

# Service Priorities and Programmes Electronic Presentations

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Implementing a Pharmacist Discharge Medication Reconciliation and Counselling Service in a high-volume Outpatient Pharmacy

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#### Introduction

Drug related problems, including adverse drug events (ADE) and non-compliance, are not uncommon in patients discharged from hospital. It is estimated that 12 to 17% of patients experienced ADE, while 60% of them are preventable or ameliorable. Approximately 6 to 12% of ADE results in emergency department visit and 5% in hospital readmission. Studies demonstrated that pharmacist interventions at discharge reduced adverse drug events after discharge, reduced medication discrepancies, improved medication adherence and reduced unplanned hospital readmission. Pharmacist Discharge Medication Reconciliation and Counselling Service was started in Pamela Youde Nethersole Eastern Hospital since January 2013. A dedicated pharmacist reconciles the discharge medication regimen, contacts physician to resolve any medication discrepancy, assesses patient's ability to manage their medications, provides information and counselling on their current medications and emphasizes any changes in regimen.

#### **Objectives**

This study was conducted to provide local data on the impact of pharmacist medication reconciliation and counselling by evaluating the overall health utilization rate following discharge and patient satisfaction towards the service.

### **Methodology**

We conducted a prospective controlled quasi-experimental study from April to June 2013 and included patients discharged from the Department of Medicine of Pamela Youde Nethersole Eastern Hospital. Patients or caregivers who could not understand Cantonese, or who had any condition (e.g. deaf, mute or severe cognitive impairment) that prevented from effective communication with pharmacist, who lived in elderly home or under nursing home care were excluded from the study. Patients in intervention group received pharmacist counselling at discharge were compared to the control group with patients receiving usual care in a matched historical control subjects in 2012. Primary outcome was the utilization of healthcare resources defined as the combination of rate of 30-day readmission from emergency department and 30-day emergency department visit after discharge. A patient satisfaction survey was conducted in June 2013 to assess patient satisfaction towards the service.

## **Result**

303 patients were included in the interventional group with a mean age of 69.9 years old. The mean number of chronic medication taken was six items. Compared to the previous regimen, there were a mean of 2.6 modifications to drug regimen on discharge. More than 60% of patients reported that they did not understand their discharge drug regimen before pharmacist counselling. The utilization of healthcare resources in interventional group and control group were 19% and 34% respectively. The difference was statistically significant with a p-value <0.001 using chi-squared test. 65 patients were interviewed in June 2013. The questionnaire consisted of six questions using a five-point scale. The median score regarding patient satisfaction with the pharmacist discharge counselling service was 1, indicating patients strongly agreed with the service. We concluded that Pharmacist Discharge Medication Reconciliation and Counselling Service was associated with reduced health utilization rate.