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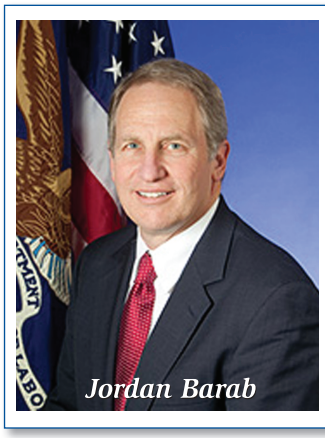
OSHA strongly opposes feds move to mandatory flu shots for HCWs

'Could be fired for refusing a flu vaccine that provides little protection'

By **Gary Evans,** Executive Editor


Jordan Barab

In a stunning setback to a federal move to mandate seasonal flu shots for health care workers, the Occupational Safety and Health Administration (OSHA) said there is insufficient evidence to warrant such policies and openly questioned the longstanding perception that they make patients safer, *Hospital Infection Control & Prevention* learned.

"OSHA believes that there must be a very high burden of proof that mandatory programs are not just desirable, but also necessary to protect the public health before the government promotes such a controversial policy that may result in employment termination," stated a letter signed by **Jordan Barab**, OSHA Deputy Assistant Secretary "…While we support the Healthy People 2020 goal of 90% health care personnel (HCP) vaccination as an aspirational goal, we are troubled that some have tried to convert the goal into a mandate. High HCP influenza vaccination rates are generally desirable, but we are unaware of any evidence to support the notion that such a high influenza vaccination rate is also essential to protect patients, and should thus be mandatory."

The OSHA comments were submitted in response to National Vaccine Advisory Committee (NVAC) recommendations drafted by its Healthcare Personnel Influenza Vaccination Subgroup (HCPIVS). (*See box, p. 16*) An advisory committee to the Department of Health and Human Services (HHS), NVAC was scheduled to meet Feb. 7, 2012. The comment period ended Jan.

In This Issue

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16th on the recommendations, but the HHS declined a request by *HIC* to release all the submitted documents.

Nevertheless, comments obtained from various key sources reveal there is considerable controversy about the NVAC recommendation, which essentially puts mandatory vaccination on the table at the federal level. Presented as sort of a "final option" in a tiered approach, NVAC recommends that facilities "that cannot achieve the 90% influenza goal in an efficient and timely manner, should strongly consider an employer requirement for influenza immunization. HCPIVS also recommends that the Assistant Secretary of Health assure that this recommendation is implemented in HHS facilities and services (including the Public Health Service, HHS staff and Federally Qualified Health Centers) and urge all other healthcare employers to do the same."

> *"…While we support the Healthy People 2020 goal of 90% health care personnel (HCP) vaccination as an aspirational goal, we are troubled that some have tried to convert the goal into a mandate.*
>
> ***Jordan Barab,*** *OSHA Deputy Assistant Secretary*

As more individual facilities and states began discussing and implementing mandatory flu vaccinations in health care settings, Assistant HHS Secretary of Health Howard Koh asked NVAC to explore the issue and make a recommendation. They have — at least in an initial draft — but OSHA urged that the mandatory recommendation be stricken from the text. "OSHA believes the report should clearly state that HCP should not be terminated from employment for refusing the influenza vaccine," Barab noted.

Moreover, OSHA's firm opposition to the provision will further embolden health care unions, several of which questioned the legality of the policy in comments to NVAC.

"Such a premature action would undermine the public's trust in federal vaccine policy," argued **William Borwegen**, Occupational Health and Safety Director for the Service Employees International Union (SEIU). "The practical effect of voting to adopt [the manda-

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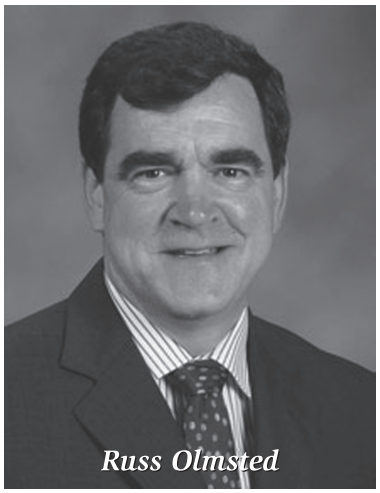
tory policy recommendation] would in essence be to make flu vaccination a mandate for millions of healthcare workers, without NVAC or HHS ever having to go through the typical rulemaking procedures as stipulated under the Administrative Procedures ACT."

SHEA, IDSA back mandatory policy

While OSHA urged dropping the mandatory option in the recommendations, a joint statement by several major infectious disease groups said NVAC should make the mandate even more forceful. The Society for Healthcare Epidemiology of America (SHEA), the Infectious Diseases Society of America (IDSA), and the Pediatric Infectious Diseases Society (PIDS) cited studies that show a protective effect for patients. "Several studies demonstrate that immunizing HCP against influenza reduces the risk of patients acquiring the virus from HCP, reducing both morbidity and mortality," the groups noted in a joint statement.[1-8]

Moreover, the 90% goal is unlikely to be achieved in the absence of such policies, so NAVAC's "tiered recommendations will only result in delays in achieving higher vaccination rates and may result in failures if facilities merely `consider' an employer requirement and do not implement one," the SHEA joint statement read.


Russ Olmsted

"Some critics have argued that employer mandates will lead to a false sense of security and decreased adherence to infection prevention programs," the joint statement reads. "Our Societies strongly support comprehensive influenza educational efforts for HCP and continuation of comprehensive infection prevention and control programs, in addition to employer mandates. Such programs would include identification and isolation of infected patients, adherence to hand hygiene and cough etiquette, the appropriate use of personal protective equipment, and restriction of ill healthcare workers and visitors in the facility."

Strongly concurring in separate comments was the Association for Professionals in Infection Control and Epidemiology.

"We strongly support the report's recommendations and the underlying Healthy People 2020 Annual goal [of 90%]," stated APIC comments signed by current President **Russell Olmsted**. "As you may know, in January 2011 APIC recommended that acute care hospitals, long term care, and other facilities that employ health care personnel (as defined in the August 2009 *MMWR*) require annual influenza immunization as a condition of employment unless there are compelling medical contraindications."

However, APIC can expect to fight an uphill battle on the vaccination issue now, including its recommendation that unvaccinated employees wear a surgical mask for patient care. *(See related story, p. 17)* With OSHA balking, the national momentum toward mandatory seasonal flu shots may stall, though many infection preventionists argue that it is the only way to overcome historically abysmal immunization rates in the 50% range. That, despite a standing Centers for Disease Control and Prevention recommendation for more than 25 years that HCP be immunized. According to the NVAC draft report, "In the 2010-11 influenza season, CDC found that approximately 13% of HCP reported that their employers required influenza vaccination as a condition of employment. Among this group, vaccination coverage was 98.1%, compared to 58.3% among those without an employer requirement."

OSHA would be the likely regulatory agency charged with enforcing any such federal requirement, which may partly explain its forceful comments at the onset. Other federal initiatives are moving forward in any case, with the Centers for Medicare and Medicaid Services (CMS) using its considerable leverage to have HCP influenza immunization rates reported as a quality infection prevention measure to the CDC's National Healthcare Safety Network (NHSN). According to APIC, a new NHSN module has recently been endorsed by the National Quality Forum and is expected to be available

NVAC issues five recommendations

The National Vaccine Advisory Committee (NVAC) flu recommendations were drafted by its Healthcare Personnel Influenza Vaccination Subgroup. NVAC is an advisory committee to the Department of Health and Human Services (HHS). The key recommendations in the draft are summarized as follows:

1: Healthcare facilities should establish comprehensive influenza infection prevention programs as recommended by the CDC as an essential step to achieve the Healthy People 2020 influenza vaccine coverage goal of 90%.

2: Healthcare facilities should integrate influenza vaccination programs into their existing infection prevention programs or occupational health programs.

3: The CDC and the Centers for Medicare and Medicaid Services (CMS) should continue efforts to standardize the methodology used to measure healthcare personnel (HCP) influenza vaccination rates across settings, linking vaccine coverage levels and quality improvement activities. The HHS should also work with CMS to implement incentives, penalties, or requirements that facilitate adoption of this recommendation.

4: Facilities that have implemented the aforementioned recommendations 1, 2 and 3, but cannot achieve the 90% influenza goal in an efficient and timely manner, should strongly consider an employer requirement for influenza immunization.

