



## Service Priorities and Programmes Electronic Presentations

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### **Pharmacist-led Bedside Discharge Medication Counselling Service – A Patient-centered Approach**

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Reduced Hospital Utilisation

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Patient Satisfaction

#### **Introduction**

Adverse drug events and poor drug adherence often occur when patient is discharged home with discontinuity of care, multiple changes to medication regimens and inadequate medication education, which results in emergency department visits and hospital readmission. Literatures showed that pharmacist interventions at discharge improved medication adherence and patient satisfaction, however effects on hospital utilisation have been a mix. Furthermore, perceptions of ward-based nurses towards such service are unclear.

#### **Objectives**

1)To investigate whether pharmacist discharge medication counselling service could reduce hospital utilisation at 30-day post-discharge; 2)To evaluate whether such service could reduce medication discrepancies and improve patient medication adherence; 3)To evaluate patient satisfaction and nurses' perception towards this service.

#### **Methodology**

This is a prospective, quasi-experimental study conducted from August 2015 to January 2016 at Ruttonjee Hospital. A dedicated pharmacist reviewed discharge medications, provided bedside discharge medication counselling and telephone follow-up to eligible patients. Case-matched controls were patients discharged from same wards in 2014 before service was launched. The primary outcome was hospital utilisation rate, which was defined as the composite outcome of unplanned hospital readmission and emergency department visit at 30-day post-discharge. Medication

discrepancies, patient medication adherence and satisfaction, and perception of nurses towards this service were secondary outcomes. Morisky Medication Adherence Scale-8 (MMAS-8) was used to measure patient medication adherence.

### **Result**

Hospital utilization at 30-day post-discharge reduced significantly after counselling (43% vs 24%,  $p=0.00864$ ). Unintentional medication discrepancies were identified in 16.3% of intervention patients. Medication adherence significantly improved after counselling (MMAS-8 score: 6.1 vs 7.9,  $p=0.001$ ). All intervention group patients were either strongly satisfied or satisfied with the service. Eighty-three percent of nurses either strongly satisfied or satisfied with the service and 86.2% of nurses either strongly agreed or agreed that the service should become regular for targeted patients.

Pharmacist-led discharge medication counselling significantly reduced hospital utilisation at 30-day post-discharge and improved patient medication adherence. It also provided useful insights on patient outcome, patient satisfaction and nurses' perception towards such service, which assists pharmacists to tailored-made service for patients. This service is positively recognised by both patients and nurse colleagues, which suggested it should become regular for targeted patients.