

## Bernie

### Case

- Bernie is a 60-year-old man who presents with lower back pain in early summer
- He says he hasn't needed to see a doctor in over 15 years
- He is a current smoker and acknowledges an occasional cough but denies sputum production
- Physical exam reveals
  - Temperature: 97.8° F
  - BP: 150/90 mm Hg
  - Respiration: 20 breaths/min
  - Pulse: 74 beats/min
  - Lungs: a few scattered, nonlocalized rhonchi
  - Nothing else remarkable

### PCP Discussion

Dr. Irvine: Bernie is kind of a typical person that probably most of us see in family practice. He comes in with low back pain, he hasn't been seen for 15 years, and he's a smoker. We don't really have any background information on him. We can look at his vitals and see that he's probably also got hypertension. But as far as this guy goes, I would focus on catching him up on his routine vaccinations. So, I would give him the yearly influenza vaccine, and I would give him the tetanus, diphtheria, and acellular pertussis (Tdap) vaccine because pertussis is so common now. And I would give him the herpes zoster vaccine. He's 60 years old, so insurance should cover that. Part of the question would be that he's probably got chronic obstructive pulmonary disease (COPD), but this isn't really spelled out. I think if we went on to talk to somebody like this a little bit longer, we would find that he probably has COPD, too.

It doesn't say, by definition, that he has had a chronic cough for three months, or more than three years. But we all kind of diagnose people who smoke with COPD, especially if they have abnormal lung sounds. In that case, I would probably recommend that he have a pneumonia vaccine as well—the 23-valent pneumococcal polysaccharide vaccine (PPSV23). But I would really leave that up to him, because, I sometimes come across insurances that don't pay for that. I live in a really rural area, where people often don't have good medical coverage, and they're not very wealthy, so they may have a hard time paying. So I would tell him that he is more at risk for having pneumonia, given his probable COPD and his smoking history, but that I couldn't guarantee that he would not have to pay anything for a pneumococcal vaccine.

And then which vaccines, if any, should we avoid for this patient? Assuming he's up to date on all of his childhood vaccines, I wouldn't avoid any of the routine adult vaccinations.

Dr. Wilson: Any other comments, or more thoughts, about Bernie?

Dr. Flores: This is Chris Flores. Yes, I agree. I agree with what Dr. Irvine said. The only other consideration would be—because I practice in the Palm Springs area, and when we see a 60-year-old man, we don't know whether he's straight or if he's gay or if he's having sex with men, or women, or both. So that might factor into which, if any, vaccines we should avoid. If it should turn out that he's HIV-positive, then we have to be careful about the herpes zoster vaccine, if his CD4+ cell counts are low.

Dr. Cullen: This is Eugene Cullen, with just one other comment on what Dr. Irvine said. I believe he would also be a candidate for the 13-valent pneumococcal conjugate vaccine (PCV13), as well as the PPSV23. And, again, it depends on insurance coverage, since it this is a pretty new recommendation. But I think as long as he's over 50, you could get that vaccine as well, in case he has COPD—and it sounds like he may.

## Faculty Wrap Up

Dr. File: Hello, this is Dr. File, back with you to provide commentary and conclusions regarding the second panel discussion in our series.

For Bernie, who is a smoker and 60 years of age, our panelists recognize the importance for immunization against flu; pneumococcal disease; tetanus, diphtheria, pertussis; and zoster. In general, the need for keeping immunizations up-to-date in older adults is necessary, because as we age we all become increasingly susceptible to infectious diseases. In addition, these illnesses may be more serious and more deadly in older patients.

Now, regarding Bernie's influenza vaccination, it is important to note that the live attenuated influenza vaccine is not approved by the US Food and Drug Administration for patients ages 50 and older, despite some data that it is effective in this age group.

As mentioned by our primary care physicians, the patient may have COPD. If he does, certainly he's at increased risk of complications of the flu, including pneumonia; but even if he does not, he's still at increased risk of pneumonia due to his smoking. Thus, he would also be at higher risk for contracting

pneumococcal pneumonia or whooping cough, so those vaccinations become even more important.

There appears to be some confusion regarding which pneumococcal vaccine Bernie should receive. If Bernie were 65 or older, we would recommend that he receive both the PCV13 and the PPSV23, but since he is younger, and in the 19 to 64 year age range, current recommendations state that he should receive only the PPSV23.

Certainly, this highlights a distinction of the recommendations, since for a patient who is 19 to 64 years of age with immunocompromising conditions or functional asplenia—like the previous patient, Robin—the PCV13 is recommended; whereas for a patient in the same age group with an underlying non-immunocompromising condition—which includes smokers or those with diabetes, chronic lung disease, or heart disease—the PPSV23 is recommended. Bernie is in the latter group, so it is recommended that he receive the PPSV23 now. At age 65, however, he would receive the PCV13, followed by another dose of the PPSV23, administered six to 12 months later.

Now unfortunately, obtaining insurance coverage for these vaccines can sometimes be challenging, but this does not really change the recommendations.

One final point: Regarding the herpes zoster vaccine—and I'm making the assumption that Bernie does not have HIV or is not immunocompromised—I would like to add that he should get the vaccine even if he has had shingles previously. This is because unlike chickenpox, people can experience more than one episode of shingles, and the risk of complications, such as potentially debilitating postherpetic neuralgia, increases with age.