

# Developing Skills and Improving Safety for Tracheostomy Patients

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# Salisbury NHS Foundation Trust

- Covers a population of 200,000
- 32,000 admissions
- Provides regional specialist services
- Employs 3750 staff
- 540 in-patient beds





# Background

- CCOT set up in 2000
- Increase in tracheostomy related critical incidences
- High readmission rate to ICU

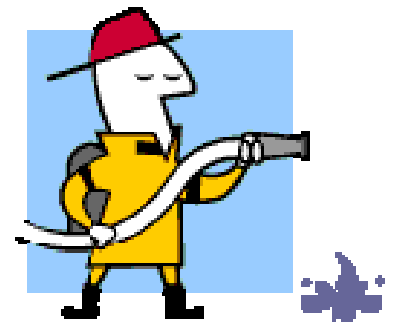


# Background

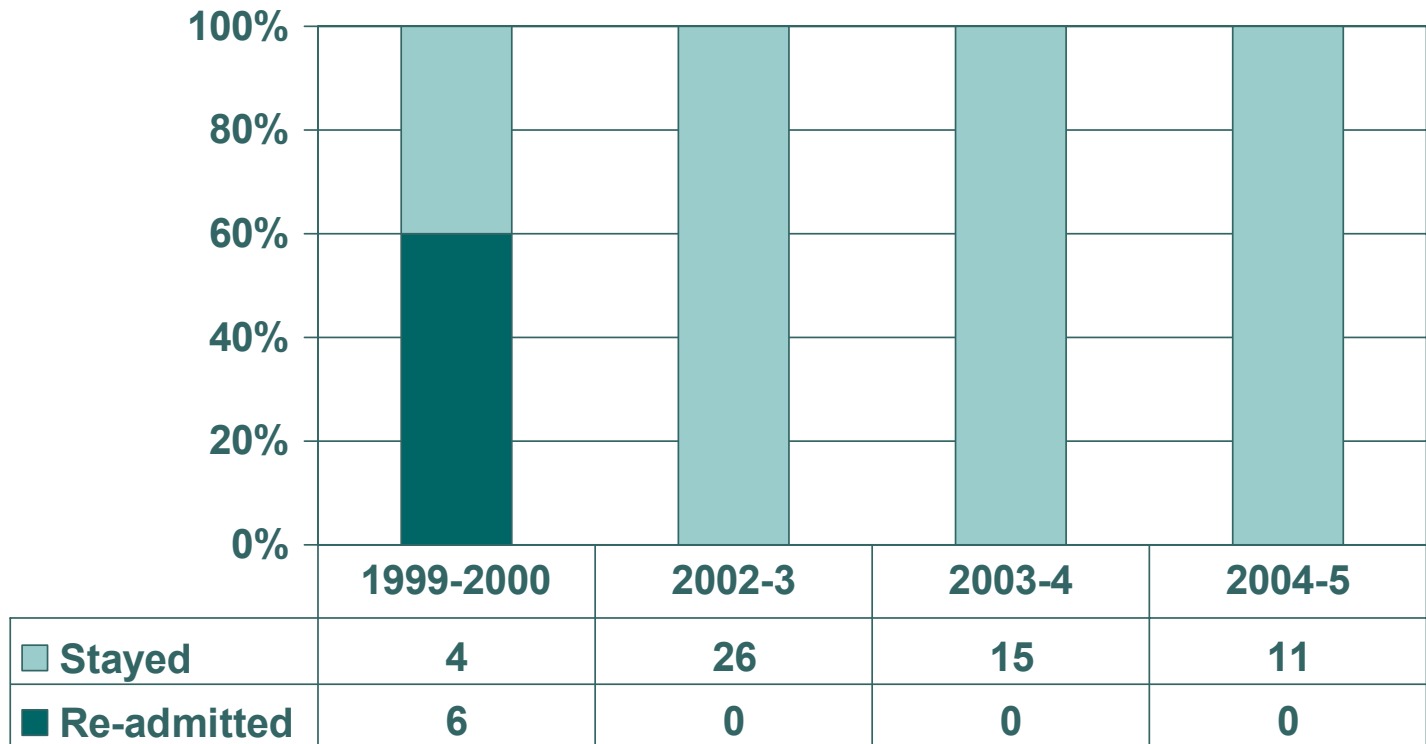
- Earlier percutaneous tracheostomy
- Earlier discharge
- Advancement in management of neuromuscular patients
- No trust guidelines
- Lack of knowledge

