



**Service Priorities and Programmes**  
**Electronic Presentations**

**Convention ID:** 674

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**Pharmacist Intervention on Hospitalized Geriatric Patients in Hong Kong – The Application of Medication Screening Tools**

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**Keywords:**

Pharmacist

Pharmacy

Intervention

STOPP

Geriatrics

Hong Kong

**Introduction**

Potentially inappropriate medication (PIM) use is highly prevalent among geriatric patients, especially those who are admitted to acute hospitals. PIM use in elderly, aged 65 and over, is problematic as the risk-benefit ratios of some drugs are unfavourably affected by the age-related changes in the pharmacokinetic and pharmacodynamic parameters of the medications.

**Objectives**

The present study aimed to investigate the prevalence of PIMs in geriatric hospitalized patients, the physicians' acceptance rate to pharmacist interventions based on Screening Tool of Older People's potentially inappropriate Prescriptions (STOPP) and whether the interventions can help to reduce hospital readmission rate.

**Methodology**

This was a randomized controlled trial conducted at a general acute hospital in Hong Kong. Patients, aged 65 years old or above, admitted to designated general medical wards, and were taking at least one chronic medication were randomized to either intervention or control group. Modified STOPP was applied to screen for PIMs by pharmacists.

**Result**

In this study, 171 and 163 patients were assigned to intervention and control group respectively, and were followed for 3 months after discharge. At admission, the prevalence rate of PIMs is 21.1%. Physicians' Acceptance Rate was 8.1%. Hospital readmission rate 3 months after discharge and the rate of PIMs at discharge were not significantly different between the control and intervention groups. Although the study failed to prove the feasibility of applying STOPP criteria to reduce the readmission rate within 3 months after discharge, discharging with PIMs was associated with more

hospital readmissions within 3 months (1.27 admissions  $\pm$  1.667), compared to discharging without PIMs (0.97 admissions  $\pm$  1.440) ( $p = 0.05$ ). Therefore, STOPP criteria may be effective in assessing the risk of hospital readmissions for geriatric patients in Hong Kong.