode Island	Adopted	R.I. Gen. Laws 23-17.19-3, R.I. Gen. Laws 23- 17.19-5., R.I. Gen. Laws 23- 17.19-6., Code R. 14-000-028 (promulgated under the authority of Chapters 23-17 and 23-17.7 of the General Laws of Rhode Island)	 Every facility in this state shall request that residents and employees be immunized for influenza virus and pneumococcal disease in accordance with this chapter. Every facility shall notify every employee of the immunization requirements of this chapter and request that the employee agree to be immunized against influenza virus. It is required for rehabilitation hospitals, hospitals and health care facilities to offer new employees starting work between October and March vaccination with influenza vaccine. Each health care facility shall offer annual vaccination against influenza to all other health care workers involved in direct patient contact, including employees and volunteers. Medical contraindication is reason for exemption to immunizations.
Texas	Adopted	Tex. Health & Safety Code 161.0051, 25 T.A.C. 97.202	 The board by rule shall require nursing homes to offer, in accordance with an immunization schedule adopted by the board: Pneumococcal vaccine to elderly residents; and Influenza vaccine to elderly residents and to staff who are in contact with elderly residents. The facility must offer influenza vaccination to residents and employees in contact with residents. Vaccination must be completed unless the vaccine is medically contraindicated by a physician or unless the employee or resident has refused the vaccine. Exemption must be documented in writing.
Utah	Adopted	R432-40-4	 Each long-term healthcare facility shall implement written policies and procedures that include: A comprehensive assessment and immunization program for residents and employees; How and when to provide the influenza and pneumococcal immunizations; Standing orders from a qualified health care practitioner to ensure residents obtain influenza and pneumococcal immunizations; and Collection and recording of resident-specific immunization history information for each resident admitted to the facility.



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