# Fire fighting stage

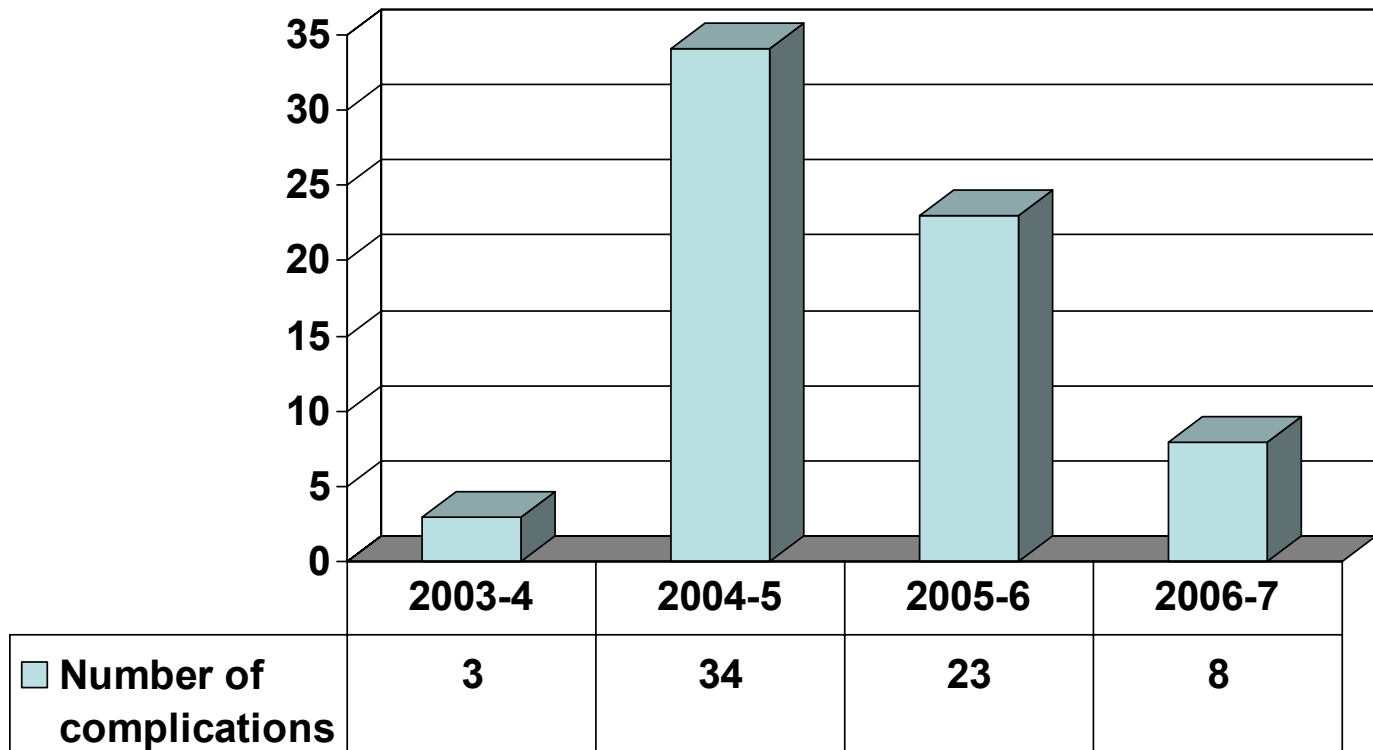
- Cohorted patients
- Daily review of tracheostomy care
- Building relationships
- Equipment
- Decannulation decision
- Education and Support
- Policies



