



**Royal Cornwall Hospitals**  
NHS Trust

# **Care of the Adult Patient with a Tracheostomy Policy**

**V2.0**

**August 2025**

## Table of Contents

1.	Introduction.....	4
2.	Purpose of this Policy .....	5
3.	Scope .....	5
4.	Definitions / Glossary .....	5
5.	Ownership and Responsibilities .....	6
5.1.	Role of the Chief Executive .....	6
5.2.	Role of the Chief Nurse .....	6
5.3.	Role of the Executive Medical Director.....	6
5.4.	Role of the General Managers .....	6
5.5.	Role of the Consultant (or lead clinician).....	6
5.6.	Role of the Heads of Nursing .....	7
5.7.	Role of the Clinical Matrons and Unit/Ward leaders .....	7
5.8.	Role of the Hospital Co-ordinators .....	7
5.9.	Role of the Critical Care/Specialist Ward Clinical Staff.....	8
5.10.	Role of the Receiving Ward Clinical Staff.....	8
5.11.	Role of the Physiotherapy and Speech and Language Teams.....	9
5.12.	Role of the Critical Care Outreach Team.....	9
6.	Standards and Practice .....	10
6.1.	Competency .....	10
6.2.	Types of tracheostomy .....	11
6.3.	Techniques for tracheostomy insertion.....	11
6.4.	Tracheostomy or laryngectomy? .....	11
6.5.	Physiological changes with a tracheostomy .....	13
6.6.	Different types of tracheostomy tubes used at RCHT .....	14
6.7.	Routine tracheostomy Practices and Equipment.....	20
6.8.	Ongoing Management.....	26
6.9.	Transferring patients with a tracheostomy.....	30
6.10.	Tracheostomy Hazards .....	32
6.11.	Tracheostomy Red flags.....	32
6.12.	Resuscitation / Respiratory Emergencies.....	34
6.13.	Discharge from hospital with a tracheostomy.....	35
7.	Dissemination and Implementation .....	36
8.	Monitoring compliance and effectiveness.....	36
9.	Updating and Review .....	36

10. Equality and Diversity .....	37
Appendix 1. Governance Information .....	38
Appendix 2. Equality Impact Assessment .....	41
Appendix 3. Head of Bed Signs .....	44
Appendix 4. Discharge Planning.....	45
Appendix 5. Tracheostomy Routine Care Trolley Contents List.....	46
Appendix 6. Tracheostomy Emergency box contents.....	48
Appendix 7. Self-Declaration of previous experience and competency in the care of adult patients with a Tracheostomy .....	49
Appendix 8. Record of Supervised Practice-Tracheostomy Care .....	51

**Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.**

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

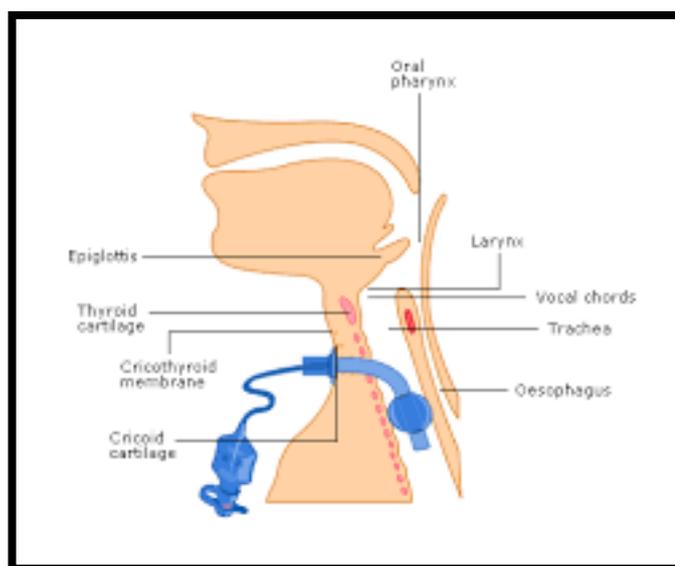
Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 are applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

Royal Cornwall Hospital Trust      [rch-tr.infogov@nhs.net](mailto:rch-tr.infogov@nhs.net)

# 1. Introduction

- 1.1. This document sets out the Royal Cornwall Hospitals NHS Trusts Policy for caring for an adult patient with a tracheostomy.
- 1.2. This document does not specifically cover the care of patients who have had a laryngectomy.
- 1.3. A tracheostomy is the formation of an artificial opening into the anterior trachea, usually between the 2nd and 3rd tracheal rings. Tracheostomies can be temporary or permanent. They are formed by a surgical or a percutaneous procedure.



