Enhanced 365 Physiotherapy Service Shorten Length of Stay in Post-Operative Orthopedic Patients of Lower Limb Fractures and Joint Arthroplasties in Prince of Wales Hospital

Chan SM(1), Chan SY(1), Kan PW(1), Tsui YC(1), Phang YW(1)

(1) Physiotherapy Department, Prince of Wales Hospital

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Introduction
From the growing demand with ageing population (15% increase in 2023), the hospital bed demand will definitely increase. The utilization of acute in-patient beds will also rise. There is a 5.7% increase in bed day occupancy (BDO) of scheduled acute beds from 2015/16 to 2017/18 in NTEC. In order to facilitate discharge and shorten length of stay (LOS) for patients with lower limb fractures and arthroplasty, an enhanced inpatient physiotherapy service-365 PT rehabilitation program (365 PT rehab) has been introduced and implemented from Oct 2017 onwards in PWH.

Objectives
365 PT rehab aims at providing daily restorative rehabilitation including weekends, Sundays and public holidays to maximize rehabilitation outcomes especially including ambulation and consequential discharge, the aim is to improve continuity of acute and rehabilitation services, and to facilitate patient's care flow with early and safe pre-discharge planning, often incorporating carers’ training. The targeted patients group mainly focused on lower limb fractures, hip and knee arthroplasties who underwent surgical interventions.

Methodology
Retrospective evaluations were made by comparison of patients discharged within period of January to September 2017 (before 365 PT rehab) and October to December 2017 (with 365 PT rehab). Outcome measures included total number of cases received 365 PT rehab, average length of stay (LOS) of patient in orthopaedic wards. Also, the number of pre-discharged planning with carers training for individual patient was included.

Result
656 patients were involved from January to September 2017 (before 365 PT rehab) while 250 patients received the 365 PT rehab. Averaged LOS of patient stayed in orthopaedic wards was 8.99 days and 7.67 days pre and post 365 PT rehab service.
respectively. For the 250 patients with 365 PT services, 19% received carer training upon discharge. Carer training services also increased from 5% (before) to 16% (with 365 PT rehab). Eighty-seven percentage of patients could be directly discharged home after carer training. The new enhanced PT rehab service model 365 PT rehab was shown to be effective in shortening LOS in patients with lower limbs fracture and arthroplasties in an acute hospital setting.