



## COMPLETED GRANT SYNOPSIS

### Comparability of Pharmacy Profile Information, Prescription Claims Data, and Patient Reported Medication Use: Implications for Pharmacy Quality of Care Measurements

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#### Objectives

- 1) Compare chronic medication use as characterized by three data sources: pharmacy profile, claims data and patient self-report
- 2) Investigate the degree to which out-of-pocket prescription costs influence discrepancies between the profile and patient self-report
- 3) Recommend tactics for improving the accuracy of data capture to promote fair assessments of individual community pharmacy performance

#### Methods

Design	<ul style="list-style-type: none"> <li>• Cohort comparison of medication use information from adults with 6 or more chronic prescription medications</li> <li>• Compare pharmacy profile medication information, claims data submissions, and patient self-report of medication use obtained during a pharmacist-patient interview</li> </ul>
Study endpoints	<ul style="list-style-type: none"> <li>• Number of medications reported by each source</li> <li>• Number of types of medications reported by each source</li> <li>• Number and types of reasons for discrepancies</li> <li>• Influence of out-of-pocket prescription expenditures on the number of discrepancies</li> </ul>

#### Results

- 52 patients were enrolled with 38 patients completing the study visit
- Total number of medications recorded were 611 medications with 435 reported on the profile, 419 within the claims data and 596 self-reported by the patient. A significant difference was seen between the number of medications reported via patient self-report and both the pharmacy profile and the claims data.
- 214 discrepancies were noted between patient self-report and the profile or claims data.
- The most common reason for a discrepancy for all medication types combined was that the medication was purchased as an out-of-pocket expenditure
- For prescription medications, medication dose changes and medication discontinuations also added to discrepancies
- Lack of specialty medicine information among profile data was particularly concerning.
- Higher number of out-of-pocket prescription expenditures were associated with a higher number of discrepancies.

#### Conclusion

Compared to patient self-report, pharmacy profiles and claims data are missing medication information, particularly as related to nonprescription medication and dietary supplements use. Lack of specialty medicine information is a concern for community pharmacies. Inadequate and inaccurate data can hinder and confuse attempts to characterize pharmacy performance related to drug therapy management and quality of patient care.

A systems approach is advocated for improving the quality of medication use data documented. Our recommendations include:

- Increase awareness and interest in maintaining and using accurate and complete medication lists among the health care sector stakeholders and the general public

- Incentivize consumers to provide complete and accurate information about their use of medications, including nonprescription medications and dietary supplements to all their healthcare providers
- Create electronic information linkages among pharmacies and between pharmacies and other healthcare providers, PBMs and health information exchanges to ensure that all have complete access to medication use information
- Create a no-charge transmission process for information-only transmissions from pharmacies to PBMs to encourage the documentation of cash-only medications
- Create a compensation mechanism for pharmacy-obtained medication lists separate from the medication therapy management process
- Include the attainment of nonprescription medication and dietary supplement use information within quality measures for both prescribers and pharmacists
- Ensure that state laws and pharmacy policy and procedures allow for certified pharmacy technicians to assist with medication use information attainment and facilitate technician training in medication list creation and maintenance as a means to improve the efficiency of medication data gathering
- Encourage public and private funding agencies and foundations to support additional studies of larger, broader populations to increase knowledge about the completeness and accuracy of medication lists