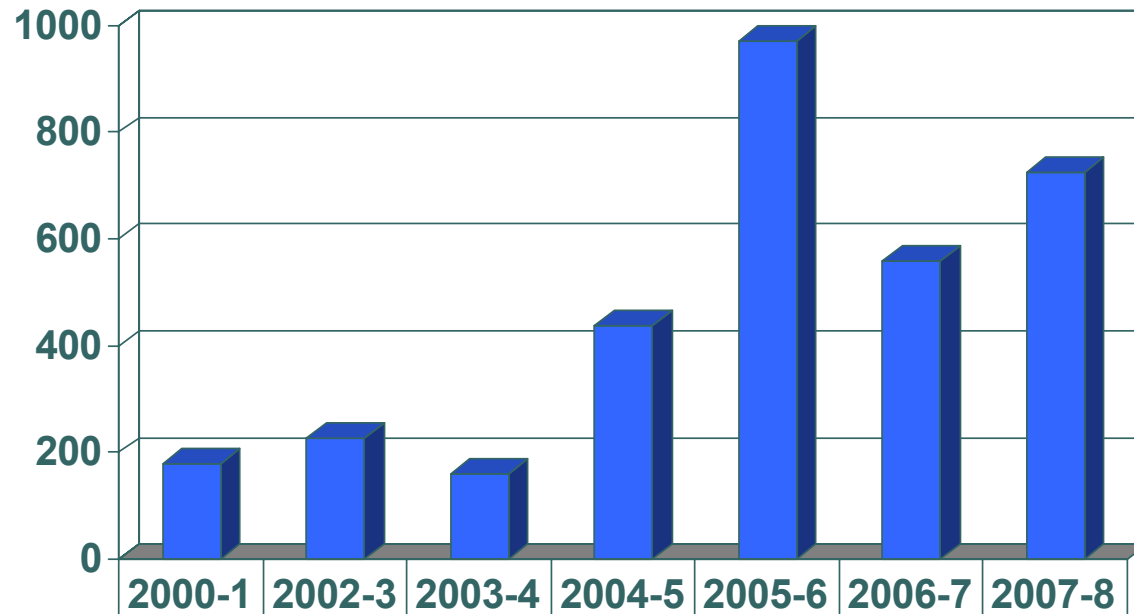
# Readmission Rates



# Complications



# Caseload



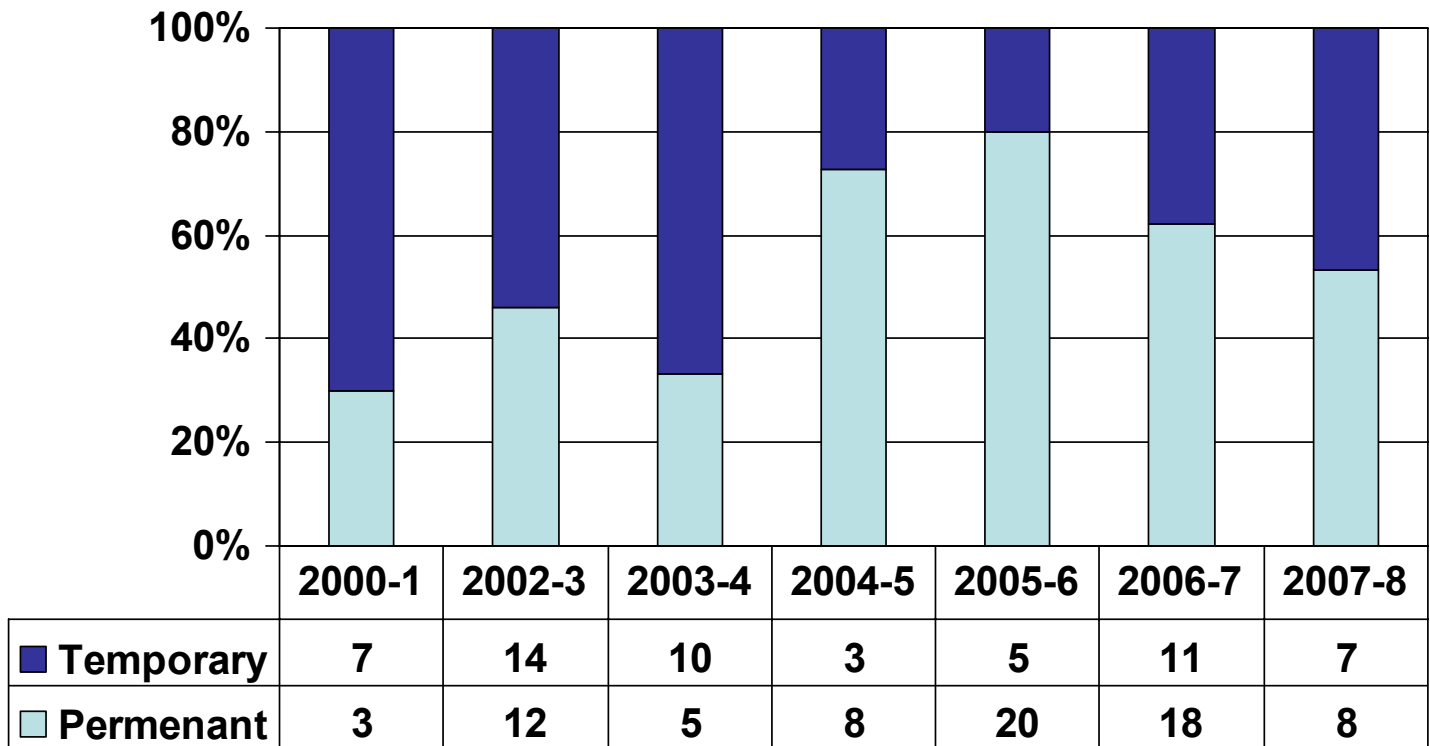
■ Total no of visits	179	228	161	438	970	558	724
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# Expanding Practice

