

POSTER ABSTRACTS

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Incidence and Preventability of Adverse Drug Events Among Older Persons in the Ambulatory Setting

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Background: Adverse drug events, especially those that may have been preventable, are among the most serious concerns about medication use in older persons cared for in the ambulatory clinical setting.

Methods: We performed a cohort study of all Medicare enrollees (n=31,757) cared for by a large multi-specialty group practice during a 12-month observation period (July 1, 1999 through June 30, 2000). Possible drug-related incidents occurring in the ambulatory clinical setting were detected using multiple methods, including: reports from health care providers; review of hospital discharge summaries; review of emergency room notes; computer-generated signals; automated free-text review of electronic clinic notes; and review of administrative incident reports concerning medication errors. Medical record reviews and abstractions were performed by trained clinical pharmacist investigators for detected incidents. Each incident was classified by two independent physician-reviewers to determine whether or not it constituted an adverse drug event, the severity of the event (significant, serious, life-threatening, and fatal), and whether it was preventable..

Results: There were 1,523 identified adverse drug events, of which 28% (n=421) were considered preventable. The overall rate of adverse drug events was 48.0 per 1,000 person-years, with a rate of 13.3 preventable adverse drug events per 1,000 person-years. 38% were categorized as serious, life-threatening, or fatal; 42% of these more severe events were deemed preventable, compared with 19% of the significant adverse drug events. Errors associated with preventable adverse drug events occurred most often at the stages of prescribing and monitoring.

Conclusions: Adverse drug events are common and often preventable among older persons cared for in the ambulatory clinical setting. More serious adverse drug events are more likely to be preventable. Prevention strategies should target the ordering and monitoring stages of pharmaceutical care. Interventions focused on improving patient adherence with prescribed regimens and monitoring procedures may also be beneficial.