

INTERPROFESSIONAL COLLABORATION

Q1. How can the members of the care team work together in the clinical decision-making process to improve pneumococcal and influenza vaccination rates in older adults?

Q1 Answer:

Emily: My name is Emily Cheshire and I'm a family nurse practitioner. Interprofessional care has been shown to improve patient outcomes and patient satisfaction so this is a key focus. Collaborative effort between all members of the care team in the clinical decision-making process is essential to ensure and improve pneumococcal and influenza vaccination rates in older adults. For example, in the ambulatory setting, a nurse or other designated staff performing intake and vitals can obtain a vaccination history focusing on pneumococcal and influenza and provide that history to the provider.

Pinki: I'm Pinki Bhatt, I'm an infectious disease physician. During the visit, the provider or designated staff can review the patient's vaccination history, educate them on the importance of staying up to date and discuss risks and benefits of the vaccination. If the patient agrees to receive the vaccine, the patient can receive the vaccine(s) in the clinic. For those clinics that do not stock pneumococcal vaccines, the patient should be referred with a document stating recommended vaccines to their community pharmacy.

Emily: Secondly, in the inpatient setting, the nursing staff can obtain a similar immunization history and ensure that the patient is up to date prior to discharge from the hospital. Through standing orders, in many hospitals, the nurse has the ability to give pertinent vaccines prior to discharge. Finally, training registered nurses and support staff on the use of apps and guidelines so that patients have their recommendations when they present to their provider can save time and allow the provider to focus on shared decision-making rather than calculation of PCV13 and PPSV23 series administration.

Q2. How can pharmacists and nurses work together to improve vaccination rates among older adults in the community setting?

Q2 Answer:

Nav: My name is Navaneeth Narayanan, I'm an infectious disease pharmacist. There are two good examples of the collaboration between pharmacists and nurses, as well as physicians and other providers that will improve vaccination rates among older adults in the community. First, in the clinic, ambulatory care pharmacists work closely with the clinic nurses as well as nurse practitioners to monitor vaccine records and screen for eligibility to receive routine and recommended vaccines and then administer during the clinic visit. Second, there could be a community collaboration where nurses screen patients in the clinic and then refer the patients to the local community pharmacy where the pharmacist can act as the immunizer for the patients. All 50 states authorize pharmacists to administer vaccines, though some specifics vary by state, such as what age patients have to be and what vaccines can be given by the pharmacist. Using students on clinical rotations to perform vaccination histories,

provide education and make recommendations with the provider's input is another useful tool that can enhance both clinical operations and interprofessional care to optimize patient care.

Emily: The underlying theme here is working together and communicating across professions in a collaborative way to ensure that all aspects of the care process are accomplished from screening to education to vaccine administration.

CASES: IMMUNIZATION AND SHARED DECISION-MAKING WITH OLDER ADULTS

CASE 1: James, a 66-year old male, presents for an annual wellness visit after his primary care provider's office reopened to routine care during the COVID-19 pandemic. It is October 1, 2020. He has no underlying chronic illnesses, is not immunocompromised and is a non-smoker. He has not received any previous doses of PCV13 or PPSV23.

Q1. How is shared decision-making implemented to determine the pneumococcal vaccine series?

Q1 Answer:

Emily: In order to engage James in a shared decision-making process, prior to determining the appropriate vaccine series, we would want to know the following:

- First, does James live in a nursing home or other long-term care facility?
- Second, what is the pediatric PCV13 uptake in James's area? As you recall, the change from routine administration of PCV13 to shared decision-making was due to the uptake in pediatric pneumococcal vaccine rates resulting in lower disease burden among older adults. So it is important for us to know what the pediatric pneumococcal vaccine rates are in James's area to determine his risk. This information is located on the CDC website and a link is located in the resources section.
- Third, does he plan travel to an area without a PCV 13 pediatric program? Providers can access this information on the VIEW-hub website; the link is located in the resources section.
- And last, has COVID-19 decreased pediatric PCV13 immunization rates in James's area?

