

### CHI Learning & Development System (CHILD)

### **Project Title**

Increasing The Rate Of Orthopaedic Inpatients Discharged Before Noon

#### **Project Lead and Members**

Project lead: Lin Shuxun & Han Fucai

Project members: Choo Soo Chian, Tan Yu Lei, Mei Lili, Adj A/Prof Fareed Kagda

### **Organisation(s) Involved**

Ng Teng Fong General Hospital

### **Healthcare Family Group Involved in this Project**

Medical, Allied Health, Nursing, Ancillary

### **Applicable Specialty or Discipline**

Orthopaedic, Physiotherapy, Occupational Therapy, Care Coordinator

#### **Project Period**

Start date: Jun 2018

Completed date: Dec 2018

#### Aims

To meet and exceed the hospitals target of >30% of inpatients being discharged before noon.

### Background

See poster appended / below

#### Methods

See poster appended / below



### CHI Learning & Development System (CHILD)

#### **Results**

See poster appended / below

#### **Lessons Learnt**

It is important to have frequent reminders for awareness and regularly engage stakeholders from nursing and therapists.

#### **Conclusion**

See poster appended / below

### **Project Category**

Care & Process Redesign, Quality Improvement, Value Based Care, Discharge Planning, Care Continuum, Inpatient Care

### **Keywords**

Root Cause Analysis, Plan Do Study Act

### Name and Email of Project Contact Person(s)

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# INCREASING THE RATE OF ORTHOPAEDIC INPATIENTS DISCHARGED BEFORE NOON

MEMBERS: LIN SHUXUN & HAN FUCAI (LEADS), CHOO SOO CHIAN, TAN YU LEI, MEI LILI, ADJ A/PROF FAREED KAGDA (SPONSOR)

|   | SAFEIY             |
|---|--------------------|
| V | PRODUCTIVITY       |
| V | PATIENT EXPERIENCE |
|   | QUALITY            |
|   | COST               |

# Define Problem/ Set Aim

### **Opportunity for Improvement**

Between January 2018 to May 2018, the percentage of orthopaedic inpatients being discharged before noon ranged from 15% to 25%. This was consistently below Ng Teng Fong General Hospital's target of 30%. This resulted in a lack of available beds for patients awaiting admission, increased wait time for patients, and overall patient dissatisfaction.

