

The effect of a Geriatric Stewardship on drug-related problems after discharge

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Background A main obstacle of inpatient medication review is the lack of insight into patient needs and the outpatient medical history.

Purpose To establish whether drug-related problems (DRPs) after discharge can be reduced via Geriatric Stewardship, which entails inpatient medication reviews based on patient interviews and consultations of primary care providers.

Method This implementation study with a pre-post design included hospitalized elderly with polypharmacy and a risk factor for frailty who were admitted to orthopedic or surgical wards. The pre-cohort received usual care; the after-cohort received an extended medication review based on 1) a review of the clinical records, 2) a consultation with the general practitioner and community pharmacist, 3) a patient interview, and 4) a multidisciplinary evaluation of all the recommendations of step 1 to 3. Two weeks after discharge, patient-reported DRPs were assessed by telephone using a validated questionnaire. DRPs (i.e. an event or circumstance involving drug therapy that actually or potentially interferes with desired health outcomes) were classified into drug-related complaints, practical problems and questions about medication. The primary outcome was the number of DRPs per patient in each group. A Poisson regression was performed to compare the groups, adjusted for potential confounders. Secondary, we assessed the number of altered recommendations by patient interviews and consultations of primary care providers.

Findings Of 127 included patients (control: 74, intervention: 53), intervention patients reported fewer DRPs after discharge than patients in usual care, 2.8 vs. 3.3 per patient (RR-adjusted 0.83, 95% CI 0.66-1.05). The difference was mainly due to a 50% reduction in drug-related complaints. In the intervention group, nearly 30% of the medication review recommendations based on the clinical records altered after consulting the patient and primary care providers.

Conclusion The implementation of a Geriatric Stewardship reduced DRPs after discharge in this cohort. Significance was not reached but further research with larger patient numbers may confirm this effect and determine the effect on clinical outcomes. The importance of patient interviews is consistent with the findings of Viktil (2006) on the value of patient interviews in an inpatient setting. No previous study considered consultations of primary care providers. Ref: Viktil et al. *Pharmacoepidemiol Drug Saf.* 2006;15:667-74