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Promoting Adult Pneumococcal Vaccinations Through Pharmacy and Provider Educational Campaigns

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KRYSLIA LESNIAK (Pharmacy)

Promoting Adult Pneumococcal Vaccinations Through Pharmacy and Provider Educational Campaigns

Sponsor: Brett Feret (PharmD)

Pneumococcal disease refers to any infection caused by *Streptococcus pneumoniae*, ranging from ear and sinus infections to pneumonia and infections of the bloodstream (bacteremia). In the United States, pneumococcal pneumonia caused an estimated 150,000 hospitalizations, while pneumococcal meningitis and bacteremia resulted in 3,250 deaths in 2019. Vaccination is the most effective way of preventing pneumococcal disease, of which there are two kinds: pneumococcal conjugate vaccines (PCV13, PCV15, or PCV20) and pneumococcal polysaccharide vaccine (PPSV23). Overall pneumococcal vaccination coverage among adults aged 19-64 years at increased risk for disease was 23.3% in 2018, and that of adults aged ≥ 65 , those at the greatest risk of serious illness and death, was 69%.

Six Doctor of Pharmacy students from the University of Rhode Island were trained to provide academic detailing to community pharmacists throughout Massachusetts and Rhode Island. These sessions encouraged immunization providers to utilize a clinical pathway to determine patients' pneumococcal vaccine eligibility. The interprofessional academic detailing was well-received; of the 65 community-based pharmacists educated, 89.2% strongly agreed or agreed that their knowledge of the PCV13 and PPSV23 vaccines had improved. A total of 93.8% respondents agreed that they felt confident and intend on applying this knowledge in clinical practice. This work provides additional insight on the potential of effective academic outreach to enhance vaccination practice and improve patient outcomes.

Following the success with community pharmacists, ambulatory care pharmacists of Rhode Island Primary Care Physicians Corporation were educated on the two new pneumococcal vaccines (PCV15 and PCV20) per the latest recommendations from the Advisory Committee on Immunization Practices (ACIP). Both PCV15 and PCV20 broaden the serotype coverage of pneumococcal conjugate vaccines, and PCV20 offers a single vaccine option that is expected to provide cost-savings and better protection. Importantly, PCV15 and PCV20 streamline pneumococcal vaccine eligibility and simplify the process of determining who is eligible receive a vaccine. With pharmacists interacting with patients at an increased risk for serious illness daily, we are hopeful that this education will further improve adult vaccination rates in the community.