

Improving Specialist Knowledge and Skills in Complex Airway Management In Critical Care

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Abstract: Following patient safety incidents it became clear that there was a need to focus on complex airway management and upskill the existing critical care teams across both sites.

SMART Aim

To upskill the critical care team in complex airway management by August 2023 evidenced by staff feedback, incident reduction and training compliance.

Plan

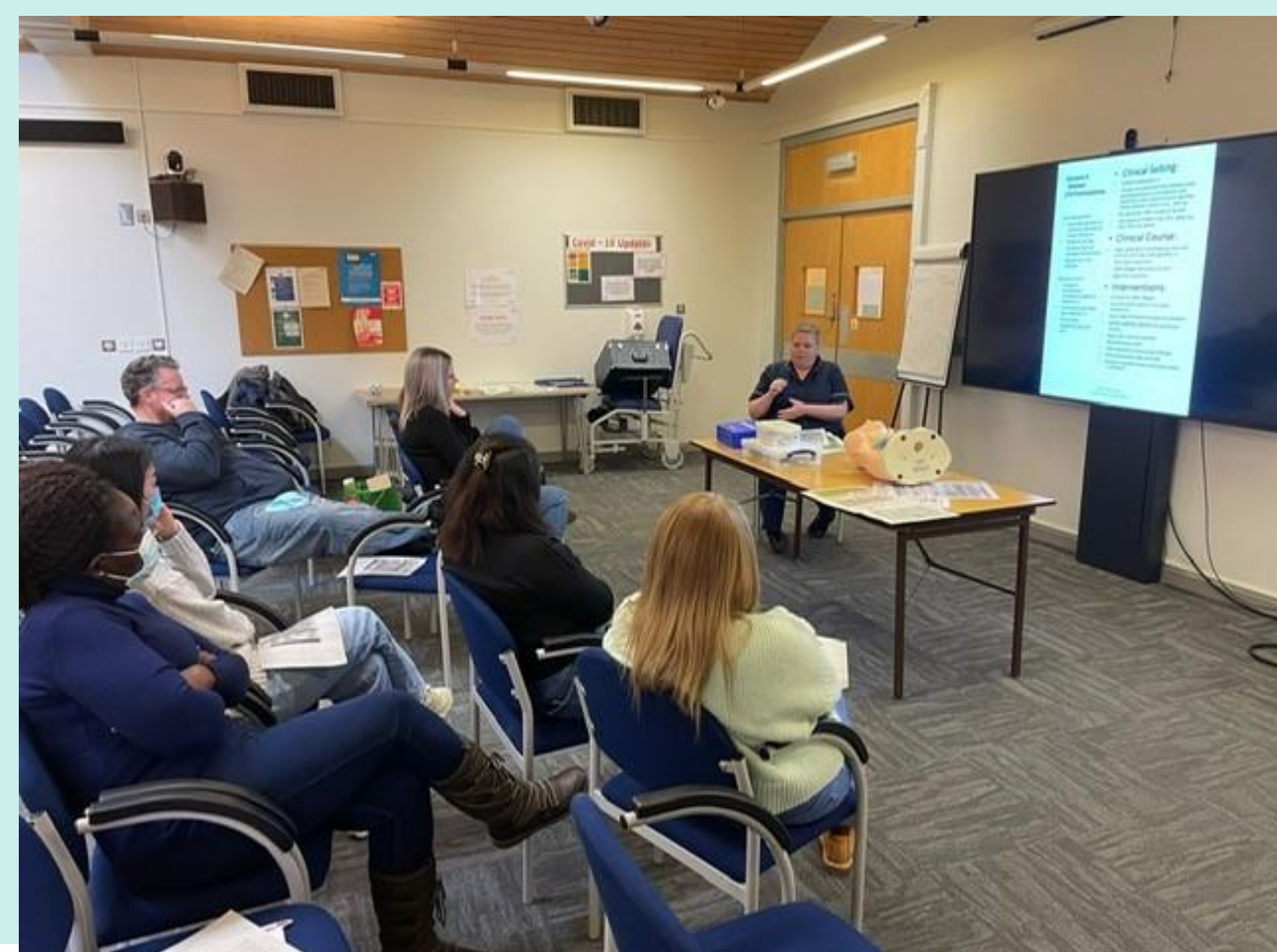
The plan was multi-faceted in many ways as there were a number of different strands completed (see below). However, the main aim and focus of this project was to upskill staff knowledge and skills and this was done through a complex airway management training session. The initial plan included the introduction of 'Trache Tuesdays'. This involved a planned training session on Tuesday afternoons at alternate sites, with the aim that staff would be able to attend whilst on shift. However, these ward based sessions resulted in poor attendance as staff were unable to attend due to the high clinical demand on the services. A designated study day away from the clinical environment was arranged. This would allow staff to take time away from the ward and cover topics relevant to complex airway management.

Do

The team have completed several tasks prior to, and alongside the training. This has included:

- Standardisation of the airway trolley cross site to help staff find the correct airway consumables quickly and effectively, regardless of which critical care unit they are working on.
- Launch of an e-learning package for tracheostomy care and management for all critical care nurses. This is now accessible on LMS and compliance in training monitored.
- New signage above the airway trolley, the same at both sites and in keeping with national colour codes for airway management (difficult airway society).
- Max- Facs training launched for new starters on the critical care induction programme.
- Daily practice to communicate the emergency care plan for complex airway patients at the beginning of every shift.
- Highlighted the need for the correct bleeps for surgical/specialty teams to be visible in the bed space of the patient. The numbers are also by the phones in bright colours for quick and easy use.

The first study day was on 24th January 2023. It involved speakers internal and external to the Trust including a Consultant Surgeon in Oral and Maxillofacial Plastics, our Trust Tracheostomy practitioner and Critical Care Registrar in addition to specialist airway equipment reps. There were sessions on the airway trolley, airway and tracheostomy management, Max-Facs surgical patients and laryngectomy patients and equipment. 15 members of staff attended this first session.



Study

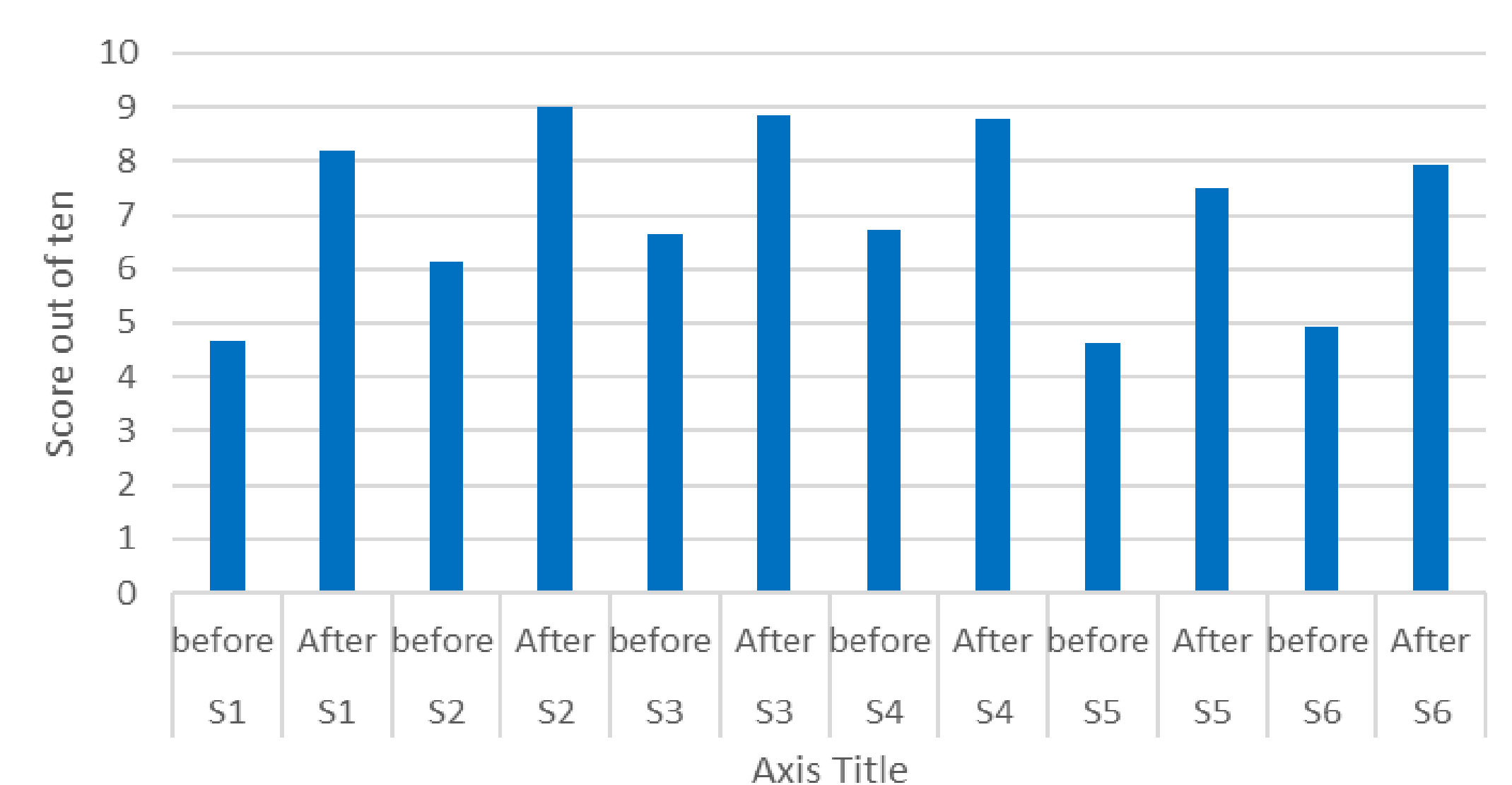
15 Members of staff attended the study day and completed an evaluation form. Staff were asked to self score their knowledge on a scale of 1-10 (10 being the highest) before and after each session.

Scores indicated that staff self reported an increase in knowledge with an overall increase of 27.6%

Staff feedback included positive comments and also constructive feedback for future course:

- 'it would be helpful to have the equipment sessions in the morning before the scenarios'
- 'Absolutely essential training for critical care nurses'
- 'Need more time on nursing post op care'
- 'to include more time for discussion'
- 'I was lacking confidence, but feel I have a better understanding now'
- 'Really highlighted the importance of that first 24 hours'
- 'Learning the difference between a trachy v's a laryngectomy'

Average scores of Knowledge of Topics (self reported) before and after session



The impact on incident reporting will not be immediately evident and, therefore, a full 12 months of the training cycle will need to be in place before incident figures (datix and investigations) are collated and compared to last year.

Act

This successful study day will now be introduced into the critical care rolling program of training so eventually it will be repeated quarterly. Subsequent sessions will be adapted to take into account the feedback received by staff. Following this first study day there will be changes to one lecture to include more information relating to post operative care and also provision of some equipment training in house to allow more time for lectures and discussion time within the day.

The next study day is planned for 7th May.

Incident figures will be collected at the end of 2023.

Acknowledgments:
Thank you to the wider critical care management and staff team who have engaged in this process.