



Service Priorities and Programmes Electronic Presentations

Convention ID: 721

Submitting author: Miss Ho Yi WONG

Post title: Pharmacist, Queen Mary Hospital

Targeting High-Risk Patients for Medication Discrepancies and Interventions to Enhance the Efficiency of Medication Reconciliation Service

Wong HYA(1), Chan CC(1), Cheung YHT(1), Lau PW(1), Wong VKC(1), Yeung KYD(1), Chang RS(2), Chui CMW(1), Wong FFC(1)

(1) Department of Pharmacy, QMH

(2) Department of Medicine, QMH

Keywords:

High-Risk Patients

Efficiency

Medication Reconciliation Service

Medication Discrepancies

Drug Related Problems

Introduction

Queen Mary Hospital provides clinical pharmacy services on medical admission wards. Services include medication reconciliation (MR), senior ward rounds, and education for patients and hospital staff. Clinical pharmacy services could not be delivered to all patients due to constraints on resources. Approximately 60% of the newly admitted patients would be reviewed by the Clinical Pharmacists. In order to allocate Clinical Pharmacist resources to high-risk areas, patient's pharmaceutical needs must be assessed and prioritised accordingly. As a result, eight high-risk criteria (Appendix 1) have been developed according to the perceived medication related risks from local practice.

Objectives

1. To evaluate the effectiveness of the new working model by using the high-risk criteria as an indicator for identifying patients with increased medication risks.
2. To investigate the sensitivity and specificity of the new high-risk criteria.
3. To investigate the severity of the drug related problems (DRP) identified.

Methodology

A prospective study carried out on six designated medical admission wards in Queen Mary Hospital over two separate four-week periods in 2016.

Any unintended prescribing discrepancies (UPD) and DRP recorded by Clinical Pharmacists on the first four weeks without prioritisation will serve as control data.

This was compared with another four weeks' data on UPD and DRP documented after the implementation of high-risk criteria which allows Clinical Pharmacists to prioritise their workload.

The severity of the DRP identified by the Clinical Pharmacists was graded by an independent medical professional.

Result

Results

447 UPD were identified in the control group (n=1272) through MR whereas 579 UPD were found using the high-risk criteria (n=1290) (p=0.0087). The high-risk criteria were found to be sensitive (67.4%) and specific (53.5%) in finding unintended prescribing discrepancies.

There was a 4.7% increase (OR=2.5; CI 1.8-3.5) of patients with DRP found with the help of the high-risk criteria and the overall acceptance rate for the DRP was 89.8%. Ninety percentage of the DRP identified were graded as significant, serious or potentially lethal by Doctor.

Outcome

The new high-risk criteria have shown to be effective in prioritising MR Service need. This new approach can enhance patient safety and maximise patient therapeutic outcomes.