Answering these questions will help us make the decision to administer PCV 13 or not.

Q2. Is PPSV23 indicated for James?

Q2 Answer:

Pinki: PPSV23 is indicated since he is a 66-year-old without prior history of PPSV23.

Q3. Should he receive PCV13 today?

Q3 Answer:

Pinki: At this time, there is no indication for PCV13. However, if James lives in a nursing home or long-term care facility, then he is potentially at an increased risk of exposure to PCV13 serotypes. In that case, there may be greater than average benefit of receiving PCV13 first today followed by PPSV23 a year later. This is a decision and option the provider can offer to James given the high degree of safety and it's known effectiveness in older adults

Q4. What about influenza vaccine – is this indicated for James today?

Q4 Answer:

Pinki: Influenza is indicated today and can be administered at a different injection site than PPSV23.

Q5: If James had received PPSV23 at age 62, what would be indicated today?

Q5 Answer:

Nav: Today, James is 66 years old so he would not be indicated to receive another PPSV23 dose yet. The plan would be to administer the second and final dose of PPSV23 five years later from the initial PPSV23 dose, which was at age 62, and that would be next year at age 67.

Q6: What resources can be utilized prior to the provider entering the patient room to obtain information from the patient and provide patient education?

Q6: Answer:

Pinki: Students in clinical practices or registered nurses following vaccine protocols/standing orders, and other appropriate medical staff can connect virtually or at the visit prior to the provider entering the patient exam room.

CASE 1, continued: At our visit today through shared decision-making, we decide that James will receive one dose of PPSV23 and will not receive PCV13. Two years later James presents for his annual wellness physical and has a new diagnosis of Hodgkin disease.

Q7: Should James receive PCV13 despite receiving PPSV23 two years ago?

Q7 Answer:

Emily: Yes, one dose is recommended for previously unvaccinated persons who become immunocompromised, knowing that the PPSV23 is not as well boosted when delivered in this order but still offers benefit.

CASE 2: Joe is 66 years old and received a PPSV23 vaccine at age 64. He has no chronic illness, is non-immunocompromised and has smoked 1 pack of cigarettes a day for 8 years. He is visiting his primary care provider for his annual wellness visit. Flu season has already begun in Joe's area.

Q1: Should Joe receive a PCV13 vaccination today?

Q1 Answer.

Nav: Because of Joe's smoking history, through shared decision-making we decide to administer PCV13 today. It can be administered today because it has been more than 1 year since he received PPSV23.

Q2. When should he receive PPSV23 if he received a prior PPSV23 dose at age 64?

Q2 Answer:

Pinki: He should receive PPSV23 at age 69, which would be 3 years from now. This would be 5 years after his first PPSV23 vaccine. The health care provider should document in the EMR the due date for his final PPSV23 dose to save time and ensure it's not overlooked in 3 years.

Q3: What about influenza?

Q3 Answer:

Emily: Administer an influenza vaccination today at a different injection site.

CASE 3: Sonia is 66 years old, has received no pneumococcal vaccines, has no chronic illness, is non-immunocompromised and a nonsmoker. Through shared decision-making incorporating both anecdotal reports at Sonia's primary care provider's office and CDC-reported NORMAL rates of non-influenza pediatric vaccine due to COVID-19, Sonia and her health care provider agree that she will NOT receive PCV13 today, but will receive PPSV23.

Q1: Does Sonia receive a second and final dose of PPSV23?

Q1 Answer:

Nav: No, Sonia would not, and this is because Sonia received her first dose of PPSV23 after the age of 65, and she does not require a second dose.

Q2: What strategies can clinicians adopt to save time and facilitate vaccine administration?

Q2 Answer:

Emily: in summary, taking time to develop processes that incorporate everyone across the interprofessional team, and incorporate technology as tools, has the potential to both increase immunization rates as well as patient satisfaction.