A pilot early occupational therapy intervention program to provide timely and clinically effective service for patients received total joint replacement
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Introduction
According to the estimation by the World Health Organization, Osteoarthritis affects 20% to 40% of the elderly aged over 60 globally, especially in hip and knee joints. Joint replacement surgery can provide effective pain relief and improve quality of life when conservative treatment fails. As at end 2009-10, the notional waiting time was about 33 months. Occupational Therapy is a key member of Joint Replacement Centre at Yan Chai Hospital. A pilot early occupational therapy intervention programme was introduced aiming at identifying and rectifying home environmental hazards, facilitating functional mobility in daily living, adopting a positive attitude and assertiveness to return home and community safe. Joint protection techniques, advice on home environment modification, aids prescription and behavior modification, functional mobility training and counseling also be provided to these patients on a group or individual basis. Home visit were arranged before the multidisciplinary Pre-Admission Clinic (PAC) if indicated.

Objectives
To evaluate the clinical effectiveness of pilot early occupational therapy intervention in Joint Replacement Program

Methodology
A retrospective 1.5 year cross-sectional study design was employed. Patients were referred from Department of Orthopaedics in YCH with a principal diagnosis of joint replacement in knee or hip. Throughout the clinical pathways of joint replacement surgery, patients received occupational therapy in and out-patient and community outreach service by the same case manager. The outcome measures included (1) the mean time attending first OT appointment; (2) Percentage of home visit arranged and distribution; (3) Percentage of home environment modification settled before discharged (4) history of fall 6 months before and after the surgery.
Result
Between August 2011 and January 2013, 661 patients were included in the service evaluation. Over 80% of the patient received unilateral joint replacement surgery. The average time attending first OT appointment was 24.11 days before the PAC (95% CI: 24.05-24.18). Pre-operation home visit were arranged for 23.6% patient and 90% home modification with construction work were completed before discharge. 595 environmental modifications were given to patients in the study cohort. To facilitate home safety and living independence, patients received total hip replacement required more assistive devices or environmental modification than patients received TKR (p<0.05). Less than 5% patient reported at least 1 episode of fall during post 6 months follow up.