- Key decision makers
- Laryngectomy patients
- Complex patients

# Type of Tracheostomy

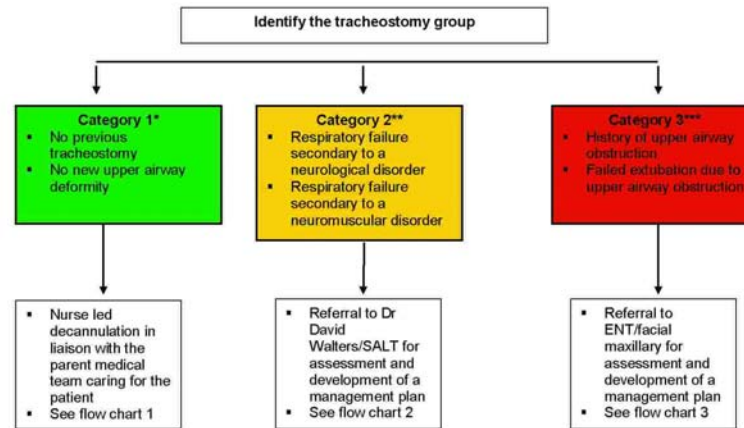




# CCOT Strategy

- The team increased their skills
- Educating nurses informal/formal
- Aware of all tracheostomy patients
- First line responders
- Earlier discharge from ICU

# So what did we do about it ?



**Category 1\***  
Patients having a tracheostomy tube inserted for weaning purposes.

**Category 2\*\***  
Brain injury  
Brain lesion  
Parkinson's disease  
Multiple sclerosis  
Muscular dystrophy  
Motor neurone disease  
Poliomyelitis

**Category 3\*\*\***  
Upper airway obstruction  
- Tumour  
- Goitre  
Laryngeal oedema  
Laryngeal spasm  
Vocal cord paralysis  
Vocal cord oedema

# Advanced Practice

## Category 1:

- Patients with a tracheostomy tube inserted for ventilatory weaning purposes
- No previous tracheostomy
- No new upper airway deformity

## Nurse-Led (CCOT) Decannulation Protocol

- Patient is able to co-operate
- Patient is on <35% oxygen
- Patient is requiring minimal suction
- No evidence of aspiration
- Patient does not develop stridor when the tracheostomy tube is occluded

Cap the tracheostomy tube for 24 hours

- Has the patient managed?
- No evidence of respiratory distress
  - Maintained oxygen saturations

No

- First failed attempt
- Consider down sizing the tracheostomy tube
  - Review in 24 hours

