

# Service Priorities and Programmes Electronic Presentations

**Convention ID: 57** 

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# Multidisciplinary Stroke Early Supported Discharge Program in QEH: Outcome, Safety and Benefit

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# **Keywords:**

Early supported discharge Acute Stroke

#### Introduction

In the past, a significant proportion of patients with acute stroke would be transferred to convalescent hospital, leading to long length of stay. With the strong collaboration of various Departments, Stroke Early Supported Discharge (SESD) Program had been implemented in QEH since Dec2011. All the acute stroke patients in Acute Stroke Unit, would be screened by SESD team. Regular multidisciplinary rounds were conducted, three times weekly to provide timely recommendation to the in-charge clinicians for the feasibility of direct discharge and the subsequent rehabilitation plan. Timely home based rehabilitation and carers' training would be provided to the directly discharged patients. Outpatient rehabilitation could be followed after home based training.

## **Objectives**

This study reviewed the throughput, outcome, safety and benefit after the introduction of SESD program.

# **Methodology**

Individual outcome data was prospectively collected while the overall direct discharge rate, length of stay and unplanned readmission rate were retrieved from HA database. Fisher exact test and paired sample t-test are used for statistical analysis.

## Result

From Dec2011 till Sept 2012, 283 patients were recruited into the SESD program. Their mean age was 70. Half of the patients had Modified Barthel Index (MBI) less then 85. There were 576 allied health home visit and 2436 outpatient attendance. After the program was implemented, the proportion of acute stroke patients directly discharged was significantly increased from 43.5% to 49.2% (p=0.005). The average length of stay of patients under SESD program was 5.08 days. It was shorter than that for all the acute ischaemic stroke over the same period (7.4 days). For the functional recovery, the MBI and Berg Balance Scale (BSS) were significantly improved after

home based rehabilitation as compared with their baseline upon discharge from QEH. (mean MBI from 81.2 to 91.9, p< 0.001, mean BSS from 40.4 to 46, p< 0.001). Although they were discharged directly with disability, their unplanned readmission rate was 9.3%, which was lower than that of all the stroke patients (12.3%) in the same period (p=0.16). After the implementation of the program, the average total length of stay of ischaemic stroke in our Cluster was reduced by 1.3 day. It translated into 1300 bed-days saved and the beneficial effect was similar to addition of 3.5 new hospital beds. In conclusion, the SESD program was effective and safe to facilitate direct discharge of acute stroke patients from QEH, and hence to reduce the total bed-days consumed.