5: The HHS should encourage ongoing efforts to develop new and improved influenza vaccines and vaccine technologies. This includes support for research, development, and licensure of influenza vaccines with improved immunogenicity and duration of immunity, as well as steps that improve the immunogenicity and rapid production of existing influenza vaccines.

Editor's note: To review the full NVAC draft and/or comment on the guidelines go to: http://1.usa.gov/yoIe5W ■

for use in August 2012.

"APIC supports use of NHSN to capture HCP influenza vaccination rates in order to capture regional trends on the yearly uptake of the vaccine, prophylaxis and treatment for HCP, and the elements within yearly influenza campaigns that succeed or require improvement," Olmsted said.

Minority Report: OSHA questions integrity'

While the patient safety and ethical justification for such policies is widely embraced in the infection prevention community, OSHA cited studies that raise questions about the efficacy of the vaccine in any given year and the seemingly sacrosanct connection between worker immunization and patient safety. The agency cited a recent study that found only an overall efficacy of 59% for seasonal flu vaccination.[9] OSHA observed that there is great variability in the effectiveness of the influenza vaccine in preventing infection, as well as preventing life-threatening illnesses. The vaccine also requires annual reformulation and revaccination, the agency reminded, noting that every year there are numerous circulating strains of influenza that are not included in the vaccine. In years where the antigenic match is good, the vaccine only provides protection against the three strains in the formulation. In years when the antigenic match is poor, the vaccine may provide limited or no protection at all, OSHA argued. The limits of current influenza vaccine technology are especially problematic in the context of a mandatory influenza vaccination program that results in job loss, the agency warned.

"OSHA believes that the [NVAC] report should specifically address the implication of the limitations of current influenza vaccine technology on HCP mandatory vaccination (e.g., that, in some cases, a worker could be fired for refusing the influenza vaccine that provides little protection.)," Barab stated.

In the comments to NVAC, OSHA expressed concern "that minority comments describing insufficient evidence of a link between worker vaccination against influenza and patient safety have not been adequately addressed in the draft report. In order to prevent any alle-

gations concerning the scientific integrity of this report, OSHA requests that the final report include appropriate minority comments."

OSHA cited three recent studies to support its concerns:

• Jefferson, et al.[10] states "There is no evidence that they [influenza vaccinations] affect complications, such as pneumonia, or transmission." The evidence-based review also concluded that "At best, vaccines might be effective against only influenza A and B, which represent about 10% of all circulating viruses [that cause influenza or ILI symptoms]."

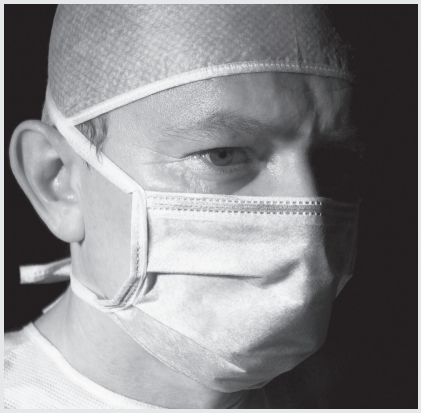
• Michiels, et al.[11] concluded "There is a striking lack of sound evidence for the effect of vaccination on influenza complications such as pneumonia, hospitalization and mortality among individuals with comorbidities."

Mask policies: Pt safety or punitive measure?

Unions object to 'illogical' policy

As part of its mandatory flu vaccination policy, the Association for Professionals in Infection Control and Epidemiology recommends that health care workers that cannot be immunized should wear surgical masks when caring for patients or working with susceptible staff.

This practice, which is already in place at some hospitals, was singled out for criticism by worker union officials in comments to National Vaccine Advisory Committee (NVAC) regarding new flu recommendations. The committee did not take a position on such masking policies, deferring to individual facilities to adopt the specifics of mandatory vaccination policies.



"The 'vaccinate or mask' option some hospitals and county health departments (including San Francisco, Sacramento and Yolo counties in California) are requiring is … not based on evidence of effectiveness," stated **Margaret Robbins**, MPH, National Director of the Occupational Safety and Health Coalition of Kaiser Permanente Unions, in comments to NVAC. "There is no scientific evidence that the routine wearing of surgical masks by unvaccinated healthcare workers protects either patients or the wearer of the mask from getting the flu. We believe this practice is intended to coerce and intimidate workers into getting vaccinated, and is not grounded in thoughtful analysis of whether the practice of daily mask wearing protects anyone."

