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CHI Learning & Development System (CHILD)

**Project Title** 

Effect of Exercises Video Intervention in Recovery after Total Knee Replacement

**Organisation(s) Involved** 

Tan Tock Seng Hospital

**Project Period** 

Start date: 11-2016

Completed date: 01-2017

Aims

The aim of this study is to investigate the effectiveness of an innovative exercise video,

where patients will be doing exercises independently with guidance, in augmenting

rehabilitation outcomes after a TKR.

Background

After TKR, patients undergo intensive rehabilitation immediately to regain mobility. To

facilitate recovery, patients are often advised and educated to do exercises on their

own time in the ward using an exercise brochure. However, it might not be the best

method to motivate patient and help them to recall the exercises. Using the concept

of guided exercises videos, it can possibly increase exercise dosage and higher

confidence level in execution of exercises.

Methods

Patients were given access to the guided exercise videos on a tablet device (consisted

of 6 bed exercises with auditory cues and safety advice) during their free time in in-

patient stay in addition to standard physiotherapy treatment. They are encouraged to

do the exercises together with the video at their own times.

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**Results** 

Patients using exercises video demonstrated greater improvement (7 degree more) in

knee range of motion and patients were more confident and more motivated in

performing the exercises.

Conclusion

Access to rehabilitation videos post-operatively can improve clinical outcome and

patient's reported outcome. This also allow patient to participate in meaningful

rehabilitation activities at their own preferred time.

**Additional Information** 

Availability of videos is limited (limited iPads, limited internet connection to access

videos), Preference of usage as patients may not be technology savvy.

**Project Category** 

Technology, Clinical Improvement

**Keywords** 

Technology, Clinical Improvement, Knee Exercises Video, Video Technology, Total

Knee Replacement, Mobility Rehabilitation, Orthopedics Rehabilitation, Post

Operation Rehabilitation, Patient Education, Self-Care, Tan Tock Seng Hospital, Allied

Health, Physiotherapy, Care Continuity, Patient Empowerment, Improve Clinical

Outcome, Patient Reported Outcome

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