Yes

- Second failed attempt
- Refer to ENT for further assessment

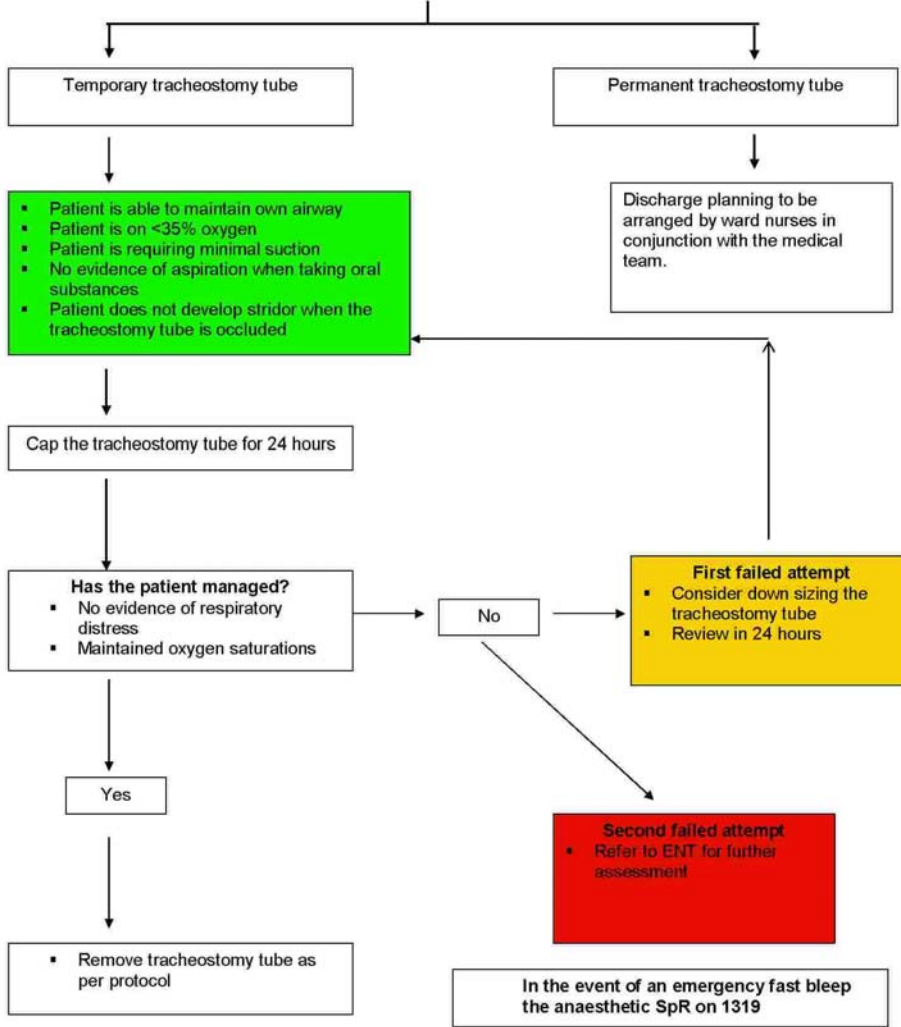
- Remove tracheostomy tube as per protocol

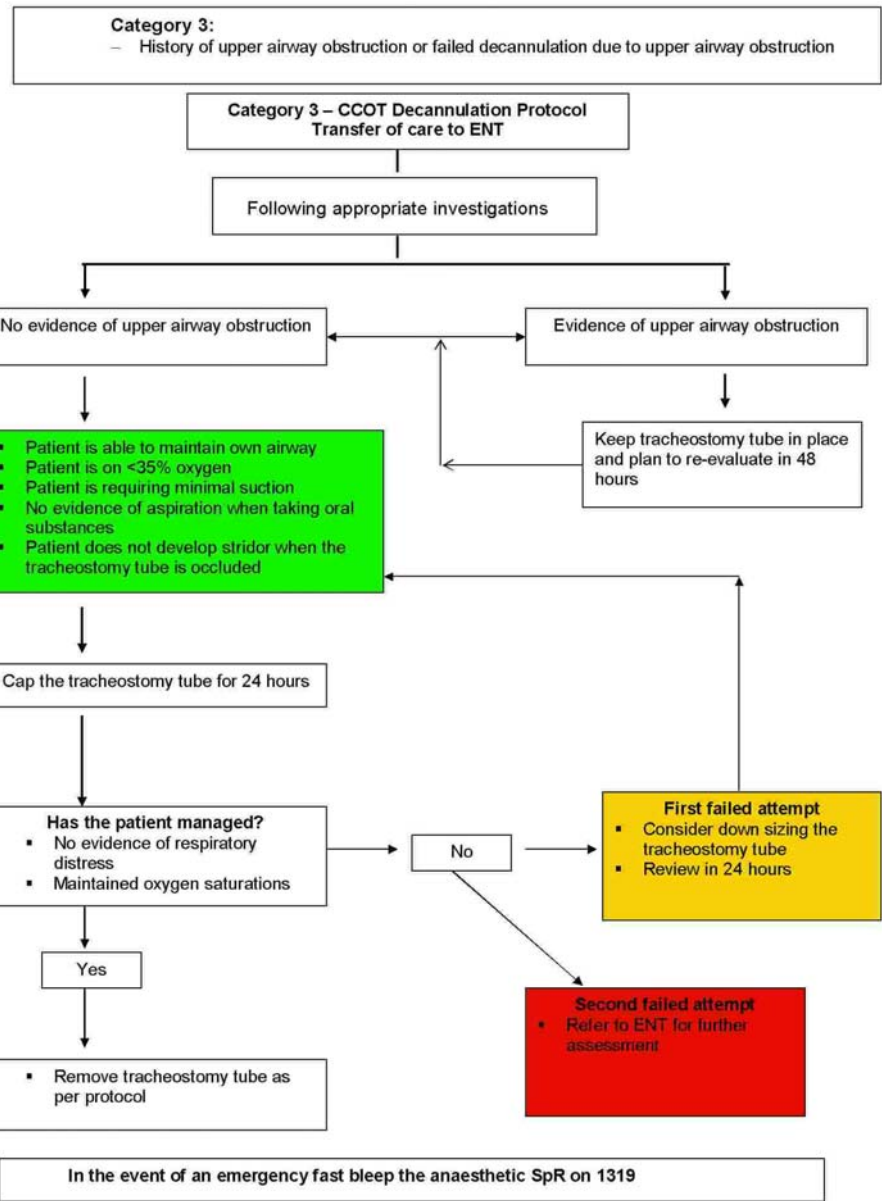
In the event of an emergency fast bleed the anaesthetic SpR on 1319

