Restructuring Storage Environment to Enhance Contingency Readiness and Service Expansion in UCH ICU
CHAN YF(1), LAU KH(1), CHUNG WY (1), CHAN WY (1)
(1) Intensive Care Unit, United Christian Hospital, Kowloon East Cluster

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Introduction
To maintain quality services in ICU, aids of medical equipment are essential. With the state-of-the-art technology, abundance of medical devices with variety of accessories and consumables are now available, such as choices of ventilators, dialyzers and advanced wound products. To embrace latest EBP, projects on VTE prophylaxis, prone position ventilation and Eye care have been launched in UCH ICU. These advancements increased the demands of the storage area. To fulfill the storage demands, part of the clinical area with build-in medical facility was vacated to cater the storage. In special circumstances, such as response to avian flu pandemic or rapid deployment for disasters, 5 ICU beds can be deployed in that area to facilitate contingency response. However, the existing cabinets were immobilized, a great deal of time and excessive manpower were required to release the area for emergency deployment.

Since 2014, HA has been established the Quality of Care Improvement Program (QOCP) that aims at enhancing frontline staff to create positive practice environment and promulgating EBP. In early 2016, a Resource Allocation Exercise (RAE) has been kicked-off by Procurement Department of UCH to facilitate the increase of consumables auto-refill frequency. These changes provide a golden opportunity for UCH ICU to restructuring her storage environment.

Objectives
- Release potential clinical area in a short period of time
- Increase capacity and facilitating reallocation by redesigning cabinets
- Improve compliance on MHO guidelines
- Enhance accessibility by regrouping stock items in category
- Apply 5-S principles in stock management
**Methodology**

Actions for Improvement

In order to increase the capacity, all the cabinets were redesigned with increased dimensions. Setting of cabinets was also rearranged. To facilitate reallocation, new cabinets were fitted with wheels and doors. Items were relocated based on their usage and weight. The auto-refill regulations and the principles of consuming the consumables were carefully revised with the elements of 5-S and the collaboration with the central stock of UCH.

**Result**

The total storage area increased 20% by estimation that made further service expansion possible. In case of emergency, the rearrangements can release the potential clinical area more easily with lesser time and manpower. The extent of manual handling is also decreased with the new designs and relocation of items enhances the compliance of MHO guidelines. The stock level is kept adequate and fresh with application of 5-S. Staffs from different disciplines expressed positive feedbacks toward the changes.

**Conclusion**

With the great support of QOCP program and the collaboration with the RAE program, our objectives were achieved that our unit is capable to release potential clinical area rapidly and safely.