Title: Impact of Pharmacist Identification of Medication-Related Problems in a Long Term Care Pharmacy
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Background:
Bremo Long Term Care (LTC) Pharmacy serves approximately 200 smaller group homes and 12 assisted living facilities, by providing medications, complete medication regimen reviews at regular intervals, and immunizations. Unique to this LTC pharmacy, there is a high population of patients with intellectual disabilities and/or behavioral health issues, along with other complex disease states, requiring a higher level of care. There is little information available to quantify the impact of pharmacists’ interventions, particularly in the small group home and assisted living facility setting. With close to 1 million people living in assisted living facilities¹, this prominent population warrants further research.

Objectives:
The objectives of this study are to evaluate the impact of pharmacist identification of medication–related problems through percent acceptance rates of interventions in a long-term care (LTC) pharmacy and to characterize the most common medication-related problems and interventions.

Methods:
A retrospective chart review of patients who are 18 years or older and utilizing the LTC pharmacy was used to evaluate pharmacist interventions made from January 2014 until August 2016. Data collection included the date and type of intervention, patient demographic information (age, gender), drug class involved, provider type (primary care or specialist), intervention outcome, and resolution type. Within the DocuTrack system, both accepted and rejected interventions were reviewed and classified based on Hepler & Strand’s eight medication related problems: untreated indications, improper drug selection, subtherapeutic dosage, failure to receive medication, overdosage, adverse drug reactions, drug interactions, and medication use without indication. Data was analyzed using descriptive statistics.

Results:
A total of 417 interventions were made over 18 months, equating to approximately 13 interventions per month. 47% of interventions were accepted and 29% were rejected by the prescriber. The remaining 24% of interventions that were made did not have a response from the prescriber. Of the medication related problems, “untreated indication” and “overdosage” were most commonly intervened upon and accepted interventions. Upon review of intervention outcomes by drug class, pharmacists made the most interventions regarding immunizations (41%), diabetes medications (11%), cholesterol medications (10%), and anti-hypertensives (7%).

Conclusions:
Pharmacists are making various types of recommendations to improve the care of patients in long term care with complex disease states, such as diabetes, hyperlipidemia, and hypertension.
Although prescribers may not accept or respond to all recommendations provided, pharmacists are still able to consistently provide recommendations to improve care.

Sources: