Medication Reconciliation for Medical Inpatients
in Pamela Youde Nethersole Eastern Hospital

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Introduction

Medication error is one of the leading causes of patient injury. Studies revealed that up to half of all hospital medication errors occur at the interfaces of care.

Objectives

To study the clinical impact of medication reconciliation in a medical admission ward, PYNEH.

Methodology

A pilot project was conducted in a 37-bed acute admission medical ward in PYNEH. Baseline data on UMD* was taken from the same ward for one month before the study.

Primary outcome was the number of patients with ≥1 UMD1 on admission and/or discharge.

Secondary outcome was to assess the potential clinical impact of UMD on improving patient safety.

[1] Unintended medication discrepancies (UMD) were defined as those discrepancies and/or clinical interventions identified by Clinical Pharmacist (CP) and agreed with attending doctors.

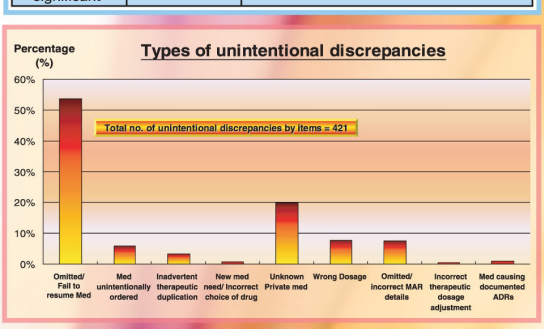
Results

Baseline data on 173 admission medical records in Nov.2008 showed 51 records (29.5%) had UMD, representing a total of 50 potential errors (by item) per 100 admissions.

Post medication reconciliation (Med. Rec.) study was conducted in Apr-Sept. 2009 on 1,961 records on admission/at discharge:

- At least one UMD was found in 421 records (21%), representing 30 potential errors (by item) per 100 admissions and 16 per 100 discharges.
- If unresolved, most (96%) would have led to minor-to-significant outcomes but 4% could have been potentially serious and even lethal.

	Total number of records	Potential errors per 100 admission	Potential errors per 100 discharge
Baseline before Med. Rec.	173	50	
Post Med. Rec. study period	1961	30	16
Severity of outcome during study period			
Serious-lethal	421	4%	
Minor-significant		96%	



Case to share:

Adm: ↑ rigidity and bradykinesia; postural related hypotension

PMH: Parkinson's disease on Sinemet
Old CVA;
Depression FU Private on Zoloft

Treatment plan: ↑ Sinemet dosage

Pharmacist communicated w/GP: In addition to Zoloft, also takingStelazine & Stablon (TCA class)

Pharmacist suspected :
Drug-induced EPS
(Likely OFFENDING agent: **Stelazine**)

Pharmacist recommended:
1. **Withheld Stelazine & Stablon;**
2. **NOT to ↑ Sinemet dosage (would worsen all symptoms)**

Conclusion

Medication Reconciliation has significantly prevented medication errors & improved patient safety.

The presence of a dedicated clinical pharmacist in the ward has facilitated the collaboration of multidisciplinary teams and immediate attention to patients drug treatment.

Implementation of this model should be considered in all hospitals to improve patients safety.