CHRISTIANA CARE HEALTH SYSTEM
Infection Prevention

Inpatient Pneumococcal Polysaccharide Vaccination
(Pneumovax®) Policy

PURPOSE:
To define the nurse driven standing order by protocol for the inpatient Pneumococcal vaccination process.

POLICY:
The Pharmacy and Therapeutics and Infection Prevention Committees have determined that the criteria listed in this Pneumococcal Protocol are appropriate for the nurse to utilize in evaluating patients for the administration of Pneumococcal vaccine.

All admitted patients 19 years of age and older who meet criteria will be offered the Pneumococcal vaccine during their hospital admission unless the patient’s physician or designee gives an order not to administer the Pneumococcal vaccine.

Patients will not be assessed using this protocol while in the ICU, unless they are discharged directly home from the ICU.

PROCEDURE:

Initial Vaccine History and Screening:

1. The nurse will first assess the patient for history of vaccination and do not give order.

The pneumococcal polysaccharide vaccination (Pneumovax®) will not be ordered by the nurse if:

- Patient has had prior receipt of the pneumococcal polysaccharide vaccination (Pneumovax®) at anytime in the past. If unknown and unable to verify in PMH or with patient, family or parent/caregiver, assume that the patient has not received pneumococcal polysaccharide vaccination (Pneumovax®) in their lifetime.

- Patient has a do not administer pneumococcal polysaccharide vaccination (Pneumovax®) order.
For non CPOE/EMAR units, the nurse will assess the patient for eligibility using the paper standing order by protocol.

For CPOE/EMAR units, the Pneumococcal Vaccine Assessment Form task is fired in Power Chart at 1000 the day after the patient is admitted. The Pneumococcal Vaccine Assessment Form will also be fired when a patient is transferred from an ICU to another level of care.

2. The nurse will then assess the patient for the following indications:

   If the patient does not have any of the below listed indications, the patient will not be screened for contraindications. The vaccine is not indicated.

   **Indications:**

   - Patient age 65 years or older
   - Patients age 19 to 64 years of age and has any of the following conditions (if unknown or unable to confirm, assume patient does not have – so the options will be yes, no/unknown).
     - Diabetes Mellitus
     - Chronic lung disease, such as COPD, emphysema, asthma
     - Chronic kidney disease, including nephrotic syndrome and patients requiring dialysis
     - Chronic heart disease, such as CHF, cardiomyopathy
     - Cigarette Smoker
     - Damaged spleen or no spleen (spleenectomy, sickle cell disease)
     - Alcoholism or chronic liver disease (including cirrhosis)
     - Immunocompromising conditions (congenital, HIV/AIDS, cancer within the past 2 years – excluding skin cancer)
     - Immunosuppressive therapy (chemotherapy within the past 2 years, long-term systemic corticosteroids, radiation therapy within the past 2 years)
     - Active or history of a CSF leak (congenital, traumatic, or after neurosurgery)
     - History of any transplant (Bone Marrow, Kidney, Heart, Lung, Liver, Pancreas or Bowel)
     - Recipient of cochlear implant

3. If the patient has any of the indications above, then the nurse will screen the patient for contraindications.

   **Contraindications**

   - Patient is less than 19 years of age
   - Patient had a prior systemic reaction to the pneumococcal vaccination; reaction defined as hives, swelling of the lips or tongue, or difficulty breathing. (Does not include sore arm, minor skin rash, local reaction or subsequent upper respiratory tract infection)
• Bone Marrow/Stem Cell Transplant within the past 12 months
• Kidney Transplant during this current hospitalization
• Receipt of chemotherapy or radiation during this hospitalization or less than 2 weeks prior to this inpatient admission.
• Received the shingles vaccine (Zostavax ®) within the past 4 weeks.
• Patient or decision-maker refuses
• Pregnant patient

4. **If patient has any contraindications** the nurse will not be order the pneumococcal polysaccharide **vaccination** (Pneumovax ®).

5. **If unknown or unable to verify** the nurse will assume that the patient does not have that contraindication and will order the pneumococcal polysaccharide vaccination (Pneumovax ®) and assess the defer administration guidelines.

6. **If there are no contraindications** the nurse will order the pneumococcal polysaccharide vaccination (Pneumovax ®) and assess the defer administration guidelines.

**Guidelines to Defer Administration:**
- Defer if the patient meeting any of the following criteria:
  - Fever > 100.6 (38.1)
  - Hemodynamic instability and a SBP < 90 mmHg
  - Hemodynamic instability and a HR >110
  - Respiratory instability and oxygen saturation less than 90%
  - Respiratory instability and oxygen requirements are > 4L NC or FIO2 > 30%

If the vaccine is not deferred, the vaccine order will be verified by pharmacy. If the patient has a Latex allergy or an allergy to the preservative, pharmacy will select the appropriate product and dispense to the patient care unit.

7. **Vaccine Information Sheet (VIS), patient education,** will be printed and given to the patient. The nurse will then document that the VIS patient education was given to the patient along with the publication date.

8. **The Nurse will administer the vaccine to the patient and document** the following in the patient’s medical record:
   - Date and time of administration
   - Vaccine manufacturer, lot number, and expiration date