

POSTER ABSTRACTS

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Agreement Between Automated Pharmacy Data and Self-reported Medication Use by Drug Benefit Status and Type of Delivery System

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Background: Pharmacy utilization data captured in health maintenance organization (HMO) information systems are used for a variety of research purposes. Certain characteristics such as benefit status and type of health care delivery system may influence where enrollees fill prescription medications and therefore whether pharmacy utilization data are captured in the database. Yet, few studies have evaluated the accuracy of using automated pharmacy records to categorize exposure of specific medication classes and no studies have evaluated the completeness of these records in relationship to drug benefit status and type of delivery system. We describe where seniors enrolled in a mixed-model HMO obtain prescription medications and how source of prescription medications is related to drug benefit status and type of health care delivery system. In addition, compare the agreement between automated pharmacy records and self-reported medication use for a variety of medication classes among seniors with and without a drug benefit and in a staff versus network model delivery system.

Methods: Subjects were men and women aged 67 and above as of March 2000, continuously enrolled in Group Health Cooperative's (GHC) Medicare + Choice program during the years of 1998-1999, and diagnosed with one or more of the following chronic conditions: hypertension, diabetes, congestive heart failure, and coronary artery disease. Sources of prescription medications were obtained through a mailed survey. Current medication use was identified from a self-reported survey and automated pharmacy records. Information on drug benefit status and type of delivery system was obtained from GHC automated information systems.

Results: Where seniors obtain prescription medications is influenced by drug benefit status and type of health care delivery system. Overall, moderate to substantial agreement (kappa statistic) was found between pharmacy records and self-reported use for medication categories defined as hormone replacement therapy, cardiac agents, antihypertensives, diabetic agents, statins, and antidepressants. Agreement varied by benefit status and type of delivery system for numerous of the drug categories.

Conclusion: Automated pharmacy records are a valid source for evaluating medication use. However, health benefit status and type of health care delivery system should be considered when using pharmacy records.