



Service Priorities and Programmes Electronic Presentations

Convention ID: 699

Submitting author: Mr Chi Wai Xanthus WONG

Post title: Hospital Administrator I, Queen Elizabeth Hospital

A "win-win" Project that Reduced Assembly Time of Medical Consumables

Billy TSE(1), Ken LAM(1), Carl CHOI(1), Xanthus WONG(1), PT CHAN(2), Kitty CHING(1), Susanna KO(1)

(1)Administrative Services Division, QEH, (2) Surgery Department, QEH

Keywords:

Topping-up Service
Lean Management
Reducing Waste
Nursing Procedures

Introduction

Higher expectations on topping-up services are aroused with clinical services expansion.

Objectives

To shorten users' assembling time of supplies for nursing procedures, and increase topping-up process efficiency via reducing wastes.

Methodology

1. Analysis

I. Collection Inconvenience

Top-up items (300/ward) were not placed by common nursing procedure orders, making collection difficult. No standardized Chinese name for items also caused misunderstanding.

II. Insufficient Space

Adding new topping-up items for operations was limited by cabinet's spacing.

III. Redundancy on Procedures

4-way checking of expiry dates was too frequent for identifying expiring items (2 months' shelf-life). Moreover, temporary changes in quantity induced unnecessary checking and ad-hoc refilling.

2. Measures

I. Grouping by Same Family

Ward H4 calculated the assembly time for grouping four procedures:

Group 1* Group 2^ Group 3+ Group 4# Total

H4 (Pilot) 60sec 23sec 33sec 50sec 166sec

A1 (Control) 100sec 120sec 90sec 50sec 360sec

A4 (Control) 67sec 105sec 57sec 78sec 307sec

167.5 seconds (50.2%) were saved in average.

* Urinary

^ Gastrointestinal

+ Respiratory

Dressing & Others

II. Reducing Inventory

Slow-moving items (no refilling record in 6 months) were identified at wards:

Slow-moving Items %

A1 33/194 (17%)

A4 27/181 (14.9%)

D5 57/212 (26.9%)

R8 27/189 (14.3%)

Potential space for new items was identified.

III. Reducing Over-processing

Expiry date of one item was checked 8 times/month. It was reduced to one time only, saving 70 minutes (87.5%).

IV. Reducing Errors

To prevent misunderstanding, the team consulted users and picked some commonly used Chinese names of items and produced a standardized list.

V. Enhancing Response to Changes

Two tags "No Stock Counting"(A) and "Please Provide Full Quantity"(B) are introduced to enhance communications. "A" could save 5 minutes in counting and refilling, while "B" prevents ad-hoc refilling (6 minutes/item, 15.5 minutes/round).

From 3-7 October, 21 "A" tags and 63 "B" tags were used. 105 and 455.5 minutes were reduced respectively. Around 9 hours were saved weekly.

Result

Ward staff 100% agreed that time saving in getting consumables for procedures and communications enhancement were significant. Meanwhile, 100% topping-up staff agreed it saved refilling time.

This enhancement model of topping-up service demonstrated that continuous communication and cooperation with users can reduce wastage and free time for both ward & topping-up team staff.