NATIONAL INFLUENZA VACCINE SUMMIT NEWSLETTER

Influenza Activity Spotlights

Friday, August 29, 2008

Issue #2

Professional Medical Organizations
Please disseminate widely to all of your members.

1. Joint Commission Resources (JCR) has launched a *Flu Vaccination Challenge* to underscore the responsibility that hospitals have to help keep their employees and patients healthy this influenza season. The *Flu Vaccination Challenge* is designed to increase influenza vaccination rates among healthcare workers. The *Flu Vaccination Challenge* begins in September 2008 and will continue throughout the influenza season until May 2009. Hospitals that achieve a vaccination rate of 43 percent or more will be recognized for their dedication to helping keep their employees healthy and helping to protect their patients. Vaccination of healthcare workers may help to decrease the chances that they will get influenza and pass it on to their patients. For more information, go to: http://www.fluvaccinationchallenge.com. To enroll your hospital, go to: http://www.jcrinc.com/26814/audioconf/32522.

2. PTA (Parent Teachers Association) is partnering with Novartis Vaccines and Flu Busters, a leading provider of on-site vaccinations, to launch an exclusive program called ***Let's Fight Flu Together!*** The program provides local PTA Units with educational materials and resources to conduct on-site influenza vaccination clinics for students, their families and the community at participating schools. Influenza vaccinations will be administered by a qualified health professional at select schools around the country.

3. The National Foundation for Infectious Diseases' (NFID) National Influenza Press Conference is scheduled for Wednesday, September 24, therefore, the Summit call the following Wednesday, October 1, will provide an opportunity to summarize the conference for all.

4. This year's National Influenza Vaccination Week (NIVW) will be December 8 through December 14, 2008. This is the third year that the NIVW campaign will be conducted to improve post-Thanksgiving influenza immunization rates. Again, it is important that this is about immunizing more vulnerable people; it is NOT about having more time to immunize the same patient base.

5. The American Society of Health-System Pharmacists (ASHP) is an important partner to the Summit. ASHP represents pharmacists who practice in hospitals and health systems. The Society's more than 35,000 members include pharmacists and pharmacy technicians who practice in a variety of health-system settings, including inpatient, outpatient, home care, and long-term-care settings.

ASHP are particularly interested in exploring opportunities to collaborate on the issue of healthcare worker immunizations. They actually have a policy statement specifically advocating that healthcare workers be required to receive the influenza vaccination:

0615: INFLUENZA VACCINATION REQUIREMENTS TO ADVANCE PATIENT SAFETY AND PUBLIC HEALTH
Source: Council on Professional Affairs

To advocate that hospitals and health systems require health care workers to receive an annual influenza vaccination except when (1) it is contraindicated, or (2) the worker has religious objections, or (3) the worker signs an informed declination; further,

To encourage all hospital and health-system pharmacy personnel to be vaccinated against influenza; further,

To encourage hospital and health-system pharmacists to take a lead role in developing and implementing policies and procedures for vaccinating health care workers and in providing education on the patient safety benefits of annual influenza vaccination; further,

To work with the federal government and others to improve the vaccine development and supply system in order to ensure a consistent and adequate supply of influenza virus vaccine.

Please feel free to contact either Cindy Reilly or Mary Andrawis for more information on ASHP and for exploring collaborative opportunities.

(Note to Summit members: This position statement is also posted on the Summit's website along with those of other major health-related organizations. If your organization has a position that either encourages or mandates vaccination of healthcare workers that is not listed on that web page, please contact Diane Peterson, managing editor of the Summit's web site, to see that it gets posted.)

6. Influenza vaccine is here! Lots from multiple manufacturers have already received FDA approval and are being shipped. For more information on FDA approval, visit: http://www.fda.gov/cber/flu/flu2008.htm.

7. On the August 27 Summit conference call, we heard that the *New York Times* may be considering a story on influenza vaccine effectiveness in the elderly. We would like to remind Summit partners that we had several discussions on this issue last year, with a featured presentation by Dr. Lone Simonsen from the NIH. We are including links to the initial Simonson article, published in *Lancet Infectious Diseases,* several sets of talking points developed by CDC, here and here, a comment published in *Lancet* by Jefferson, a paper published in *NEJM* by Nichol et al – "Effectiveness of Influenza Vaccine in the Community-Dwelling Elderly", talking points on the Nichol article, and an editorial, "Influenza—The Goal of Control", by John Treanor, also published in *NEJM.*

8. The *American Journal of Respiratory Medicine* will be publishing an article from Canadian researchers suggesting that influenza immunization does not reduce mortality rates significantly in the elderly. The abstract follows:

   American Thoracic Society: "Flu shot does not reduce risk of death"

   The widely-held perception that the influenza vaccination reduces overall mortality risk in the elderly does not withstand careful scrutiny, according to researchers in Alberta. The vaccine does confer protection against specific strains of influenza, but its overall benefit appears to have been exaggerated by a number of observational studies that found a very large reduction in all-cause mortality among elderly patients who had been vaccinated.

