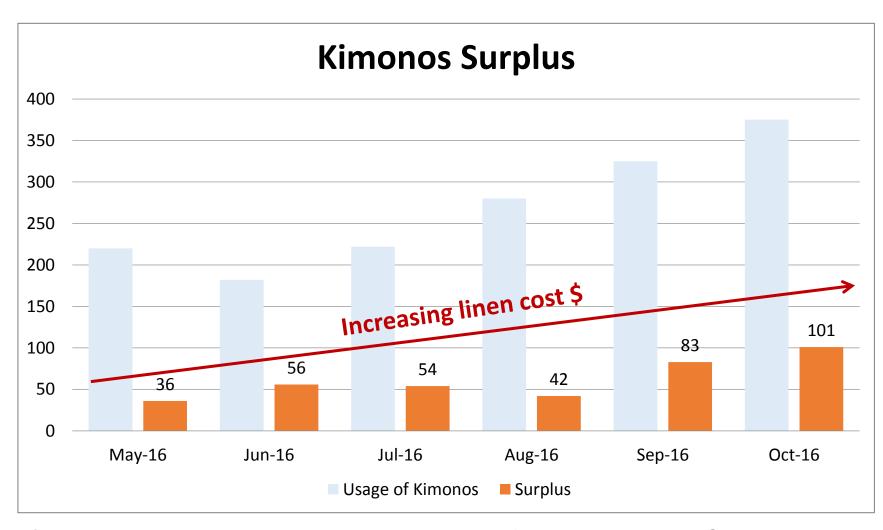


# Cost – Effective LEAN Way to Manage Linen Usage for Cardiac Radiology

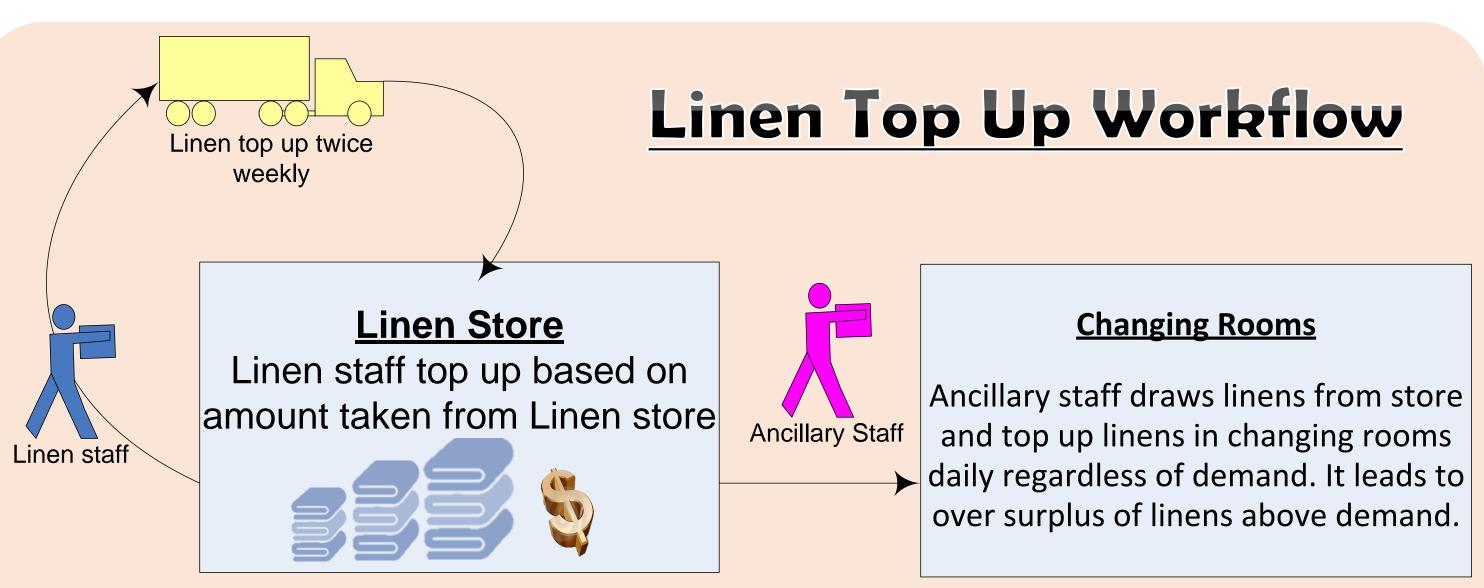
Suhanthi Mohanadas, NHCS Nancy Tay, NHCS H.C Padmini, NHCS



#### BACKGROUND



The project was suggested as part of LEAN exercise following encounter of unusually high laundry cost of x-ray kimonos.



- Linen staff delivers and top up linens based on balance count in linen store. Cost is charged based on the volume topped up.
- Ancillary staff draws linens and top-up in the respective changing rooms. Excess linens was drawn regardless of demand.
- Over storage of linens in changing rooms regardless of workload increase cost of linens in department.

## Methodology

**Lean 55** methodology was applied to re-organise linen storage area.. The location of the types of linens were standardised. Linens are sorted and stored according to their types with clear signage to indicate separate compartments for different types of linens.

Standardise topping of linen to just one location instead of multiple locations to enable efficient usage tracking based on area of operation.

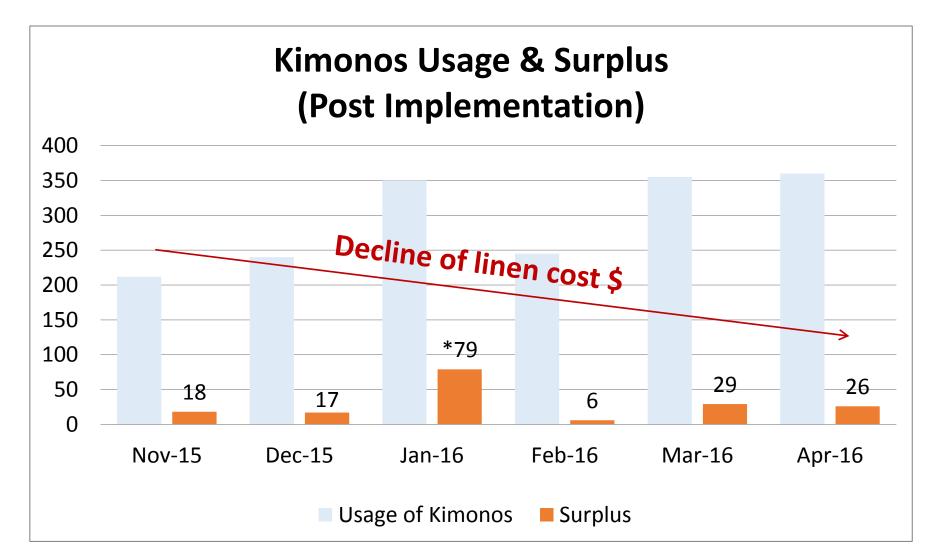
New storage are made easier for linen staff to count linens. It facilitates better usage tracking leading to time savings for staff.

Sorting has been made to make it easier for linen delivery staff to count specific linen types which will facilitate usage tracking based on area of operation.

#### RESULTS

Since the implementation of the just-in-time method of topping up, there is a reduction of linen cost by 35%.

Saving of an average cost of 60 kimonos each month, which translates to \$130 savings per month.



\*Process was re-audited for the spike in January 2016 & briefing was conducted to ensure compliance.

### Follow up & Sustainability

- Work instruction was revised for Laundry and Linen supply for the department based on the new workflow. Spin-off to include all other linen use e.g. blankets and draw sheets.
- Ancillary staff was briefed on the new workflow.
   Observed and ensure proper compliance of top-up and distribution of linen following implementation of new workflow.
- Take So kimonos (MSCT) and 20 kimonos (GEN XRAY) from UNEN ROOM every Monday and Wednerday.

  Check the top-up of Linen Delivery before acknowledgement of Linen Delivery note.

  Linen Room Cabinet 1
  MSCT (R5507)

  Linen Room Cabinet 2
  GENERAL XRAY (R6000)

  Work Instructions placed in linen room to guide

staff in topping up linens

 Monthly linen count summary checked and counterverify to ensure correct billing based the actual usage of linens.

The *Just-in-Time Storage* concept was practiced. Storing of linen workflow was revised from daily just-in-case to store-upon-demand for the weekly operation to reduce wastage.

The pull on demand method of topping up eliminates excess cost due to waste of over stocking. Storing processes was standardized to ensure cost-effectiveness in linen use in the department.

Linen supply is based on the new workflow to ensure compliance. Ancillary staff was briefed and practiced the new method from 07 Nov ember 2015.

Ancillary staff check every Monday and Wednesday if need to top up changing rooms, monitor usage pattern and top-up upon projected usage.

Verification and monitoring of weekly linen top-up is done by ancillary staff upon delivery of linen every week. Monthly linen count summary was counter checked to verify correct quantity based on actual usage to ensure accuracy.