*Tracheostomy with cuff inflated diagram courtesy of NTSP, 2020*

- 1.4. Indications for tracheostomy include.
  - a) To bypass potential or actual obstructions to the airway
  - b) To facilitate mechanical ventilation and weaning from mechanical ventilation.
  - c) To provide access for removal of respiratory secretions where the patient is unable to clear them spontaneously.
  - d) To minimise the risks of aspiration in patients with laryngeal incompetence.
- 1.5. A patient with a tracheostomy or laryngectomy is at risk of death or harm if inappropriate or inadequate care is provided. These patients require airway devices to be safely inserted, securely positioned and appropriately cared for, in order to maintain a patent airway. Failure to do so may lead to a displaced or blocked tube, which if not dealt with immediately, may be fatal within minutes.
- 1.6. This policy has been developed to be used in parallel with The National Tracheostomy Safety Project (NTSP) guidelines 2013 and the ICS guidance for Tracheostomy Care 2020. These can be accessed at:

## 2. Purpose of this Policy

2.1. The purpose of this policy is to provide guidance for all healthcare professionals involved in the care of an adult patient with a tracheostomy and to ensure that this is done both safely and effectively. This policy has been written in keeping with the following national evidence-based guidelines:

- The National Tracheostomy Safety Project Guidelines (2013).
- The NCEPOD report 'On the Right Trach' (2014).
- The ICS Standards in Tracheostomy Care (2014).
- The ICS Guidance for Tracheostomy Care (2020).

2.2. This policy **does not** cover the management of tracheostomies of patients in Critical Care or children (as defined by the Children's Act 2004), infants and neonates. Please refer to local guidelines for these areas.

## 3. Scope

3.1. This policy applies to all health care staff caring for adult patients with a tracheostomy (including bank, agency, and locum staff) and who are employed by RCHT. This includes medical, nursing, Allied Health Professionals (AHP) and support worker roles such as Assistant practitioners and Nursing Associates.

3.2. This policy and associated documents apply to all adult inpatients within RCHT who have a tracheostomy, except those cared for in the Critical Care unit. The policy also does not apply to children (as defined by the Children's Act 2004), infants and neonates.

## 4. Definitions / Glossary

- **Tracheostomy** - an artificial opening into the trachea. Patency is maintained by insertion of a tracheostomy tube.
- **Percutaneous tracheostomy** - a tracheostomy formed by piercing the trachea through the skin and dilating the tract until a tracheostomy tube can be passed.
- **Surgical tracheostomy** - surgical formation of an opening into the trachea to allow a tracheostomy tube to be passed.
- **Laryngectomy** - surgical removal of the larynx. The trachea is formed into an end stoma. There is no connection from the mouth to the airway and a patient breathes solely through the stoma. For support with laryngectomy care please contact the Head and Neck Specialist Nurses and Specialist Speech and Language Therapists.

- **Altered Airway** - collective term for tracheostomy and laryngectomy. Any airway which does not follow the normal anatomical route.
- **Weaning** - the process of abruptly or gradually withdrawing ventilatory support.
- **Inner Cannula** - an inner tube inserted within the tracheostomy that facilitates tracheostomy care. It may periodically be removed, cleaned and then re-inserted. This helps prevent tracheostomy tube blockage with secretions.
- **Decannulation** - the permanent removal of a tracheostomy tube.

## **5. Ownership and Responsibilities**

### **5.1. Role of the Chief Executive**

- The Chief Executive is responsible for ensuring the requirements within this policy are fulfilled and operational responsibilities are in place when patients who have a tracheostomy are nursed on general wards.

### **5.2. Role of the Chief Nurse**

- The Chief Nurse is responsible for ensuring requirements within this policy are fulfilled and that this policy is disseminated to all Heads of Nursing for appropriate action.

### **5.3. Role of the Executive Medical Director**

- The Medical Director is responsible for ensuring that this policy is disseminated to Consultants who supervise medical staff in training and that education and training facilities are available to ensure medical staff can maintain level of clinical standards to appropriately manage patients who trigger on the NEWS.

### **5.4. Role of the General Managers**

- The General Managers will ensure that adequate resources are available within their care groups to make provisions within this policy feasible.

### **5.5. Role of the Consultant (or lead clinician)**

- The Consultant is the professional with the overall clinical responsibility for their patients.
- A member of their medical team should review the patient every day, regardless of location.
- The Consultant will ensure that clinical standards are maintained and that any necessary deviation from this policy is documented and explained in the medical notes.

- It has been agreed that for patient's whose tracheostomy was inserted during a Critical Care admission that the Critical Care Consultant Team are happy to be contacted by the patient's named consultant for queries related to the tracheostomy.
- If the tracheostomy was inserted by the Ear, Nose and Throat (ENT) team then the same applies with regards to them.
- It is the responsibility of the named consultant for patients that are repatriated who have had a tracheostomy inserted in another hospital or those patients admitted from the community with a tracheostomy to make a formal referral to ENT if a review of the tracheostomy is required.

## **5.6. Role of the Heads of Nursing**

- Heads of Nursing have a responsibility to ensure that this policy is disseminated to Clinical Matrons and Unit/Ward leaders to inform clinical staff of their responsibilities in the safe care of patients who have a tracheostomy.
- In collaboration with Clinical Matrons and Unit/Ward leaders, Heads of Nursing must ensure that adverse clinical incidents in relation to the care of patients with a tracheostomy in their clinical areas are reported and investigated. Action plans must be produced to prevent future occurrences.

## **5.7. Role of the Clinical Matrons and Unit/Ward leaders**

- Clinical Matrons and Unit/Ward leaders have a responsibility to ensure that any staff responsible for caring for patients with a tracheostomy, receive training on their care and management and recognise when to escalate care to appropriate people.
- Clinical Matrons and Unit/Ward leaders have a responsibility to ensure that all clinical staff have access to equipment and documents for providing safe care for patients with a tracheostomy.

## **5.8. Role of the Hospital Co-ordinators**

- Hospital co-ordinators must ensure that patients with an altered airway are admitted to a general ward from a critical care area, specialised ward or from any community setting are cared for in one of a number of designated areas. The tracheostomy cohort wards are Pheonix, Tintagel and Wheal Coates.
- Patient's with an altered airway should not be cared for outside of these areas and should 'by-pass' admission areas such as AMU/SDMA and go straight to one of the tracheostomy cohort wards as listed above.
- However, under exceptional circumstances, and for as short a period as possible, patients may need to be admitted to other areas. This should only occur following discussion and documented agreement by the admitting consultant during the day or on-call speciality consultant out of hours.

## 5.9. Role of the Critical Care/Specialist Ward Clinical Staff

- Most tracheostomy patients discharged from Critical Care should ideally have an un-cuffed tracheostomy tube with an inner cannula sited. Exceptions to this must be clearly justified by the discharging Consultant. Suitable exceptions include reduced conscious level, excessive secretions and inability to protect the airway.
- Where possible, at least 24 hours' notice should be given to the receiving ward prior to a patient with a tracheostomy being discharged from a specialist area. This will ensure the receiving ward can make all necessary preparations to safely accept responsibility for the patient.
- Transfers should not take place after 22:00 as per the SOP for admission to and discharge from the Critical Care Unit.
- A Tracheostomy Passport (CHA4419) must be completed by discharging team. This should be discussed and agreed with the receiving ward nurse before the patient is discharged from Critical Care or another location. This will ensure that a full handover has taken place and that the receiving ward can maintain a safe environment for the patient with a tracheostomy. These passports are available in house by emailing [rch-tr.patientinformation@nhs.net](mailto:rch-tr.patientinformation@nhs.net) quoting the above reference number and provide a budget code.

## 5.10. Role of the Receiving Ward Clinical Staff

- The receiving ward should ensure that the patient with a tracheostomy is nursed in a bed that is observable from the nursing station and wherever possible not in a side room.
- Discussion with infection control teams should take place if the patient's history/clinical presentation would normally indicate a requirement for a side room, as close observation for airway compromise may take priority over use of a side room for infection control purposes. If patients with a tracheostomy are nursed in a side-room then dependent upon the risk assessment continuous 1:1 staffing may need to be provided.
- The receiving ward should ensure that the patient with a tracheostomy has access to a nurse call bell and other communication aids, if they are able to use them. If a patient does not have adequate means of communication due to their clinical state, then provision for one-to-one care must be adopted. This does not need to be provided by a trained member of staff. If this support is unavailable at any time when required, this must be escalated to the senior nursing team.
- The receiving ward should ensure that the patient with a tracheostomy requiring oxygen, must have an oxygen supply, and that the oxygen is prescribed on the patients' prescription chart. Any patient with a tracheostomy who is oxygen dependant should have their oxygen warmed and humidified.

