



To have a Standard Layout of Drugs and Consumables in the Resuscitation Cabinet Within 3 Months

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INTRODUCTION

Patients in the resuscitation room of the Department of Emergency Medicine, are critically ill or in imminent danger of collapse. Thus they need to be attended to immediately and would require maximum allocation of staff, equipment and resources.

However, the staff persistently feedback that they face difficulty in locating and retrieving equipment and medications from the panels in the resuscitation room due to poor accessibility and organisation of items. This incurred possible risks such as injuries to staff, medication errors as well as lower efficacy in treating the critically ill patients.

AIMS

To improve efficacy of patient treatment by consolidating and arranging drugs, consumables and equipment in the centralised resuscitation cabinet within 3 months.





An easier access of resuscitative equipment during an emergency will enhance patients' safety, prevent potential medication errors and improve staff satisfaction.

METHODOLOGY

The 5S approach was implemented to facilitate daily operations with the smallest amount of wasted time and materials. It is a system which reduces waste and optimize productivity through maintaining an organised workplace and using visual cues to achieve more consistent operational results.

Equipment which are not frequently used were removed. The old cabinet was torn down and a new cabinet without doors was built. After housekeeping was completed, frequently used equipment, medications and consumables were categorised and placed as outlined. Standard work instructions were drafted and implemented to ensure that the cabinet do not deteriorate to its former state.

Briefing on the arrangement of the items was reinforced and all staff are orientated to the new layout of the cabinet in the resuscitation room. Resuscitative items are replenished according to compartmental categories every night. Cleaning and tidying of the shelves are scheduled accordingly during weekends on a weekly basis. Replenishment of medications by the pharmacy staff is scheduled weekly. Random audits are carried out to reinforce accountability of all staff.

5S	Interventions
Sort	Equipment that are not frequently use for resuscitation, are removed from the cabinet.
Set in-order	Equipment and medicines are sorted according to their main function and therapeutic category respectively.
Shine	<p>The cabinet was torn down and a new cabinet without doors was built. After cleaning, the equipment, medicines and consumables are then placed together and their shelves are outlined by different colored tapes as illustrated below.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Fig 1. Medications have been outlined with yellow tape and grouped according to their therapeutic category by using different colored labels.</p> </div> <div style="text-align: center;">  <p>Fig 2. Intravenous solutions have been re-arranged, while its cupboard has been outlined with blue.</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  <p>Fig 3. Equipment was grouped together according to functions. Airway adjuncts have been outlined with red tape</p> </div> <div style="text-align: center;">  <p>Fig 4. Consumables have been moved to the cupboard and outlined by green tape.</p> </div> </div>
Standard-ize	Standard work instructions were drafted and briefing on the layout of various items was reinforced during roll call for a week.
Sustain	Random audits were carried to ensure that the cupboard is tidy and sufficiently topped-up.

RESULTS

The new layout and arrangement of the resuscitative equipment, medications and consumables facilitates quick retrieval and replenishment of items. The efficacy of patients' treatment was greatly improved as the staff are able to locate the items effortlessly and carry out interventions efficiently. Staff have expressed increased satisfaction as it is easier and faster to access resuscitative items as the items are currently centralised. This aids in the productivity in the daily operations of the department as well as the organisation. Overall, there are positive impacts on patient and staff safety as staff stated that the items in the cabinet are more organised, standardised and easily accessible, which also prevents potential medication errors while retrieving the drugs. This indirectly leads to cost avoidance which could result from medication errors and compromised patient and staff safety.

CONCLUSION

The team have implemented standard work instructions and random audits are carried out daily to ensure sustainability of the new arrangements and constant reinforcements are made to staff to ensure tidiness of the cabinet.