

IMPACT OF AN ELECTRONIC MEDICINES RECONCILIATION PROGRAM USED IN A GENERAL SURGERY UNIT

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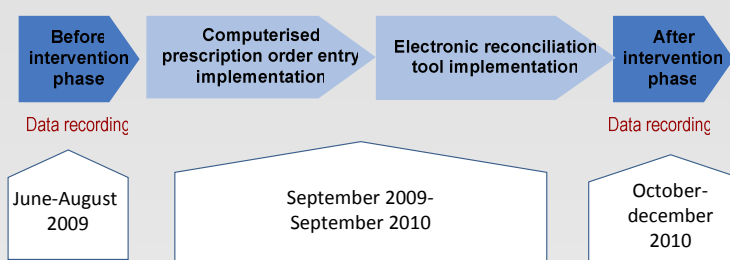
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BACKGROUND AND PURPOSE

Medicines reconciliation is a key tool in the prevention of adverse drug events. The objective is to assess the impact of a medicines reconciliation programme for hospital admission into a general surgery unit, including an electronic tool, in the number and type of unintended discrepancies between chronic medicines and medicines prescribed upon admission.

METHODS

✓ Quasi-experimental/retrospective study. Inclusion criteria: Patients admitted into a general surgery unit for more than 24 h who were taking ≥ 3 drugs chronically at home.



Data recording in before and after intervention phases consisted of three stages:

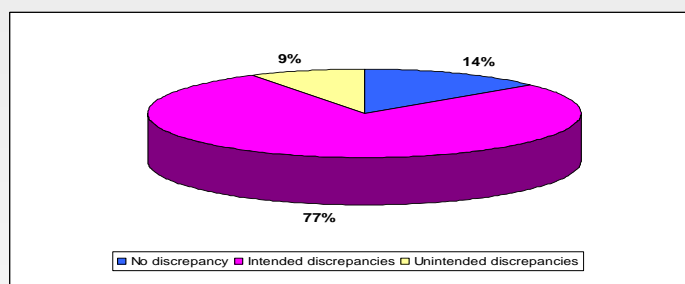
- ✓ Standardized interview to register chronic medicines and medical history
- ✓ Investigation and classification of detected discrepancies between chronic medicines and drugs prescribed in the hospital
- ✓ Assessment of unintended discrepancy severity using National Coordinating Council for Medication Error Reporting and Prevention 2001 classification

RESULTS

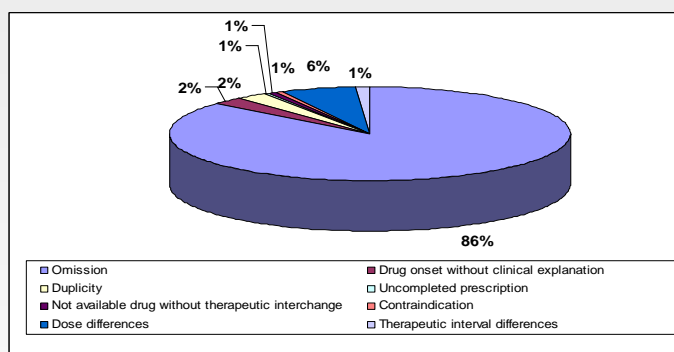
✓ A total of 191 patients were included (52.9% male, 47.1% female), 107 patients in the phase before intervention and 84 in the phase after intervention.

✓ We investigated 1,951 drugs and 1,678 discrepancies were detected.

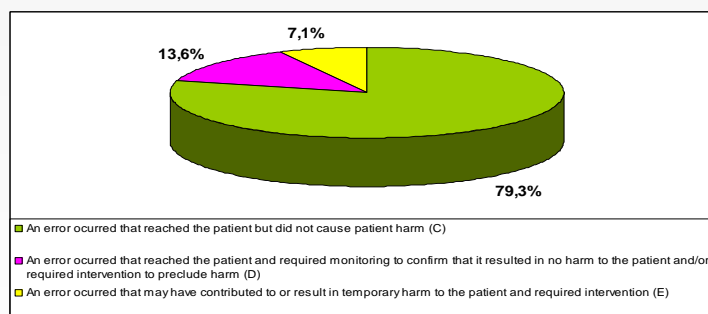
Distribution of discrepancies: the majority of discrepancies were intended



Distribution of unintended discrepancies



Severity of unintended discrepancies



After intervention unintended discrepancies with grade C severity decreased from 8,61% to 3,95% of total drugs investigated ($p < 0,05$)

Omission of drugs was the most common unintended discrepancy, being 89 (9.2%) in the phase before and 55 (5.6%) in the phase after intervention ($p < 0,05$). The summary of unintended discrepancies was as follows:

Unintended discrepancies (UD)	Total sample	Before intervention	After intervention	Significance
Total number	167	102	65	
Average (SD) per patient	0,87 (1,435)	0,95 (1,622)	0,77 (1,283)	P=0,677
UD per drug investigated (%)	8,6	10,6	6,6	P=0,002
Patients with UD N (%)	75 (39,3)	43 (40,2)	32 (38,1)	P=0,885

CONCLUSIONS

- ✓ The implementation of the medicines reconciliation program has shown a reduction of the rate of unintended discrepancies detected during admission into a general surgery unit.
- ✓ Omission of drugs was the most common type of discrepancy detected in both phases and decreased after intervention.

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