- The receiving ward should ensure that the patient with a tracheostomy has working suction equipment at the bed space.
- The receiving ward should ensure that the patient with a tracheostomy has a tracheostomy tube of the same size, and type, and a tracheostomy tube of the same type, but one size smaller, at their bedside, at all times, and that these are taken with the patient on any transfer, together with the tracheostomy emergency box.
- The receiving ward should ensure that the tracheostomy emergency box is readily available and that it is checked daily.
- The appropriate 'Bed-Head' sign (see appendix 3) should be completed describing the details of the tracheostomy. This form should be printed double sided so that the emergency algorithm is printed on the reverse. It should ideally be laminated to enable the form to be wiped down and reused.
- Patients with a tracheostomy must have regular checks carried out as per the tracheostomy passport. The receiving ward should ensure that the patient with a tracheostomy has been referred to the Physiotherapy and Speech and Language teams for ongoing management, as well as Critical Care Outreach if appropriate.

### **5.11. Role of the Physiotherapy and Speech and Language Teams**

- The specialist physiotherapist for Critical Care will ensure that all patients with a tracheostomy that are discharged under any speciality other than ENT will continue to be regularly reviewed by the Critical Care physiotherapy team.
- The Critical Care physiotherapy team will then be able to lead in the patient's weaning and planning for decannulation (if appropriate).
- The physiotherapy team on the ENT ward will provide the same provision of care to their patients.
- For patients who do not fall under either of these categories (repatriations or those admitted from the community) it will be the responsibility of the physiotherapist receiving the patient referral to ensure an ongoing plan for review and management of weaning and decannulation (if appropriate) is made.
- Speech and Language team will be responsible for assessment and management of patients with a tracheostomy that have communication and swallowing difficulties and are involved in the multi-disciplinary decision-making surrounding weaning and decannulation (if appropriate).

### **5.12. Role of the Critical Care Outreach Team**

- The Critical Care Outreach Team are available 24 hours a day, 7 days a week, via bleep 3504.

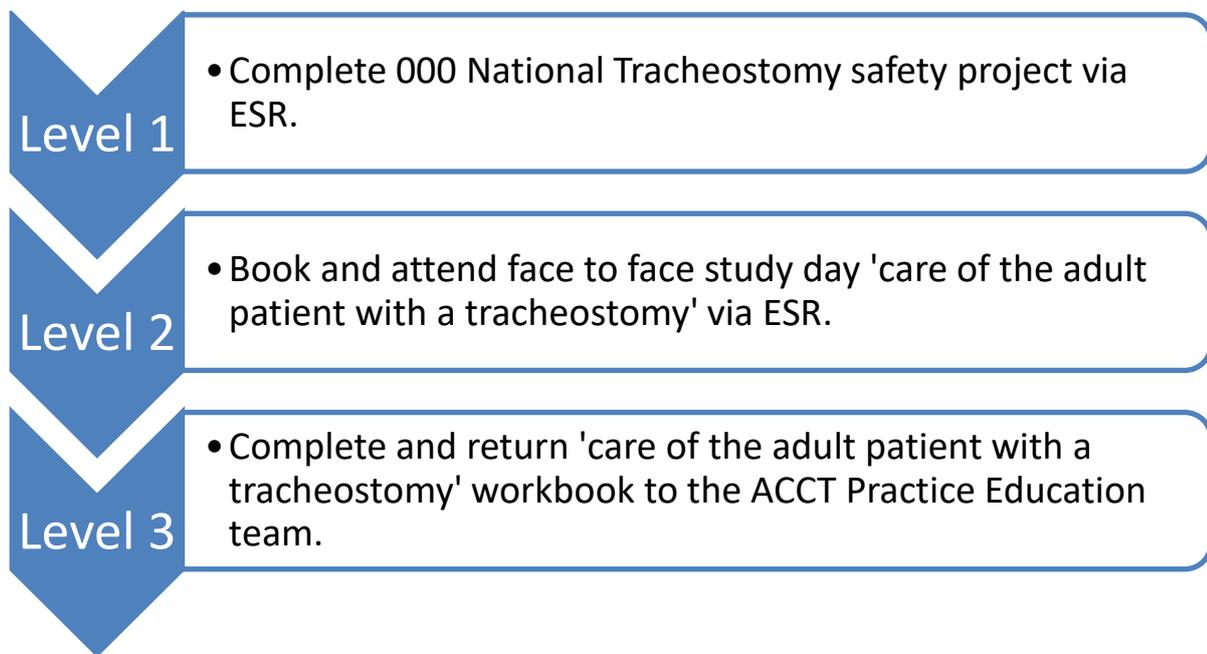
- The Critical Care Outreach team are happy to support staff in caring for patients with an altered airway.