Robbins coalition is comprised of 28 local unions representing some 95,000 frontline employees of the Kaiser Permanente health system. Since the flu vaccine is typically only 59% effective in a given flu season, and since there are many influenza like illnesses (ILI) that cannot be prevented by the flu vaccine, then many workers who are vaccinated can and will get the flu or other ILIs, Robbins argued.

"The logic of the situation tells us that it is not 'just' unvaccinated workers who are at risk of being a pre-symptomatic case of ILI (one of the justifications we've been given for such policies)," she said in comments to NVAC. "Both vaccinated and unvaccinated HCW could be a pre-symptomatic ILI case. By this logic every health care worker should be masked every day during flu season. We are not claiming this is a path that should be followed, but this is the direction logic leads us if we accept that the vaccinate-or-mask policy makes sense."

Robbins also expressed concern that the masking policies actually could contribute to transmission if a worker never changes the mask throughout the course of patient care.

"We wish the report and recommendations had reviewed and commented upon the safety and appropriateness of this type of requirement for vaccine refusal," she noted. ■

• Thomas, et al.[12] determined that "there is no evidence that vaccinating HCP prevents influenza in elderly residents in LTCFs."

"The scientific literature clearly supports offering the influenza vaccine to workers for the protection of the workers themselves, however OSHA does not believe that at this time the scientific literature adequately supports the notion that vaccinating HCP also provides a significant measure of protection for the patients for whom they care," Barab stated.

Urging that these issues must be "substantively addressed" in the final NVAC report, Barab's comments imply the NVAC subcommittee tried to finesse the issue by giving it short shrift in the report.

"We are concerned that the subgroup has obscured the issues of insufficient evidence of a link between worker vaccination against influenza and patient safety, by addressing the issue at the end of the section on mandatory vaccination and just before the conclusion," Barab stated in the comments. "The strength of association (or lack thereof) between worker vaccination and patient safety is a central and necessary element before contemplating whether mandatory influenza vaccination is an appropriate remedy. Additionally, the ethical and legal arguments associated with mandatory influenza vaccination also rely upon the integrity of the scientific evidence."

While OSHA expressed serious policy concerns about promoting "mandatory-taking" influenza vaccination programs, the agency supported "mandatory-offering" the vaccine in conjunction with education and the use of declination statements. OSHA cited its declination statement used for HCP hepatitis B vaccinations as a best-practice model.

Influenza vaccination exemptions should be allowed for HCP with valid medical contraindication to vaccinations, or religious and/or personal objections," Barab concluded. "In addition, a signed declination statement should indicate that: the HCP has been educated regarding influenza; is aware of the risk and benefits of influenza vaccination; has been given the opportunity to be vaccinated at no charge; and can receive the influenza vaccine in the future, at no cost, should they change their mind. We believe declination statements are an appropriate way that healthcare settings can document employee refusal and employer actions to encourage vaccine acceptance."

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Joint Commission pushes 90% flu goal

Standard calls for yearly improvement

Beginning in July 2012, The Joint Commission will require hospitals to improve influenza rates annually and to work toward a national goal of 90% flu vaccination of health care workers.

However, the accrediting agency did not establish a mandate as a condition of accreditation. The Joint Commission said, "The changes to the standard were made in response to increasing attention in the United States on improving patient safety by having health care personnel vaccinated against influenza. Both government and professional organizations have emphasized the need to increase patient safety by decreasing patients' exposure to the influenza virus while receiving health care."

A similar standard also will apply to ambulatory care, behavioral health care, long-term care, home care and laboratory services. This is the revised standard:

Standard IC.02.04.01

Influenza Vaccination for Licensed Independent Practitioners and Staff

The hospital offers vaccination against influenza to licensed independent practitioners and staff.

Note: This standard is applicable to staff and licensed independent practitioners only when care, treatment, or services are provided on-site.

When care, treatment, or services are provided off-site, such as with telemedicine or telephone consultation, this standard is not applicable to off-site staff and licensed independent practitioners.

Elements of Performance

1. The hospital establishes an annual influenza vaccination program that is offered to licensed independent practitioners and staff.

