Pneumococcal infections are particularly deadly in older people. The *Streptococcus pneumoniae* organism can invade the blood (producing septicemia), brain and central nervous system (meningitis), and lungs (pneumonia).

To protect people against *S. pneumoniae*, two vaccines—a 13-valent pneumococcal conjugate vaccine (PCV13; Prevnar 13, Pfizer) and a 23-valent pneumococcal polysaccharide vaccine (PPSV23; Pneumovax 23, Merck Vaccines)—are available. Both are indicated in all people 65 years or older, and immunizers can increase vaccination rates by linking their administration to patients’ annual flu shots in successive years.

Medicare covers both pneumococcal vaccines with no copayments or deductibles, but they must be administered 1 year apart. Thus, getting a pneumococcal vaccine at the same time as an annual flu shot and then the other pneumococcal vaccine when getting the next year’s flu shot makes sense both scientifically and from a reimbursement perspective, William Schaffner, MD, said during a September 17, 2015, media briefing. Schaffner, a member of the NAVP Workgroup, is Chairman of the Department of Preventive Medicine as well as Professor of Infectious Diseases in the Department of Medicine at the Vanderbilt University School of Medicine.

What are these two vaccines and why is getting both of them so important? Let’s take a look.
While these two vaccines cover only a fraction of the 90 known \textit{S. pneumoniae} serotypes, their use produces a dramatic decline in risk of pneumococcal disease. For children, older adults, and other adults with certain risk factors, getting immunized is important for prevention of serious, potentially life-threatening infections.

The vaccines are recommended for all patients 65 years or older unless they have a contraindication (such as severe allergic reactions to components of the product) and for other adults (19–64 years old) who are at increased risk of pneumococcal disease because of chronic conditions such as diabetes, heart disease, and lung disorders as well as smoking.

When patients need both vaccines, PCV13 should be given first. The PPSV23 dose is usually given 1 year later because of Medicare reimbursement policies, but it can be given sooner (the times vary according to patient condition). The two vaccines should not be administered to a patient during a single visit.

A definitive study from the \textit{New England Journal of Medicine} demonstrates the importance of pneumococcal vaccination. Among 84,496 adults aged 65 years or older, PCV13 vaccination prevented “vaccine-type pneumococcal, bacteremic, and nonbacteremic community-acquired pneumonia and vaccine-type invasive pneumococcal disease.” While the vaccine did not significantly reduce overall rates of community-acquired pneumonia (caused by all serotypes, including those not included in the vaccine), study data indicated lower rates of community-acquired pneumonia caused by the 13 covered serotypes. Investigators in this Community-Acquired Pneumonia Immunization Trial in Adults (CAPITA) found that the protective effects of PCV13 persisted for at least 4 years.

How can GSA members motivate patients to get recommended pneumococcal vaccinations?

As noted in last month’s NAVP Immunizations Newsletter, serious conditions that result in hospitalizations can put older patients on a slippery slope. Ability to perform activities of daily living declines, and risk of requiring institutionally based care increases. Septicemia, meningitis, and pneumonia are examples of these serious conditions.

Patients can reduce their risks of pneumococcal infections by getting vaccinated. Adverse effects of the vaccines are usually minor—most often local reactions such as injection site pain, soreness, redness, swelling, or induration (hardened mass under the skin). Headache, weakness, fatigue, and muscle pain occur less frequently.

CDC officials are putting a positive spin on Medicare’s policy of reimbursing for the second pneumococcal vaccine after a 1-year wait by linking pneumococcal administration to annual influenza vaccinations. Health professionals can reinforce with patients that Medicare covers both pneumococcal vaccines with no copayment and no deductible as long as they are given 1 year apart.

“Pneumonia is the major complication of influenza,” Schaffner said during the media briefing. “The principal bacterial cause of pneumonia is the pneumococci. Pneumococcal infections can affect anyone but are particularly deadly in older persons. Those at highest risk are the same people recommended for pneumococcal vaccination.”
SOURCES AND RESOURCES

- CDC pneumococcal materials
- Prevnar 13 product labeling
- Pneumovax 23 product labeling

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