# Easy Replenishment of Home Care Consumables

### Background

Procurement holds the main stock of home care consumables in the main store and releases them slowly to the home care cupboard as and when stocks are low.

Nurses and doctors were required to sign out and keep track of stocks whenever they drew out any consumables from the cupboard using the inventory log sheet. One home care staff also conducted stock take every Monday to determine the amount of stock to request from procurement. The process of stock taking could take up to 4 hours each time.

In addition, Procurement also performed stock count of the main store of home consumables every Tuesday, and it required 4 hours each time. Stock would be purchased when the inventory reached PAR level.

### Initial Process

<table>
<thead>
<tr>
<th>Procurement Staff</th>
<th>Home Care Staff</th>
<th>Doctor / Nurse</th>
<th>Witness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print out Inventory Form</td>
<td>Counting Inventory</td>
<td>Complete Withdrawal Form</td>
<td>Check &amp; Counter-sign the Withdrawal Form</td>
</tr>
<tr>
<td>Compare PAR Level</td>
<td>Tally with withdrawal Form</td>
<td>Pick up Items</td>
<td>Check &amp; Counter-sign Inventory Form</td>
</tr>
<tr>
<td>Monitor PAR Level</td>
<td>Complete Inventory Form with items balance</td>
<td>Filing for Reference</td>
<td>Filing for Reference</td>
</tr>
<tr>
<td>Order Items</td>
<td>Data Entry</td>
<td>Replenish Stock</td>
<td>Replenish Basket</td>
</tr>
</tbody>
</table>

### Problem

- Large amounts of consumable stocks
- Time-consuming to keep track
- Some items reach expiry date
- $$$
- Lots of paper work tracking
- Involving many personnel
- Time Consuming!

### Methodology

A value steam mapping was conducted in July 2018 and identified the issues to addressed. The team consisting of a home care nurse and procurement staff then identified the commonly used items and the past quantities used. The home care cupboards were then reorganised, and Kanban system was employed.

- Par level of each product item is calculated based on 1 month usage or minimum order quantity (MOQ).
- All 102 consumables are labelled and each has a place in the cupboard.
- Commonly used items are placed within eye level and easy reach.
- Twin-bin (Kanban) system was employed whereby, once a bin is used up, it is put into the replenishment basket. This triggers procurement fill up the bin and replenish it in the cupboard. No counting is required.
- Procurement will then place order for the items from supplier based on the bin in the replenishment basket.

### Results

- 416 manhours saved per year
  - No counting of stock in the cupboard by home care staff (4 hours saved per week)
  - No counting of stock in the main store by procurement staff (4 hours saved per week)
- 50% reduction in stock holding
- Reduce wastage, as there will be fewer incidences of expired stock

### New Process

<table>
<thead>
<tr>
<th>Procurement Staff</th>
<th>Doctor / Nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual check on replenishment basket / cupboard</td>
<td>Pick up items from cupboard</td>
</tr>
<tr>
<td>Replenish items from main store</td>
<td>Put the empty bin in the replenish basket</td>
</tr>
</tbody>
</table>

### Conclusion

This project has drastically improved the process of topping up the consumables. Clinical staff can now spend more time on providing patient care and procurement staff can review the stock easily.

Acknowledgement: This project was conducted with the support of Singapore Institute of Technology and Lean Global Network.