Use of Predictor Tool To Fast track and Reduce post TKR Length of Stay in Acute Hospital

Singapore Healthcare Management 2017

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INTRODUCTION

To reduce the length of stay in Singapore General Hospital for post surgical Total Knee Replacement (TKR) Patients requiring intensive therapy, using a predictive tool to identify them at pre-operation day. Patients are fast tracked from acute to community hospital for longer term rehabilitation needs. 272 out of 1900 TKR cases were discharged to the community hospital in 2015

PROBLEM

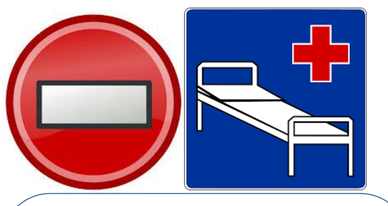
The average LOS of patients discharged to community hospitals is 8.6, which is longer than the average LOS for TKR patients at 5.4.

2 main reasons for the delay

(1) referral processing delay and (2) bed availability

All healthcare team inputs required for referral submission

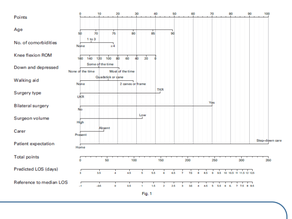
Completed only on POD 4



Subsequent delay in bed preparation and patient transfer

PRACTICE CHANGE IMPLEMENTED

Pre- Operation



1 **Prediction for LOS**

2 **Discharge Counselling**

Operation Day

3 

Fast Track Referral + Immediate Acceptance

Bed Preparation

POD 4 / 5

Patient Transferred to CH

RESULTS

FAST TRACKED

72

Between

April	Feb
2016	2017

LENGTH OF STAY

Average LOS for CH placement **8.6** → **5.5** Fast Track LOS

3.1

Days Saved

COST SAVINGS

Bed, Physiotherapy

$662 per day

72 patients, 223.2 bed days

$147,758 saved

CONCLUSION

Using the predictive tool to identify patients requiring longer rehabilitation has allowed us to successfully reduce the LOS in an acute hospital by fast tracking or arranging for early discharge to a community hospital.

Early identification of patients is a useful method to help stratify patient's needs, reduce cost for the patient and optimise hospital resources for appropriate care. We have successfully reduced the length of stay for those fast tracked.

The fast track has been implemented in 3 partner community hospitals (Bright Vision Hospital, Jurong Community Hospital and Yishun Community Hospital), and will be extended to more community hospitals.