

The scope of drug-related problems in the home care setting

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Abstract

Introduction: While drug-related problems (DRPs) in the inpatient setting are well known, the scope of these problems in home care has not been critically evaluated.

Our primary objective was to evaluate the incidence and demographics of DRPs in home care. Our specific aims were to characterize the rate of potentially inappropriate medications (PIMs), medication errors (MEs) and adverse drug events (ADEs) and to identify risk factors which contribute to DRPs in the home care setting.

Methods: Pubmed, Embase and CiNAHL databases were systematically searched from January 2000 to December 2016 for all publications which quantitatively characterized DRPs in the home care setting.

Results: The most commonly reported DRPs characterized in studies were PIMs (n=16), MEs (n= 4) and the ME-subcategory medication-related discrepancies (n=7). The frequency of PIMs ranged from 19.8-48.4%; up to 26% PIMs were considered severe. Polypharmacy (≥9 drugs) and increasing age were the most common risk factors for DRPs. Insufficient interdisciplinary teamwork and inconsistent performance of medication reviews were also risks factors for DRPs. Patients and/or caregivers were responsible for 42.3% of DRPs.

Discussion and Conclusions: Compared with acute inpatient care, DRPs are more frequently reported in home care. Transfer of complete medical records and the use of an interdisciplinary team have the potential to reduce DRPs, including MEs, specifically when integrating a pharmacist providing regular medication review. Importantly, patients and informal caregivers must be significant partners with this interdisciplinary team.