2. The hospital educates licensed independent practitioners and staff about, at a minimum, the influenza vaccine; nonvaccine control and prevention measures; and the diagnosis, transmission, and impact of influenza. (See also HR.01.04.01, EP 4)

3. The hospital provides influenza vaccination at sites and times accessible to licensed independent practitioners and staff.

4. The hospital includes in its infection control plan the goal of improving influenza vaccination rates. (For more information, refer to Standard IC.01.04.01).

5. The hospital sets incremental influenza vaccination goals, consistent with achieving the 90% rate established in the national influenza initiatives for 2020.

Note: The U.S. Department of Health and Human Services' Action Plan to Prevent Healthcare-Associated Infections is located at: http://www.hhs.gov/ash/initiatives/hai/tier2_flu.html.

6. The hospital has a written description of the methodology used to determine influenza vaccination rates. (See IC.02.04.01, EP 1)

Note: The National Quality Forum (NQF) Measure Submission and Evaluation Worksheet 5.0 provides recommendations for the numerator and denominator on the performance measure for NQF #0431.

The Joint Commission recommends that organizations use the Centers for Disease Control and Prevention (CDC) and the NQF proposed performance measure to calculate influenza vaccination rates for staff and licensed independent practitioners. The CDC/NQF measure, however, does not include all contracted staff. Therefore, The Joint Commission recommends that organizations also track influenza vaccination rates for all individuals providing care, treatment, and services through a contract, since contracted individuals also transmit influenza.

7. The hospital evaluates the reasons given by staff and licensed independent practitioners for declining the influenza vaccination. This evaluation occurs at least annually.

8. The hospital improves its vaccination rates according to its established goals at least annually. *(For more information, refer to Standards PI.02.01.01 and PI.03.01.01)*

9. The hospital provides influenza vaccination rate data to key stakeholders which may include leaders, licensed independent practitioners, nursing staff, and other staff at least annually. ■

Cameras + feedback = 88% HH compliance

"Big Brother is Watching You."
George Orwell, 1984

A novel solution to the historic problem of hand hygiene (HH) compliance suggests "Big Brother" and all its ominous connotations may be not such an unwelcome presence after all. The use of video cameras and real-time feedback dramatically improved and sustained HH compliance rates on a 17-bed unit at North Shore University Hospital in Manhasset, NY.

> *"I think people's behavior changes when they know they are being observed and they know the purpose of the observation"*
>
> ***Bruce Farber,*** *MD*

"We initially thought that some of the staff may [be concerned] `that someone is constantly watching us,'" says **Donna Armellino**, RN, DNP, CIC director of epidemiology at North Shore. "Once we discussed it with the staff and saw their enthusiasm it became less of an issue. Those concerns disappeared very quickly."


Bruce Farber

The investigators evaluated healthcare worker HH with the use of remote video auditing with and without feedback. The study was conducted in a 17-bed intensive care unit from June 2008 through June 2010. Cameras were placed with views of every sink and hand sanitizer dispenser to record HH of workers. Sensors in doorways identified when individuals entered and exited. When video auditors observed a worker performing HH upon entering and exiting, they assigned a "pass." If not, a "fail" was assigned. HH was measured during a 16-week period of remote video auditing without feedback and a 91-week period with feedback of data. Performance feedback was continuously displayed on electronic boards mounted within the hallways, and summary reports were delivered to supervisors by electronic mail.

"I think people's behavior changes when they know they are being observed and they know the *purpose* of the observation," says **Bruce Farber**, MD, hospital epidemiologist at North Shore. "The whole culture changes. That's clear in virtually every field that has studied direct feedback, whether it's traffic lights or the food service industry. "

During the 16-week pre-feedback period, HH rates were less than 10% and in the 16-week post-feedback period increased to 81%. The increase was maintained through 75 weeks at an aggregate rate of 88%.

In a surprising finding, the presence of cameras alone did not make the difference — it was the feedback of compliance rates that sealed the culture change. To repeat, the aforementioned 10% adherence rate was stunningly low even after the cameras alone were introduced.

"They knew they were there, but they really didn't clearly know what their purpose was," Farber says. "At the same time we had on-site people saying that our rates were 60%. And the definition we used [in video observations] was much tougher."

The definition of appropriate HH at the hospital requires workers to perform HH both before and after all patient room entries and exits. They must also disinfect hands after touching objects in the patient's environment and after removing gloves.

Despite ongoing training, many clinicians mistakenly thought that hand washing or using an alcohol-based hand sanitizer either prior to or after having patient contact is sufficient, while others assumed the use of disposable gloves can take the place of HH.

"They all were in favor of doing it, but

Camera use common in other industries

Hospitals leary of adopting

In an era where all manner of privacy is disappearing, health care lags well behind other industries in using cameras for monitoring behavior.

Adam Aronson, chief executive officer of Arrowsight in Mount Kisco, NY, began by monitoring food safety, animal welfare and productivity in the meat industry.

At a ham plant in Council Bluff, IA, Arrowsight placed cameras in a hallway outside the bathroom. Workers were supposed to squirt alcohol-based gel on their hands after leaving the bathroom.

"What we found was that the workers basically ignored the protocol despite the fact that there was a sign," he says. "Within two weeks of providing feedback, the number was 95%."

Aronson shared the information with his father, vice chair of quality at Beth Israel Deaconness Medical Center in Boston, who urged him to tailor the technology for hospitals. Aronson tried, but the hospitals he approached weren't interested. "We hired some consultants and met with 10 hospitals, none of whom would even trial it for free," he says.

Then Aronson had a personal experience that pushed him to do more. Both his mother and sister acquired serious infections during hospital stays. Aronson decided to try again. He was able to use the technology in an outpatient surgery center in Macon, GA, and show its value. ■

[lagged] in terms of knowing the order to pass, to have to do it before and after [seeing patients] and within 10 seconds," Farber says. However, once education was reinforced and the cameras were complemented by an aggregate feedback system, compliance rates began to rise dramatically.

In another unusual feature, the compliance auditing is conducted by remote third-party human auditors. They use a web-based workflow software program to visualize and assess HH compliance by clinical staff with the use of video cameras and doorway motion sensors. As performance data are collected, feedback metrics are automatically tabulated by a central server database and delivered back to the hospital staff through electronic "LED" boards, electronic mail summaries and comprehensive weekly performance reports. The electronic boards can also be used for positive feedback, sending a message like "Good Shift!" if compliance is coming in very high.

Sustaining the gain

"We have had this for three years and there has been no decrease in compliance rates," Farber says.

The ability to sustain the gain — the common downfall to many an infection prevention initiative — makes a huge difference for Armellino.

"When we put in the cameras the hope was to achieve sustainability," she says. "Through my experience in the past there have been a lot of short-lived campaigns and initiatives to temporarily improve HH. Because of the inability to continuously monitor and give feedback there is always a drop — the rates don't stay up. You have manpower when you focus on the issue, but then other issues come up so you have to redeploy staff. "

In contrast, the way the North Shore program is set up, Armellino receives compliance updates twice a day, allowing her to intervene as needed.

"I know how well they are doing and I know when I need to encourage the leadership there to change some of the behaviors because we see the rates dropping — I'm talking about an 80% range, she explains. "They have had a wonderful run close to 90% and even higher in the unit over the past couple of weeks. But

when I see an 85% I get concerned."

While the direct relationship between HH and infection rate reduction has been studied in one form or another since Semmelweis in the 19th century, small scale interventions like the one at North Shore can find it challenging to achieve the numbers needed for statistical significance.

"We have seen a decrease in our transmission rate of MRSA, but this is a 17-bed unit and a second unit that [has been added since the study] has no more than 18 beds," she says. "When you look at infections they are relatively low, so it's very hard to say, 'Because we did this our rates went down.' There are a lot of other variables that come into play to change infection rates, but we did see a drop in MRSA transmission rates. "

Then again, Armellino notes, "We don't need any more studies to know that hand washing is a good idea."

Video monitoring requires a significant financial investment, and that can be daunting for hospitals in challenging economic times. North Shore received a $50,000 grant from the New York state health department to install the system. Monitoring costs $3,000 for an initial unit and $1,000 a month for each additional unit. The monitoring is actually conducted by an outsourcing firm in India, with additional monitoring and quality assurance auditing by workers in Huntsville, AL.

