Fast-track Through-train rehabilitation program for total joint replacement
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Introduction
With the aging population in Tsuen Wan and Kwai Tsing District, there is an increasing demand for treatment for musculoskeletal degeneration management and joint replacement. In 2011, Yan Chai Hospital (YCH) developed and set up the Kowloon West Cluster Total Joint Replacement Centre, target was to perform a total of 500 total joint replacements on a yearly basis, which dramatically shortened the waiting time and improve patient satisfaction. The Total Joint Replacement (TJR) Program is a multi-disciplinary project heading by the Department of Orthopaedics and Traumatology, YCH. From the time the patient being seen by surgeons in SOPD to admission for operation, the multi-disciplinary team members, namely, Surgeons, PT, OT, MSW, RT, Nurses work together to prepare the physical, psychological and social support (e.g. post-op social care, home modification, etc.) well before admission.

Objectives
Physiotherapists has designed specialized “Through-train Rehabilitation Program” for the TJR patients. Before the patients attending the Pre-admission clinic, ALL of them are invited for a PT Pre-op Education Class. The Class provides a platform for therapists and patients to build up rapport and allows the patients to be well informed and prepared for the rehabilitation program. Immediate physiotherapy service is provided on post-op D1 including chest physiotherapy, pain management and mobility & walking training. Usually the patients could be discharged by D7 post-op and they came back to SOPD on D14 for wound care by nursing staff. On the same day, the patients will attend the Post-op Physiotherapy Clinic. They will be assessed by physiotherapist and if indicated, an Out-patient appointment within 1 week will be given.

Methodology
Key Enhancement 1: Pre-op Education Class -Build Rapport -Expectation of early
discharge and early rehab - Pre-op ex and baseline assessment (time-up-and-go test)
- Teach post-op home care and ex, e.g. ice therapy, mobilizing & strengthening exercise

Key Enhancement 2: Agreed protocol with surgeons - Start walking on D1
- Start rehab in gym on D2 - Encourage independent walking with aids in ward after PT
walking assessment - Walking aids arrangement by D/C - Ex pamphlet for home ex
and care

Key Enhancement 3: Post-op PT clinic - PT assessment on same day of
wound care by nurse (minimize transportation especially for THR) - Give PT OPD
appointment for indicated cases (usually within 1 week) on the spot, no further waiting
required

Result
BEFORE LOS: 14 days+ Patients’ expectation not managed well No D/C plan formed
Start walking by D3 Put on normal waiting list if OPD PT indicated Long waiting time
for TJR (2+ yrs) AFTER: LOS: 5-7 days Pre-admission intervention: PT, OT & MSW ->
manage expectation D/C plan formulated Start walking by D1 *Fast Track
Through-train Rehab Program: instant entry of OPD PT Waiting time shortened From
Jan 2012 to Dec 2014, a total of 1554 joint replacement was done. About 40% of the
TJR cases required further out-patient training. Among those, 80% of them are able to
exit the rehabilitation program by 6th weeks post-op, i.e. 4 sessions of training in OPD.