**Category 2:**

- Respiratory failure secondary to a neurological or neuromuscular disorder

**Category 2 – CCOT Decannulation protocol**  
Transfer of care to stroke physician and following  
Speech and Language Therapy (SALT) assessment














# Ward Based Education

Care Bundle Component	Date	Indicative Content
1. Tracheostomy tube care 	Friday 8-2-08 Wednesday 20-2-08 Monday 3-3-08 Friday 14-3-08 Wednesday 26-3-08	<ul style="list-style-type: none"> <li>Anatomical position/structures</li> <li>Types of tubes</li> <li>Cuffed versus uncuffed tubes</li> <li>Cuff pressure monitoring</li> </ul>
2. Suctioning 	Monday 11-2-08 Friday 22-2-08 Wednesday 5-3-08 Monday 17-3-08 Friday 28-3-08	<ul style="list-style-type: none"> <li>Criteria for suctioning</li> <li>Suction catheter size</li> <li>Suction catheter type</li> <li>Suction control pressure</li> <li>Complications associated with suctioning</li> <li>Infection control issues</li> </ul>
3. Humidification 	Wednesday 13-2-08 Monday 25-2-08 Friday 7-3-08 Wednesday 19-3-08 Monday 31-3-08	<ul style="list-style-type: none"> <li>Effects of tube placement</li> <li>Cold water humidification</li> <li>Hot water humidification</li> <li>Swedish nose/HME devices</li> <li>Temperature monitoring</li> <li>Water level monitoring</li> <li>Monitoring sputum</li> <li>Infection control issues</li> </ul>
4. Tracheostomy dressing 	Friday 15-2-08 Wednesday 27-2-08 Monday 10-3-08 Friday 21-3-08 Wednesday 2-4-08	<ul style="list-style-type: none"> <li>Securing the tube</li> <li>Skin inspection</li> <li>Choice of dressing</li> <li>Infection control issues</li> </ul>
5. Safety 	Monday 18-2-08 Friday 29-2-08 Wednesday 12-3-08 Monday 24-3-08 Friday 4-4-08	<ul style="list-style-type: none"> <li>Bedside equipment</li> <li>Cuff pressure</li> <li>Emergency response</li> <li>Methods of communication</li> <li>Eating and drinking</li> </ul>

- Need for education identified
- Time constraints
- Limited resources



# Competency

- Based on hospital policy
- Need for a robust assessment tool
- Pilot
- DVD

## Clinical Competency 1

*General principles and equipment required to safely manage a patient with a tracheostomy tube.*

Name: \_\_\_\_\_ Ward: \_\_\_\_\_ Date: \_\_\_\_\_

**Method of assessment:** Question and observation

No errors observed 5  
 Occasional errors, corrected by trainee 4  
 Frequent errors, corrected by trainee 3  
 Frequent errors, not corrected by trainee 2  
 Trainee unable to proceed without step-by-step instruction 1

Observable criteria	Circle assessment outcome					Date	Assessors Signature
	5	4	3	2	1		
1. Define the term tracheostomy							
2. Discuss the difference between a tracheostomy and laryngectomy							
3. Discuss the indications for a tracheostomy tube							
4. Set up the essential bedside equipment							
5. Discuss two different types of tracheostomy tubes used in the Trust							
6. Explain the function of the inner tube							
7. Explain the function of the cuff							
8. Explain why a patient may be unable to speak							
9. Discuss the different methods of achieving effective communication							
10. Discuss the signs and symptoms of respiratory distress in a patient with a tracheostomy							



# The Way Forward

- Improving Clinical Standards conference
- Ward induction programmes
- Mandatory training
- Development of CCOT role



# Contact Details

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