

# Service Priorities and Programmes Electronic Presentations

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# Effective shortening of discharge lead time in the Surgical Ward

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#### Introduction

In 4Q 2016, from the confirmation of a discharge of an ambulatory patient and patient needs NEAT service to the patient received the discharge documents requires 5 hours in average. This was due to a complicated discharge workflow and long waiting time to prepare all discharge documents.

Therefore, the discharge workflow was reviewed and to implement changes to shorten the discharge lead time and increase the availability of bed to meet the service demand of surgical cases admission.

## **Objectives**

- 1. Identify and remove of non-value added process in the workflow of discharge.
- 2. Decrease the discharge lead time of an ambulatory patient and patient needs NEAT service

# **Methodology**

- 1. Creating the current state map to visualize the whole discharge process steps and non-value added in the process.
- 2. Data was collected from each discharge steps to calculate the average 'Total Lead Time' and 'Processing time'. Average 4 hours 58 minutes total lead time and 22 minutes 33 seconds processing time was identified. In the whole process, more than 2 hours waiting was noted at 'place documents to nursing station to contact relatives by clerk' and 'Enter data to CMS by doctors to final check by team nurse'
- 3. Decide on the major categories (Equipment, policies, procedures, people and environment) that potentially contribute to a problem. Use cause and effect analysis (Fishbone Diagram) to identify the possible causes of a problem. Four areas were identified that had a room of improvement.
- 4. Identify the waste and brainstorm solutions
- 5. Apply the Countermeasure:
- a) Prioritize: All ambulatory patient and patient require NEAT service will be put in first priority. A team nurse will attach a high priority tag to those patients. Then clerk will put

the discharge document to the discharge filing trolley. The doctor will also deal with the patient's discharge plan first.

b) Enhance communication: Use a board at nursing station to communicate with supporting staff. HCA/PCA noted who will be discharged require NEAT service. They will pack the belonging and change the clothes in appropriate time.

## Result

Same data collection method was performed at 3Q17.

After applied the lean concept and rolled out the countermeasure, the average lead time of discharge process decreased 40% (from 5 hours to 3 hours) for ambulatory patient. And, the average lead time of discharge process decreased around 20% (from 5 hours to 4 hours) for patient need NEAT service.