On the other hand, hospitals that can achieve and verify such high compliance rates will almost certainly be preventing costly healthcare associated infections by sharply reducing the likelihood of cross transmission between patients. When thousands of dollars of subsequent care are eliminated in the act of preventing a single infection, one could argue that such surveillance and feedback systems are well worth the considerable investment they require. The cost may also be justified in areas in which patients are at highest risk for infection. It is likely that the frequency of the audits could be reduced without compromising the result to reduce the cost, Farber says.

"They are monitored very frequently now; we probably need a lot less monitoring to accomplish the same result," he says. "But in the study they were monitored thousands of times per day."

The technology may have other applications in quality auditing, with examples including compliance with proper technique during resuscitation, rapid responses, central line catheter placement, select nursing care (such as turning and positioning to prevent decubiti), as well as patient interactions. In addition, compliance with patient isolation measures could be recorded and audited to ensure barriers like gloves, gowns and masks are donned and worn appropriately.

And what about Big Brother?


Lauris Kaldjian

The increasing invasiveness of high tech surveillance of health care worker behavior has the potential to lead to unethical situations and systems, warns **Lauris C. Kaldjian**, MD, PhD, Director of Bioethics in the Department of Internal Medicine University of Iowa Carver College of Medicine.

Asked to review the study for *HIC*, Kaldjian says North Shore set up the program with a wise commitment to full transparency from the onset.

"I am impressed by the transparency and candor with which they designed this intervention," he says. "Healthcare workers were aware that HH was a condition of employment, signed an annual HH contract, and were informed that cameras were being installed to monitor HH to generate aggregate data only. One of the key elements in these sort of interventions has to be a straight forwardness so that care workers know what's going on and they know why it's going on."

Using the LED displays to give direct feed-

back to staff is both equitable and fair as long as all parties agree on the definitions of the observed behavior, he adds.

"If there is no dispute there, this kind of approach seems to be a very impressive attempt to try and reflect what is actually happening and show that to the people who are the actors on the stage," he says. [They are using] this as not only an incentive to try harder but also congratulate them for doing well."

Of course, extending such surveillance into other areas potentially involving patients would open up a new set of ethical and disclosure questions. However, in the current study one could certainly argue that it is better to know cameras are monitoring you than a lurking "secret shopper" of the human variety.

"Nobody felt like they were being [observed] unfairly," Farber says. "It was all up front and was not secret."

While aggregate data is presented, Farber conceded that individuals could be identified from the tapes and their compliance assessed.

"Yes, no question, we have video of everybody going in and out," he says. "We just have to call up the time and day and I could get it — I have gotten it — but we purposely have not gone after specific individuals."

As such programs and the high tech devices to conduct them continue to evolve, health care workers could eventually be fed back individual HH compliance rates like surgeons being told their rates of surgical site infections.

REFERENCE

1. Armellino D, Hussain E, Schilling ME, et al. Using high-technology to enforce low-technology safety measures: The use of third-party remote video auditing and real-time feedback in healthcare. *Clin Infect Dis* Published online on November 21, 2011. ■

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CNE/CME Objectives

Upon completion of this educational activity, participants should be able to:

- Identify the clinical, legal, or educational issues encountered by infection preventionists and epidemiologists;
- Describe the effect of infection control and prevention issues on nurses, hospitals, or the health care industry in general;
- Cite solutions to the problems encountered by infection preventionists based on guidelines from the relevant regulatory authorities, and/or independent recommendations from clinicians at individual institutions. ■

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CNE/CME Questions

1. The Occupational Safety and Health Administration (OSHA) cited which of the following in opposing a recommendation for mandatory influenza vaccinations of health care workers?
   A. a recent study that found only an overall of efficacy of 59%
   B. vaccine requires annual reformulation and revaccination
   C. numerous circulating flu strains not included in the vaccine
   D. All of the above

2. OSHA recommended "mandatory-offering" of the vaccine in conjunction with education and the use of declination statements.
   A. true
   B. false

3. As part of its mandatory flu vaccination policy, the Association for Professionals in Infection Control and Epidemiology recommends that health care workers that cannot be immunized should:
   A. take antivirals at the first sign of symptoms
   B. work in non-patient care areas
   C. consider another career field
   D. wear a mask when caring for patients or working with susceptible staff

4. The use of video cameras dramatically improved and sustained hand hygiene compliance after what additional component was implemented?
   A. Posting the names of those with low compliance
   B. Real-time aggregate feedback
   C. Cash rewards for the best work shift
   D. Private, individual feedback

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