





COMMUNITY PHARMACY FOUNDATION

COMPLETED GRANT SYNOPSIS

Medication Therapy Management Provided Through a Community Pharmacy in **Collaboration with a Safety Net Medical Clinic**

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Objectives

 Develop and implement a community pharmacy-based comprehensive MTM program that partners with a solo or small-group physician practice to identify and manage high-risk patients. Describe the association between the MTM program and changes in healthcare quality and medication safety, including medication-related problems identified and resolved. 	
Methods	
Design	 Descriptive study of the development and design of the program Pretest-Posttest comparison of healthcare quality measures Description of medication-related problems identified and resolved, including medication safety problems (adverse drug events, potential adverse drug events)
Study endpoints	 Changes in nationally-aligned measures of healthcare quality (e.g., A1C for diabetes, blood pressure for hypertension) Medication-related problems quantified through proprietary data collection tool now used in the HRSA Patient Safety & Clinical Pharmacy Services Collaborative
Results	

- Over the course of 10 months, 83 patients referred from the solo physician practice received MTM services from the community pharmacy through 188 individual visits (between 1 and 9 visits per patient, average 2.3 although most patients only had 1 or 2 visits). The most common disease requiring improved control was diabetes (45%), followed by hypertension (40%), dyslipidemia (13%), asthma and heart failure (2.4% each).
- Among a limited number of hypertension patients who had more than 1 visit with a clinical pharmacist, blood pressure was reduced from an average baseline of 162.6 / 77.1 mmHg to 130.3 / 62.3 mmHg (reduction in SBP of -32.3 mmHg and DBP of -14.8 mmHg). Diabetes patients with an average A1C of 9.3% who returned for at least one follow-up visit had a subsequent average A1C of 7.6% (average reduction of -1.7 points).
- Among the patients seen, 300 medication-related problems were identified (i.e., 3.6 medication-related problems per patient). Nearly 80% of problems related to quality of care, while almost 1 in 5 were medication safety issues
- The most common medication-related problems identified were poor control of chronic disease, the need for additional laboratory test results (mostly diabetes patients lacking A1C or urine albumin to creatinine ratio tests), and medication misuse or poor adherence.
- Subsequently, the most frequent actions by the pharmacist to resolve these problems were changing medication doses, adding new medications, ordering laboratory test results, and educating patients.

Conclusion

The findings from this small pilot program evaluating the impact of clinical pharmacy services provided at a community pharmacy collaborating with a solo practice physician demonstrated opportunities and early success in improving healthcare quality and medication safety. A larger project or spread of the program to multiple pharmacies and collaborating physician practices is needed, and is happening through the HRSA PSPC, community partnerships, and a recent government grant obtained by a school of pharmacy.