The pre-session survey highlighted that only 32% of doctors attending (n=39) had received any prior training in tracheostomy management. These were all doctors previously working in anaesthetics or critical care. Feedback on the teaching was positive (9.7/10) with participants finding it useful, relevant and valuing the practical component (Fig. 4). Improvement was seen in their confidence in managing tracheostomy emergencies, knowledge of the NTSP algorithms and clarity on the differences between a tracheostomy and a laryngectomy (Fig.5).

A teaching session was developed consisting of a 30-minute lecture followed by a workshop and simulated scenarios (Fig. 1). The lecture covered relevant theory and the NTSP algorithms. The workshop (Fig. 2) provided practical experience of handling tube types and equipment, while the simulated scenarios aimed to allow consolidation and application of knowledge. The session was designed to be delivered in a ward or seminar room environment using a small box of equipment and a "Trachy Tracey" Doll (Fig. 3). It was piloted on a medical ward before being incorporated into the FY2 and CMT teaching programmes in NHS Grampian. A pre-session survey assessed baseline confidence and knowledge. This was repeated following the teaching and feedback was gathered.

**Aims**

- To improve confidence in junior medical staff in their ability to manage a tracheostomy emergency as a first responder.
- To introduce the national tracheostomy safety project (NTSP) algorithms.
- To reinforce the importance of knowing the difference between a tracheostomy and a laryngectomy, and the implications for managing these patients.

**Background**

Critical incidents involving tracheostomies have a 60-70% risk of harm, with a relative risk of seven in the ward environment [1]. While this increased risk is multifactorial, lack of training plays a part. Junior doctors on hospital wards may face managing an acutely unwell patient who has had a tracheostomy or laryngectomy until expert help arrives. In NHS Grampian, we initiated a quality improvement project focusing on educating junior doctors in airway management for these patients.

**Methods**

A teaching session was developed consisting of a 30-minute lecture followed by a workshop and simulated scenarios (Fig. 1). The lecture covered relevant theory and the NTSP algorithms. The workshop (Fig. 2) provided practical experience of handling tube types and equipment, while the simulated scenarios aimed to allow consolidation and application of knowledge. The session was designed to be delivered in a ward or seminar room environment using a small box of equipment and a "Trachy Tracey" Doll (Fig. 3). It was piloted on a medical ward before being incorporated into the FY2 and CMT teaching programmes in NHS Grampian. A pre-session survey assessed baseline confidence and knowledge. This was repeated following the teaching and feedback was gathered.

**Results**

The pre-session survey highlighted that only 32% of doctors attending (n=39) had received any prior training in tracheostomy management. These were all doctors previously working in anaesthetics or critical care. Feedback on the teaching was positive (9.7/10) with participants finding it useful, relevant and valuing the practical component (Fig. 4). Improvement was seen in their confidence in managing tracheostomy emergencies, knowledge of the NTSP algorithms and clarity on the differences between a tracheostomy and a laryngectomy (Fig.5).

**Conclusions**

- This educational intervention shows encouraging results.
- It will continue to be delivered bi-annually as part of the FY2 and CMT teaching programmes.
- It is being rolled out to other staff groups.
- Further quality improvement work is focusing on improving local compliance with the display of NTSP bedhead signs and algorithms.
- Additional work will be required to assess whether educating medical staff translates into improvements in patient safety.

References: