00480 Effectiveness of Using a Risk Assessment and Prediction Tool in Predicting Discharge Disposition for Patients Undergoing Total Knee Replacement Surgeries

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Aims: This study examined the accuracy of a Risk Assessment and Prediction Tool (RAPT) in predicting discharge disposition for patients undergoing Total Knee Replacement (TKR).

Methodology: This is a prospective study of 40 patients who had undergone TKR surgeries and were discharged from 19th February 2018 to 31st May 2018. The patients were assessed using the RAPT by the Case Managers at Pre-admission Anesthesia Clinic (PAAC). Based on the RAPT scoring, patients were categorised into (1) discharge home; (2) discharge home with additional interventions such as Meals-on-Wheels, Interim Caregiver Services etc.; (3) discharge to community hospital. Comparison was made between the actual discharge dispositions against the predicted discharge disposition.

Result: Of the 40 patients, 55% (n=22) were males and 45% (n=18) were females. 67.5% (n=27) were Chinese, 27.5% (n=11) were Malays, 5% (n=2) were Indians. The median age was 65 years old.

Among the 29 patients who were predicted to be discharged home, 28 patients (96.6%) were discharged home as predicted. One patient (3.4%) was discharged to community hospital in view of rehabilitation needs.

Of the 11 patients who were predicted to be discharged home with additional interventions, eight patients (72.7%) were discharged home without additional interventions, while one patient (9.1%) was discharged home with Interim Caregiver Services. Two patients (18.2%) were discharged to community hospital due to patient's preference and rehabilitation needs.

The overall accuracy of the prediction tool for discharge disposition was 92.5% (37 out of 40 patients).

Conclusion: This study has shown that the use of a RAPT is accurate in predicting discharge disposition for patients undergoing TKR surgeries. Early identification of patients' discharge needs and proactively addressing discharge issues prior to the surgery will lead to timely post-operative discharge.