

# Impact of the Visiting Pharmacist Officer (VPO) on the rate of hospital admission in Old Aged Home residents and its cost implications – A Pilot Run

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## Introduction

Old aged home (OAH) residents visit multiple clinics and hospitals with frequent medication changes that predispose them to drug related problems (DRPs) such as duplications and interactions. A new approach, medication reconciliation conducted in OAHs in community, has been advocated by overseas authorities to minimize DRPs and to improve clinical outcomes.

## Purpose of the Project

The Visiting Pharmacist Officer (VPO) Program constructed by community pharmacists aims to provide medication reconciliation in collaboration with the Community Geriatrics Assessment Team (CGAT) in the Hong Kong East Cluster (HKEC). A 1-year, cluster randomized controlled trial has been designed to examine the rate of hospital admission and DRPs in 10 private OAHs implemented with the program. A pilot run of feasibility was conducted from August to September 2007. This paper reports on the design of VPOP and the pilot findings.

## Material & Methods

During the pilot phase, two VPOs visited a 40-bed OAH and assessed its drug administration system according to published guidelines. Residents' baseline demographics, medication profile and clinic follow-up schedule were collected with electronic patient profiles generated. The listed medication profile of each patient was verified with clinical diagnoses and the actual medications received. When a patient was transferred between institutions or has attended a medical follow-up, the VPO would update the patients' electronic profile and check for DRPs. Selected high-risk cases were reviewed in-depth in a structured pharmaceutical care approach. All the potential DRPs identified were documented and reported to the project steering committee.

## Results of pilot project

During the 2-month period, 69 clinic visits and hospital admissions occurred and medication reconciliation was conducted in all the episodes. Eighteen changes in drug profiles and 17 DRPs were identified. Examples of DRPs include inappropriately administered medications, omitted dosages and drug-disease interactions. Approximately 120 hours were spent on data collection, service execution, data entry and other tasks.

## Conclusion

Potential DRPs are apparent in OAHs and community pharmacists can assist to identify them. The potential DRPs may need to be resolved in a multidisciplinary approach with public-private collaboration which is to be further investigated in the current project.