

Pneumococcal Vaccination Rates after a Pharmacist Conducted Medication Therapy Review (MTR)

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BACKGROUND

- Pneumococcal disease, which includes pneumonia, bacteremia, and meningitis, causes more deaths in the United States than all other vaccine preventable diseases
- Populations at greatest risk for pneumococcal disease include those ≥65 years, smokers, and people with certain medical conditions such as asthma or chronic obstructive pulmonary disease (COPD)
- Pharmacists can identify patients at high-risk for pneumococcal disease during medication therapy reviews (MTRs)
- North Carolina law allows pharmacists to provide pneumococcal vaccination to patients ≥18 years with a prescription

OBJECTIVE

- To identify the need for pneumococcal vaccination in patients who received a pharmacist-conducted medication therapy review (MTR) and determine post-MTR vaccination rates

METHODS

Design

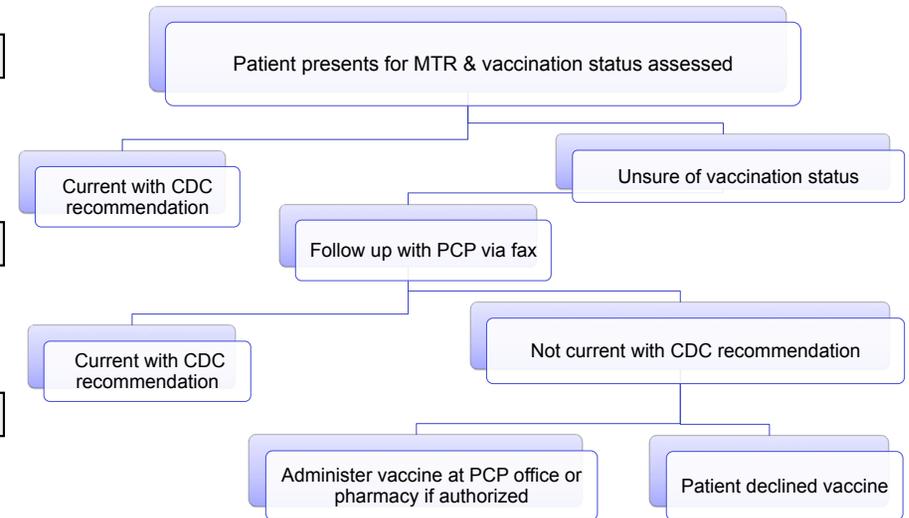
- Prospective, multi-site study at two rural community pharmacies and one private physician practice

Population

- Patients ≥65 years at the community pharmacies or referred by the physician

Study Dates

- July 1, 2010-February 4, 2011

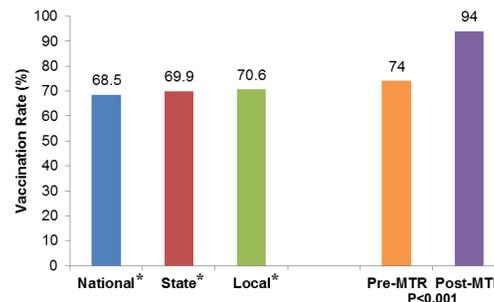


CDC = Centers for Disease Control and Prevention; MTR = medication therapy review; PCP = primary care provider

RESULTS

- 104 MTRs were conducted during the study dates
- Before MTR,
 - 77 patients (74%, 77/104) were up-to-date with pneumococcal vaccination
 - 27 patients (26%, 27/104) were eligible for vaccination
- Of the 27 patients eligible for vaccination, upon follow-up with the primary care provider (PCP),
 - 21 patients (77%, 21/27) received vaccination
 - 6 patients (23%, 6/27) refused vaccination
- Following MTR,
 - 98 patients (94%, 98/104) were up-to-date with pneumococcal vaccination

Pneumococcal Vaccination Rates



* Data obtained from the CDC's 2009 Behavioral Risk Factor Surveillance System

CONCLUSIONS

- Pharmacist-led MTRs are an avenue for improving pneumococcal vaccination rates through patient education regarding CDC recommendations, enhanced access to vaccine, and, when authorized, vaccine administration
- Pneumococcal vaccination rates during MTR increased vaccination rates by 20%, which was statistically significant in our patient population (P<0.001)
- Following MTR, our patient population achieved a vaccination rate that was higher than reported national, state, and local vaccination rates
- We strongly encourage pharmacists to review vaccination status during MTR and communicate with PCPs in an effort to improve patient care