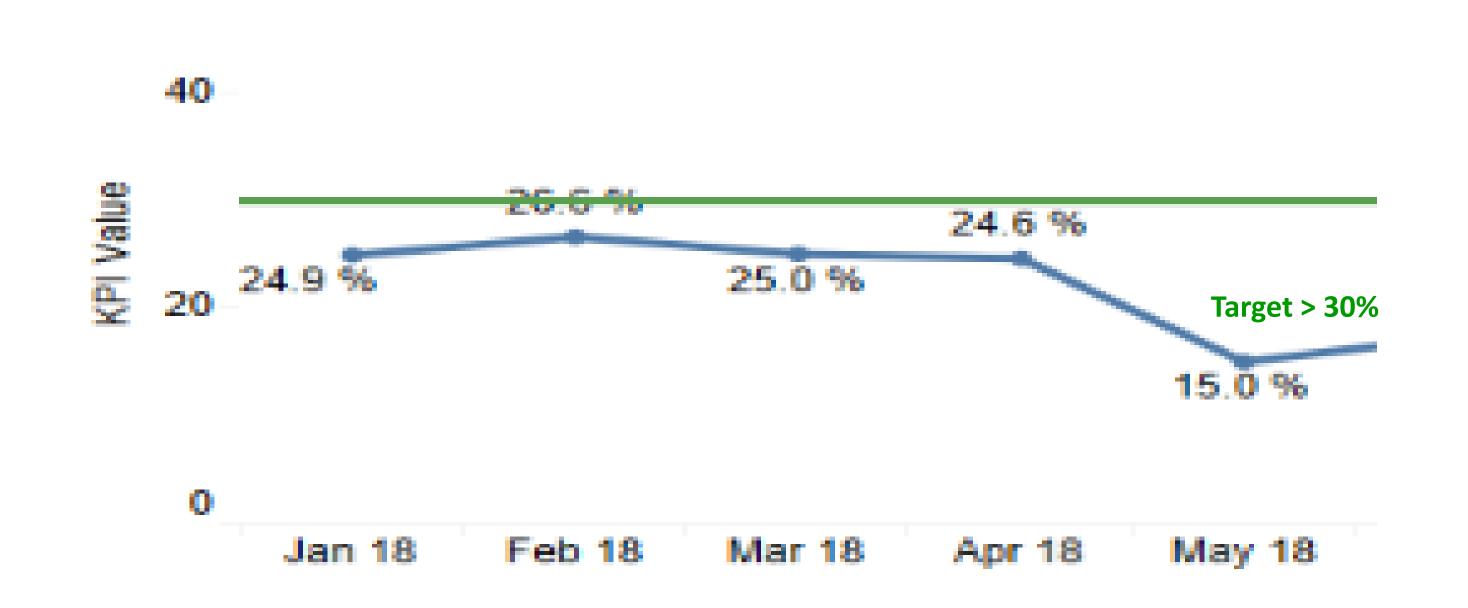
### Aim

Our team aimed to meet and exceed the hospitals target of >30% of inpatients being discharged before noon.

# Establish Measures

## **Baseline Performance**

Percentage of Orthopaedic Inpatients Discharged Before Noon (Jan-May 2018)



# **Analyse Problem**

# **Process before intervention**

Orthopaedic team documents that patient is fit for discharge during morning rounds

Physiotherapist and Occupational therapist gives safety clearance for discharge

Discharge medications and memos are processed

Patient is discharged

# **Root Cause Analysis**

# Orthopaedic Team - Did not highlight plan for discharge early - Delay in completing prescriptions/memos/discharge summaries

- prescriptions/memos/discharge summaries
   Not prioritising discharge changes
- Imbalanced workload amongst house officers from different teams resulting in delayed discharges of patients cared for by busier teams

# Physiotherapist/

## **Occupational Therapist**

- Delay in identifying patients for discharge
  Did not prioritise reviewing patients for discharge earlier
- Delay in providing mobility aids for patients who need it upon discharge

Patient unable to discharge before noon

### **Nursing Team**

- Did not prepare medications and materials for patients requiring dressing change before home
- Insufficient manpower to obtain discharge

# - Did not inform patients family to bring patient home resulting in transport delay

### **Care Coordinator**

- Did not identify patients for discharge early enough to troubleshoot blocks to discharge
- Did not consider logistics of transport home or if patient could be cared for at home

# **Select Changes**

### **Probable Solutions**

The Root Cause Analysis showed that there were many contributing factors. Hence the solution had to be multi-pronged and summarised in the table below.

| table below. |   |  |  |  |  |  |  |  |
|--------------|---|--|--|--|--|--|--|--|
|              | Root causes                                   | Measures   |  |  |  |  |  |  |
|              | Orthopaedic<br>team                           | <ul> <li>Early identification of patients planned for discharge</li> <li>Prompt D-1</li> <li>Complete discharge summaries, memos, prescriptions before 1030hrs each day</li> <li>Workflow created to prioritise discharging of patients</li> <li>Internal load balancing with house officers from busier teams helping out those from lighter teams</li> </ul> |  |  |  |  |  |  |
|              | Physiotherapist s and Occupational therapists | <ul> <li>Improved communications with orthopaedic team and earlier screen for patients pending discharge</li> </ul>  |  |  |  |  |  |  |
|              | Ward nurses                                   | <ul> <li>Promptly obtain discharge medications and dressings, even the day before</li> <li>Communicate with patients family plan for discharge and facilitate logistics</li> </ul>   |  |  |  |  |  |  |
|              | Discharge coordinator                         | <ul> <li>Identify patients planned for discharge and assist with discharge planning</li> </ul>   |  |  |  |  |  |  |

# Test & Implement Changes

| CYCI | LE PLAN   | DO  | STUDY  | ACT   |
|------|---|---|--|---|
| 1    | Aim was to test whether all these measures would bring about any positive increase in rate of discharged before noon. | Test changes were carried out as planned. Regular meetups were held with all stakeholders involved to optimise the workflow. Feedback was sought at regular | A positive increase in rate of orthopaedic inpatients discharged before noon was seen from May 2018 to December 2018. This was sustained and spanned 3 rotations of House Officers who were pivotal in the workflow, proving that the measures had a lasting effect. | We plan to adopt this change in workflow and continually ensure that the targets are met. |

### Percentage of Inpatients Discharged Before Noon Trend Line (Jun-Dec 2018)



# Spread Change/ Learning Points

### **Spread Changes:**

We intend to spread this to all healthcare staff that care for orthopaedic inpatients. As they rotate regularly as part of their training and job scopes, positive changes must be maintained despite staff turnover.

# **Learning Points:**

Frequent reminders for awareness and regular engagement of stakeholders.