



COMMUNITY PHARMACY FOUNDATION
COMPLETED GRANT SYNOPSIS

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

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Objectives

- 1) 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	<ul style="list-style-type: none"> • Prospective, multi-site study at two rural community pharmacies and one private physician practice • Patients ≥65 years at the community pharmacies or referred by the physician • July 1, 2010-February 4, 2011 • During the MTR, patients were asked to report their pneumococcal vaccination history. For patients who were unsure or had not received the pneumococcal vaccine the pharmacist followed up with the patient’s primary care provider (PCP) via fax to clarify vaccination status. The fax asked the PCP if the patient had received the vaccine. If they had not, the fax asked if the vaccine should be administered at the PCP office or at the pharmacy.
Study endpoints	<ul style="list-style-type: none"> • Response from PCP on pneumococcal vaccination status <ul style="list-style-type: none"> ○ If needed, whether the vaccine should be administered at the PCP office or the pharmacy • Administration of vaccine

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, P<0.001
 - The PCP offices administered 6 pneumococcal vaccines and the pharmacy administered 15 pneumococcal vaccines

The national, North Carolina, and local (3 county) pneumococcal vaccination rates in 2009 were 68.5, 69.9, and 70.6 respectively from the CDC’s Behavioral Risk Factor Surveillance System.

*All 6 patients stated that they do not receive any vaccinations

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Conclusion

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.