



## Service Priorities and Programmes Electronic Presentations

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### **The Impact of Pharmacist-led Medication Reconciliation in Surgical Ward targeting High Risk Patients in a Local Hospital**

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#### **Introduction**

Medication errors are prevalent upon transition of care in hospital. Implementation of an established medication reconciliation process has been shown to reduce medication errors. For this reason, medication reconciliation has been prioritized as one of the top five patient safety strategies, within WHO Action on Patient Safety: High 5s Project. Pharmacist-led medication reconciliation is effective in identifying and rectifying unintended medication discrepancies. However, upon expansion of service, without extra manpower and resources, pharmacist involvement at all stages of the reconciliation process for every patient is not feasible.

#### **Objectives**

To determine the percentage of incidence and the severity of unintended medication discrepancies before and after targeting high risk patients in surgical wards. High risk criteria include at least one of the followings: (1) Patients older than 65 years of age; (2) Concurrent use of five or more regular medications; (3) An active order of anticoagulants, insulin or dual antiplatelets.

#### **Methodology**

This was a single-center, pre-post intervention study conducted at the surgical wards of a local hospital in Hong Kong. Intervention consisted of training on high-risk patient screening criteria and data collection using a documentation form based on PCNE version 6.2. Pre-intervention data (From ward A) was collected retrospectively over 3 months from December 2013 to February 2014; while post-intervention data (From ward A and B) was collected prospectively over 3 months from December 2014 to February 2015. The potential severity of the unintended medication discrepancies was rated by pharmacists and classified into 3 levels according to NCC MERP criteria.

#### **Result**

When comparing the pre-intervention (From ward A) and post-intervention group (From ward A and B), the percentage incidence of unintended medication discrepancies increased from 5.32% to 7.35% (p-value 0.056). Statistical significance was shown when comparing ward A patients only in both groups, the percentage of incidence increased from 5.32% to 8.15% (p-value 0.021). No statistical significance was shown when comparing the severity level of medication discrepancies between pre-intervention and post-intervention group. Conclusions: Targeting high risk patients in the medication reconciliation process in surgical ward was a feasible approach given the limited time and resources available for pharmacists, allowing a higher percentage incidence of unintended medication discrepancies being detected.