

The Burden of Cost- Admission versus Discharge Medications

Abstract:

Sir,

Avoiding unnecessary polypharmacy prevents potential drug-drug interactions culminating in adverse drug events.¹ Medication review is an important opportunity for rationalizing a patient's treatment to maximize therapy for established chronic disease and minimize the potential for drug-drug and drug-disease interaction. A secondary consideration is the potential for a drug review to identify the possibility of cost saving by noting those occasions where generic substitution could occur without detriment to the patients overall therapy. We completed an audit of drug costs of medications for patients on admission and on discharge from an acute general hospital.

The charts of the first 94 medical patients admitted into an acute general hospital starting from January 1st 2012 were sourced from Hospital In-Patient Enquiry (HIPE) and a pre-designed questionnaire was completed for each of these patients. The cost of medications per patient was calculated using the MIMMS manual appropriate for the period of admission and discharge. We examined the patient demographics, source of referral, LOS (length of stay), admission diagnosis, past medical history and names of medications and their individual costs.

The total monthly cost of medications for the 94 patients on admission was 10,517.20 Euro with the average monthly cost being 111.89 Euro per patient. In comparison, on discharge, the total monthly cost was 11,320.05 Euro with the average cost being Euro 120.43 per patient. 64 patients (68.1%) were 65 years and older of whom 6 patients (6.4%) were resident in nursing homes. The average length of stay was 3.1 days. Prescription cost increased for 51 out of the 94 patients (54%); an increase of 25.4% in monthly cost of medications was identified. 70% of these patients were aged 65 years or over. Cost reduction was noted in 21 (22%) of the patient group with a 26.7% saving in monthly cost noted. The remaining 22 (24%) patients had no change in medication cost. The most commonly prescribed medications were anti-coagulants and anti-platelets, costing 409.63 Euro per month, followed by inhalers, nebulizers and antitussives, costing 1661.45 Euro per month. 40% had previous admissions within the last 6 months. There was a non-significant trend observed in reduction of cost of medication following admission under a geriatrician rather than a general physician.

Identifying a preferred drug list could impact positively on the cost of medications for the state.

Acute medical admissions are an opportunity for substantial quality improvements. Each medication needs to be evaluated in terms of appropriateness particularly in the elderly age group and its impact on the patient especially when prescribed with other medications. There are many merits associated with having a cost effective prescription drug regimen. Simple strategies for ensuring appropriate prescribing can be put in place which may inadvertently reduce polypharmacy and hence cost.

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