



COMMUNITY PHARMACY FOUNDATION
COMPLETED GRANT SYNOPSIS

Implementation of a Personalized Medicine (Pharmacogenomics) Service in a Community Pharmacy

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Objectives

- 1) To determine the feasibility of pharmacogenomics testing in a community pharmacy using clopidogrel as an example.

Methods

Methods: Patients at a community pharmacy taking clopidogrel underwent genotypic testing of CYP2C19 following an initial appointment and questionnaire at the pharmacy. Once results were obtained, the patient’s prescriber was notified via fax and a change of therapy was recommended via a Clinical Pharmacy Practitioner (CPP) agreement. After receiving a response from the prescriber, the patient was scheduled for a follow-up visit to discuss the results of the testing and to complete a follow-up questionnaire. The patients’ insurance was billed electronically for a medication therapy management visit. Endpoints included determining the percentage of eligible patients that consent to a pharmacogenomics test conducted by a community pharmacist, finding the percentage of prescribers that accept the pharmacist’s suggested intervention, determining the amount of time required to perform pharmacogenomics testing, determining the pharmacist reimbursement for performing pharmacogenomics testing, and assessing patient satisfaction of pharmacogenomics testing.

Results: A total of 18 patients age 61-92 were enrolled in the study. Nine of the 18 were homozygous wild type (*1/*1) while the remaining nine had some type of genetic variation. All recommendations for change in therapy were accepted by the prescribers. An average of 76.6 minutes was spent with each patient, and the average time to complete the study was 30.1 days. Reimbursement was not collected for any claims due to an inability to get the claims to be recognized by the medical insurance. Eight-three percent of the patients stated they would pay for a pharmacogenomics service and 88% of patients thought this service a valuable use of time and belonged in a community pharmacist. After completing, 71% of patients equally rated pharmacists and prescribers ability to perform pharmacogenomic testing.

Conclusions: Based on patient interest and physician response, a pharmacogenomics service is viable in community pharmacy. Overall time spent by the pharmacist with each patient (from start to finish) was just over one hour, and the total time passed between initial patient contact and prescriber response was approximately one month. Medical insurance claims were submitted for 15 patients, but reimbursement was not collected for these claims.

For further information and/or materials on this grant, please visit
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