An enhancement of equipment storage system in A&E/TSWH by 4R Concepts (Redesign, Reallocate, Regroup and Relabel)
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Introduction
During the commissioning phase, there was hundreds of equipment items including medical equipment and its accessories, consumable items, household equipment were delivered to our department. All equipment was randomly stored in five stores in our department. In order to make sure all staff can find out the equipment effectively during emergency situations, a more systematic framework for storage of equipment is needed. Therefore the 4R concepts are applied in our department for equipment storage.

Objectives
To make the equipment in A&E department easily accessible by 4R concepts (Redesign, Reallocate, Regroup and Relabel) in five stores.

Methodology
Plan
There was a lot of equipment which was not systematically stored in five stores. The labelling was not clear enough and the grouping method was not specific. Therefore, equipment subcommittee team members were responsible for the 4R project to reallocate all equipment in the A&E department.

Do
A pilot project was done by relabelling of the equipment in each store by the nurse in charge for that equipment.

Check
Although the labelling of the equipment renewed, the equipment was not stored systematically. Therefore the equipment team sub-committee team members introduced the 4R concepts in October, 2017.

Act
a) Redesign
There are five stores in our department (Medical consumable store, general store, special equipment room in G/F and 1/F and 4th floor store.). The use of each store is
designed for different equipment.
b) Reallocate
- Resuscitation equipment is placed in Medical consumable store that close to resuscitation rooms.
- Special procedure items (e.g. Radiation, hazmat personal protective equipment, restraints) are stored in general store
- Special team items (e.g. Emergency Medical items) are stored in special equipment room in G/F.
- Valuable, back up equipment (e.g. IT and training equipment) is stored in special equipment room in 1/F.
c) Regroup
- All equipment accessories e.g. cables, power cords and operation manual are grouping together in different lockers.
- The model of the medical equipment, consumable items and operation manual are displayed on each locker and a master list was available for staff quick reference. Therefore, staffs can locate and replace the accessories easily.
- Built-in equipment and household equipment are grouped in lockers. Therefore, staff can find and replace effectively.
d) Relabeling
- Label of the equipment from macro scale to micro scale. For macro scale, floor plan is designed for each store and checklist for all the equipment in each area. For micro scale, checklist of equipment in each cupboard and label for each item are provided.

Result
Results
The 4R project was introduced in Oct, 2017 to all staff and the feedback was promising and they verbalized the equipment is easily accessible and easily refill. Inventory storage database will be reviewed by equipment team members every half year.
Conclusion
A systematic framework for equipment storage is necessary in A&E TSWH to facilitate staff for finding and refilling the items.