   The results will appear in the first issue for September of the *American Journal of Respiratory Medicine,* a publication of the American Thoracic Society.

The study included more than 700 matched elderly subjects, half of whom had taken the vaccine and half of whom had not. After controlling for a wealth of variables that were largely not considered or simply not available in previous studies that reported the mortality benefit, the researchers concluded that any such benefit "if present at all, was very small and statistically non-significant and may simply be a healthy-user artifact that they were unable to identify." "While such a reduction in all-cause mortality would have been impressive, these mortality benefits are likely implausible. Previous studies were likely measuring a benefit not directly attributable to the vaccine itself, but something specific to the individuals who were vaccinated—a healthy-user benefit or frailty bias," said Dean T. Eurich, Ph.D., clinical epidemiologist and assistant professor at the School of Public Health at the University of Alberta. "Over the last two decades in the United States, even while vaccination rates among the elderly have increased from 15 to 65 percent, there has been no commensurate decrease in hospital admissions or all-cause mortality. Further, only about 10 percent of winter-time deaths in the United States are attributable to influenza, thus to suggest that the vaccine can reduce 50 percent of deaths from all causes is implausible in our opinion."

Dr. Eurich and colleagues hypothesized that if the healthy-user effect was responsible for the mortality benefit associated with influenza vaccination seen in observational studies, there should also be a significant mortality benefit present during the "off-season".

To determine whether the observed mortality benefits were actually an effect of the flu vaccine, therefore, they analyzed clinical data from records of all six hospitals in the Capital Health region in Alberta. In total, they analyzed data from 704 patients 65 years of age and older who were admitted to the hospital for community-acquired pneumonia during non-flu season, half of whom had been vaccinated, and half of whom had not. Each vaccinated patient was matched to a non-vaccinated patient with similar demographics, medical conditions, functional status, smoking status and current prescription medications.

In examining in-hospital mortality, they found that 12 percent of the patients died overall, with a median length of stay of approximately eight days. While analysis with a model similar to that employed by past observational studies indeed showed that patients who were vaccinated were about half as likely to die as unvaccinated patients, a finding consistent with other studies, they found a striking difference after adjusting for detailed clinical information, such as the need for an advanced directive, pneumococcal immunizations, socioeconomic status, as well as sex, smoking, functional status and severity of disease. Controlling for those variables reduced the relative risk of death to a statistically non-significant 19 percent.

Further analyses that included more than 3,400 patients from the same cohort did not significantly alter the relative risk. The researchers concluded that there was a difficult to capture healthy-user effect among vaccinated patients.

"The healthy-user effect is seen in what doctors often refer to as their 'good' patients— patients who are well-informed about their health, who exercise regularly, do not smoke or have quit, drink only in moderation, watch what they eat, come in regularly for health maintenance visits and disease screenings, take their medications exactly as prescribed— and quite religiously get vaccinated each year so as to stay healthy. Such attributes are almost impossible to capture in large scale studies using administrative databases," said principal investigator Sumit Majumdar, M.D., M.P.H., associate professor in the Faculty of Medicine & Dentistry at the University of Alberta.

The finding has broad implications:

* For patients: People with chronic diseases such as chronic respiratory diseases such as chronic obstructive pulmonary disease, immuno-compromised patients, healthcare workers, family members or friends who take care of elderly patients and others with greater exposure or susceptibility to the influenza virus should still be vaccinated. "But you also need to take care of yourself. Everyone can reduce their risk by taking simple precautions," says Dr. Majumdar. "Wash your hands, avoid sick kids and hospitals during flu season, consider antiviral agents for prophylaxis and tell your doctor as soon as you feel unwell because there is

still a chance to decrease symptoms and prevent hospitalization if you get sick— because flu vaccine is not as effective as people have been thinking it is."

* For vaccine developers: Previously reported mortality reductions are clearly inflated and erroneous–this may have stifled efforts at developing newer and better vaccines especially for use in the elderly.

* For policy makers: Efforts directed at "improving quality of care" are better directed at where the evidence is, such as hand-washing, vaccinating children and vaccinating healthcare workers.

Finally, Dr. Majumder said, the findings are a reminder to researchers that "the healthy-user effect is everywhere you don't want it to be."

9. To volunteer for the various Summit working groups that have formed for this upcoming season, please email Jim Harrison and L.J Tan. The working groups are: (1) Communications/Consumer Working Group; (2) Healthcare Provider Working Group (3) Payment Working Group; and (4) Occupational Health Working Group.

10. The National Influenza Vaccine Summit web site has evolved into a national leading resource for all things related to influenza. Please share this important resource with your colleagues: www.preventinfluenza.org.