



Service Priorities and Programmes Electronic Presentations

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To Improve The Efficiency And Effectiveness of Specimen Collection and Delivery at Shatin Hospital: Through The Lean Strategy.

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Introduction

Specimen collection and delivery is a routine task for portering staff in Shatin Hospital. Currently, the average lead time of specimen collection and delivery require over 45 minutes. Say, there is 3 rounds of specimen collection and delivery in a day, it costs total 135 minutes for specimen delivery each day. This is wastage of time. So LEAN approach was adopted to improve the efficiency and effectiveness of specimen delivery. The new workflow was implemented in 23/01/2017.

Objectives

- 1)To reduce the unnecessary workload of porter
- 2)To eliminate missing specimen or delayed specimen delivery
- 3)To improve and establish a new workflow on handling of specimens from clinical area to laboratory aiming to reduce redundant processes and man hours.

Methodology

LEAN approach aims to provide the best quality with the lowest cost, and in the efficient manner, through eliminating waste (Krafick, 1988). A LEAN working group was formed.

An Observational Study was conducted in September 2016.

Brainstorming session in the working group provided opportunities for staff to ventilate their feelings and ideas on specimen delivery procedures so as to identify their frustrations on current practice.

Fish bone analysis was utilized to identify the root causes for the long lean time of the specimen delivery procedures. It found that there were specimens located in various cabinets with different categories which contributed to the increase of risk of delayed specimen collection and delivery to laboratory. It also found that porter was doing multi-task during specimen handling, including differentiate the specimen into categories, counting and etc.

Therefore, a modified specimen handling procedure was established. The space utilization of cabinet for specimen bottle was re-organized. It reduced the risk of over-look of specimen resulted in delayed delivery. The steps of specimen collection

were simplified. It reduced unnecessary tasks performed by porter and decreased the time of specimen delivery.

Result

The lead time of the specimen delivery has been reduced from 45 minutes 30 seconds to 30 minutes 18 seconds.

90 % of the portering staff reported reduction in time spent on collecting and transportation resulting in less frustration and faster completed the specimen delivery process.

WAY FORWARD

The project will further look into the process of specimen delivery and improve the efficiency and the effectiveness of specimen collection.

The design of the cabinet and specimen collection cart will be re-modified.