

# Ask the Experts

In this and future issues of *MPM*, we ask a panel of experts to comment on a pressing issue of the day. Let us know if you have suggestions regarding experts you would like to hear from or questions you would like to see addressed.

***Despite widespread awareness that vaccines for contagious illnesses can improve morbidity and mortality, millions—especially older adults—go without them. Why do we fail to achieve appropriate vaccination levels among older adults? Are physicians, patients, payers, or a combination of all 3 blocking the effort?***



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Over the past 15 to 20 years of being involved in commercial and Medicare-managed care programs, the answer to this question remains unclear. Even when private healthcare programs, state-funded programs, and community awareness programs emphasize the importance of vaccinations, the response is less than expected. The reasons in my opinion are multifactorial and include the provider community's support and participation in vaccination programs and individual recipients' beliefs in the need to become vaccinated.

In the mid-1980s while I was a fellow in geriatrics, a study out of New York City evaluated the concept of adherence to any specific treatment plan that required the filling of one or more prescribed medications. The results determined that neither education, financial status, nor phys-

ical health were the determinants in following through with the prescribing physician's recommendations. The determining factors included confidence in the prescribing physician and the pharmacist filling the prescription. In my opinion this concept of confidence in the medical delivery system has not changed. In other words, if the healthcare delivery system is not respected at all levels of patient encounter, then the likelihood of adherence to prescribed treatment regimens will always be compromised.

As healthcare providers, we must not only advocate the importance of such vaccinations against influenza and pneumococcus, but actually demonstrate the usage. Back in 1989, as Chief of Medicine at the Veterans Home of California in Yountville, California, I decided to role up my own sleeve and demonstrate to patients and staff my endorsement of the annual influenza vaccine. The use of ice cream and a "Blue Ribbon" as incentives to distinguish the recipients from nonrecipients of the vaccine over the ensuing 60 days resulted in a 120% increase in employee and 45% increase in resident participation in the program.

Over the last 15 years, the importance of influenza and pneumococcal vaccines when appropriate is highlighted during the months of October through December. Since 1997 I have written an article about vaccinations every October for a statewide senior newspaper. And yes, I continue to role up my sleeve every year whether or not ice cream or a blue ribbon is offered.



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I don't feel that efforts to vaccinate are necessarily being blocked; however, education on the benefit vs. risk must be more widespread. Many older adults fear they will become ill after receiving vaccinations. I have encountered several long-term care (LTC) facility residents who either had a previous "reaction" many years ago or knew someone who died after receiving the "flu shot." It remains very challenging to convince these res-

## Immunizations: An Adult Thing to Do

Steven L. Phillips, MD, CMD

In adults, influenza is responsible for an estimated 20,000 deaths in the United States annually and for 172,000 excess hospitalizations. During epidemic years, these figures are much higher. Despite recommendations to provide annual influenza vaccination, coverage remains low. A recent study of influenza vaccination rates in 22 developed countries has concluded that "Given its well-established clinical effectiveness and cost-effectiveness, none of these countries has yet achieved the full benefits of its programs."

Between 30% and 40% of the American population is at high risk for developing serious complications associated with influenza. Many chronic conditions (eg, congestive heart failure, pulmonary disease) elevate the risk of serious sequelae of influenza. An even more prevalent risk factor is advanced age. The annual cost associated with a severe influenza outbreak is more than \$12 billion dollars. This includes the direct costs of hospitalization, rehabilitation in a nursing facility after hospitalization, excess utilization of home health services, physicians' fees, and medications. The indirect costs associated with influenza are more difficult to estimate. Among the indirect costs of illness are the costs of lost work days, days of reduced productivity at work, and lost caregiver work days as a result of caring for a family member with influenza. Finally, in addition to its direct and indirect costs, influenza can greatly affect quality of life. In younger people, the decrement in quality of life is usually transient; in the elderly population, for whom influenza can markedly change the course of a chronic condition, these decrements may be of longer duration and perhaps even permanent.

There are 3 main groups of influenza viruses. Influenza A is responsible for most outbreaks of widespread influenza. Influenza B is also responsible for widespread disease, affecting the very young and elderly populations in particular. Influenza C is responsible for minor illness and has a more sporadic distribution than either influenza A or B. The vaccine is a highly purified, killed, egg-grown virus. It contains 3 viral strains, 2 strains of influenza

A and 1 strain of influenza B. Influenza A changes every year, requiring that a new vaccine be produced annually.

There are few contraindications for use of the influenza vaccine. These include a true allergy to eggs and the preservative thimerosal used to prevent any bacteria from growing in the vaccine. Thimerosal is also frequently used as a preservative in contact lens solutions. Side effects include local tenderness, fever, and muscle aches. An exceedingly rare occurrence is a neurological syndrome called Guillian-Barré. Several studies have shown that the benefit of vaccination far outweighs the risk.

When to administer the vaccine is an important consideration. Optimal anti-influenza antibody protection occurs at approximately 2 to 3 weeks after vaccination. In the United States, the typical influenza season lasts from mid-November to April and generally peaks between January and March. Consequently, October is the optimal month for receiving the vaccine.

Pneumococcal pneumonia is the third leading cause of hospitalizations among the elderly population. A highly purified vaccine is available that significantly reduces the complications associated with pneumococcal pneumonia. The pneumococcal vaccine is recommended for persons older than 65 with at least a 1-time revaccination at 6 to 10 years. It may be given safely at the same time as the influenza vaccine at a different injection site.

Influenza and pneumococcal infection are the two most preventable infectious disease in the elderly population. Despite these findings, pneumonia and influenza combined are the fifth leading cause of death among people over the age of 65. Only 50% of the high-risk elderly population in the United States receive an influenza vaccination and only 30% receive a pneumococcal vaccination. The percentages can be increased, and hospitalizations, deaths, and costs can be greatly reduced. So, roll up your sleeve, if you haven't already, and start vaccinating.

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This article was written in collaboration with my wife Joann. We can be contacted at [gcnreno@gmail.com](mailto:gcnreno@gmail.com).

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idents to allow administration of vaccines, particularly the influenza vaccine. The Centers for Medicare and Medicaid Services (CMS) requires that LTC facilities vaccinate residents annually for influenza and for pneumonia, if indicated, unless the resident or responsible party refuses.

Physicians have an opportunity to provide patient education, and I believe they do promote proper vaccinations for older adults.

Payers recognize the pharmacoeconomic value of providing coverage for immunizations and generally do not discourage their use, particularly in high-risk older adults. Some immunizations, however, may require prior approval because they may not be indicated for a particular population, such as the Zostavax™ (herpes zoster virus vaccine) in patients who are immunocompromised.

The public, in general, is well aware of the influenza vaccine and its importance. However, other immunizations, such as the pneumococcal vaccine, do not receive the widespread press coverage that the influenza vaccine receives annually. I believe there is also confusion about the frequency that immunizations should be given, particularly the pneumococcal vaccine.

Ongoing education, such as public service announcements and other “direct to consumer” advertisements may help increase awareness of the availability of vaccines and their benefit.

On the positive side, several states allow properly trained pharmacists to administer vaccinations. Clinics for administration of the flu vaccine are frequently available at local pharmacies where many older adults go to receive their medications. This may be a more convenient mechanism for them to receive their vaccine(s) than going to a physician’s office. MPM