

# Improving Health of High Risk Elderly in the Community—the HARRPE

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## Introduction

The Hospital Authority (HA) has set up task groups on Hospital Admission Risk Reduction Program for the Elderly (HARRPE) aiming to improve health of community-dwelling elderly immediately discharged from hospital. It took the platform of telephone nursing consultation supervised by geriatricians, collaborating with various partners of health and community care.

## Purpose of the Project

To investigate the new HA risk score-- HARRPE score on various outcomes among discharged elderly and to analyse the efficacy of telephone nursing service on these outcomes.

## Material & Methods

Daily list of patients aged over 65 discharged from the Hong Kong East Cluster (HKEC) under Medical specialty was provided by HA. HARRPE score was assigned based on demographic factors, socioeconomic factors and comorbidities. Risk score varies from 0-1, with higher score predicting higher chance of hospital readmission. Discharged patients with HARRPE score >0.17 were prospectively randomly recruited into treatment or control group. Telephone nursing service was provided to treatment group to identify any problems within 24 and 72 hours of discharge, and as necessary thereafter on discretion. Management of problems included phone advice (based on clinical protocols), home-visit, arranging early follow-up in specialist clinics, General Out-patient Clinics (GOPCs) or HARRPE Clinic, and referral to community nurse or socio-community services. Elderly and their care givers could also phone in for advice.

## Results

The HARRPE program was able to show reduction in outcomes across all HARRPE score subgroups. It resulted in 28.6% reduction in patients with Accident & Emergency Department (AED) attendance ( $p=0.03$ ) and 25.5% reduction of AED attendance episodes ( $p=0.04$ ). Reduction in admissions and length of stay was also seen (ranged from 10%-30%).

## Conclusions

The HARRPE program was helpful in improving health outcomes of community dwelling elderly just discharged from hospital. Benefit was shown across all subgroups of HARRPE score of patients higher than >0.17.

