Prescriber Follow-up of Pharmacist Clinical Interventions in an Australian Teaching Hospital

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Aim: To describe the type of clinical interventions reported by clinical pharmacists and identify factors that predict prescriber follow-up of clinical interventions.

Introduction

o Clinical pharmacists review medication orders and document clinical interventions as part of routine practice.

o This allows communication of suggested changes to medication therapy, optimises medication use and enhances patient safety and the quality of the patient's care.

o We sought to quantify the proportion of follow-up performed of pharmacist-identified clinical interventions by prescribers.

Methods

o Retrospective review of clinical interventions reported on NIMC and discharge prescriptions by pharmacists at a large teaching hospital in New South Wales, Australia.

o Study period: the first weeks of February, May, August and November of 2017. These months were chosen to account for prescriber maturity and workload at different times of the year.

o Follow-up: "*any action documented on the medical records by a prescriber that addressed the pharmacist-identified clinical intervention*".

o Descriptive analyses to characterise the type of clinical interventions and quantify follow-up activity.

o Binary logistic multivariate regression to identify predictors of follow-up activity.

Results

o A total of 396 clinical interventions were reported.

o Clinical interventions were reported most commonly for anti-infectives, cardiovascular and respiratory drugs.

o Dose selection with unclear or incorrect instructions was the most common type of clinical intervention.[1]

o Over two-thirds (n=262, 66%) of clinical interventions were followed up by prescribers.

o Factors that predicted prescriber follow-up activity:
  o Polypharmacy, OR 2.3 (1.3-4.1)
  o Clinical interventions documented on discharge prescriptions, OR 6.4 (2.0-21.0)
  o Clinical interventions documented in August, OR 2.3 (1.1-5.2)
  o Patients admitted under a medical speciality (vs surgical), OR 2.1 (1.1-4.0)

Table 1: Follow-up rates of clinical interventions

Clinical intervention [1]	Follow-up, n (%)	Total
Dose selection	138 (64.7)	215
Drug use process	25 (49.0)	51
Logistics	36 (72.0)	50
Drug selection	39 (81.3)	48
Drug form	16 (66.7)	24
Other	7 (87.5)	8

Discussion

o Follow-up of clinical interventions, particularly of dose selection errors, is necessary to minimise patient harm.
o Follow-up by prescribers was less likely when the solution was clear for pharmacists to amend the medication order themselves.
o Increased winter workload and pressures increased likelihood of prescriber follow-up in August.

Conclusion

o Follow-up of clinical interventions by prescribers appeared to be influenced by factors that pose a potential risk of harm to patients.

o Standardisation of clinical intervention prioritisation may improve prescriber follow-up.

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References
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