

Airway Kit to Facilitate Patient Intubation

Introduction

The improvement project was conducted in Changi General Hospital, Ward 44. As a Medical High Dependency and Acute Stroke Unit, Ward 44 experiences a moderate number of patients requiring either emergency or elective intubations. Registered Nurses tasked with assisting the doctor in the intubation regularly experience difficulties in obtaining the requisites from the emergency trolley due to the standardized checklist, and finding sufficient space to prepare the requisites for the intubation. These difficulties can result in further deterioration of a patient's condition.

Changes

After garnering feedback from Ward 44 nurses with more than 1 year working experience, partnered with team feedbacks given, the team ascertained the root causes of difficulties during a patient intubation include:

- Lack of floor space in the ward cubicles resulting in the emergency trolley having to be positioned at the foot of the hospital bed, out of reach of the airway nurse who is positioned at the head of the bed.
- Unavailability of intubation requisites, such as a CO2 detector and in-line suction catheter, in the e-trolley.
- The absence of a table or other hard surface for the airway nurse to prepare the intubation requisites.

Having identified the root causes, the team held brainstorming sessions and concluded that the availability of an Airway Kit would resolve these issues.

The team made a list of requisites that were deemed important to have on hand in the event of an intubation. These requisites were then placed in a container that had adequate space for all the items, had a handle that allows a grab-and-go action, and could be opened and used as a makeshift table.

The Airway Kit was placed in the Medical High Dependency cubicle but was also available for the nurses in the Acute Stroke Unit. Ward nurses were made aware of the Airway Kit during ward roll calls, and were encouraged by the team members to use the kit during intubations.

Measures

Feedback forms were distributed to all ward nurses after the Airway Kit had been placed on trial for 9 months to measure the effectiveness of the kit.

After collation of the feedback, the team noted that the ward nurses found the Airway Kit useful during an intubation. Requisites were found to be more accessible, and there was lesser risk for cross contamination of unused requisites. Lesser time was also required to obtain requisites.

However, nurses also stated that insufficient space is still a concern for the nurses assisting in the intubation. This may be due to a lack of education on how the container can be used as a makeshift table.

Conclusion

With the Airway Kit, nurses have saved crucial time by not having to run to and fro from the ward's Utility Room to the patient to obtain absent items. Nurses have also indicated that the Airway Kit is handier and more compact as compared to the e-trolley. Some nurses also stated the kit provided them with more space to prepare and assemble their intubation requisites.

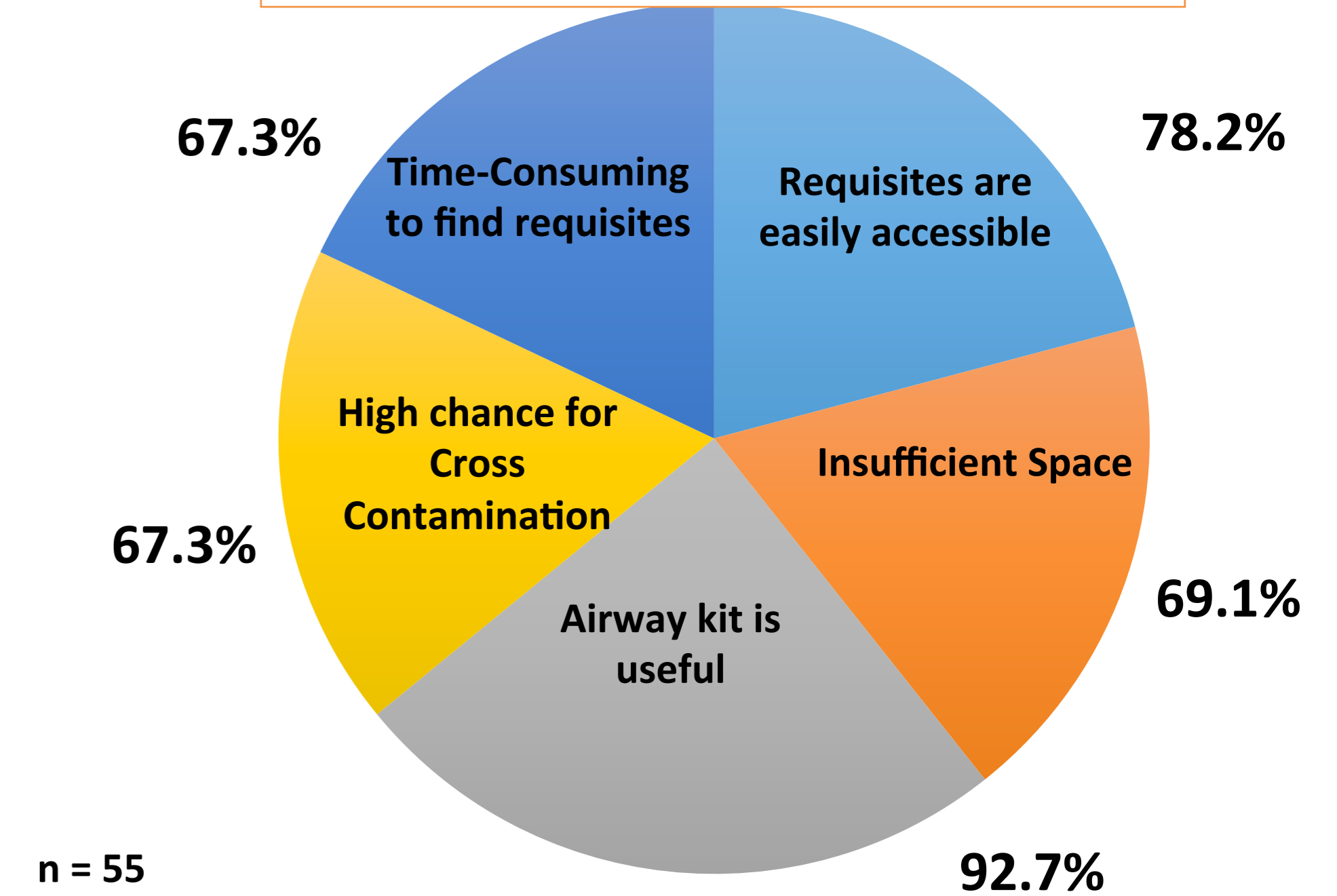
Improvements

Nurses have stated that the Airway Kit needs to be more organized as the items are not placed in compartments, and that some items have to be squeezed in due to limited space. The team will locate a bigger and more suitable container to be used for the Airway Kit.

Further education for the nurses on the usage of the kit will be conducted to ensure effective use of the airway kit.



Before Implementation



After Implementation