## 6. Standards and Practice

### 6.1. Competency

- 6.1.1. Competency for caring for adult patients with a tracheostomy will be registered on ESR as 156 Tracheostomy Clinical Skill – Level 3 Final Assessment in Practice.
- 6.1.2. The following elements are required in order to obtain the competency.
1. Completion of the online 000 ESR module – National Tracheostomy Safety Project.
  2. Attendance at a RCHT Care of the Adult Patient with a Tracheostomy Study Day.
  3. Completion of the RCHT Tracheostomy Competency pack or self-declaration of previous experience and competency in the care of an Adult Patient with a tracheostomy at Appendix 7.

### Pathway for obtaining competency in the care of the adult patient with a tracheostomy.



- 6.1.3. A Tracheostomy Passport (CHA4419) is to be completed for every patient with a tracheostomy being cared for outside of the Critical Care Unit (excluding Children.)

## 6.2. Types of tracheostomy

6.2.1. Tracheostomies may be temporary or permanent and may be formed electively or as an emergency procedure.

- **Temporary:** will be formed when patients require short or long term respiratory support or when they cannot maintain a patent airway.
- **Long term:** may be formed due to carcinoma of the pharynx or larynx. Dependent on the disease either a tracheostomy or laryngectomy may be performed. Other patients requiring permanent tracheostomies include those with chronic respiratory or progressive neurological disease.

6.2.2. Please Note: Cricothyroidotomy (mini tracheostomy) is used to assist with secretion clearance only and does not provide the airway protection provided by a cuffed tracheostomy tube.

## 6.3. Techniques for tracheostomy insertion

Two techniques are utilised to insert a tracheostomy for the first time, surgical or percutaneous.

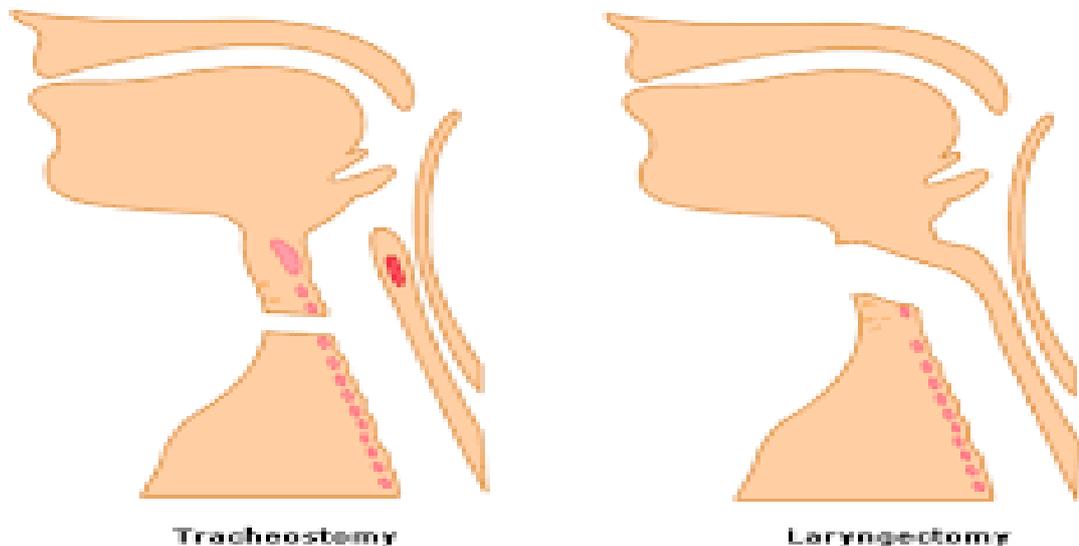
- **Surgical tracheostomies** are usually carried out in an operating theatre. General anaesthesia is often used but the procedure can also be carried out with a local anaesthetic. A surgical opening is made into the trachea into which a tube is placed. This is typically sutured to the skin and secured with tapes.
- **Percutaneous tracheostomies** are formed by the insertion of a needle through the neck, into the trachea, followed by a guide wire through the needle (Seldinger technique). After removing the needle, the tract is dilated by inserting a series of progressively larger dilators over the wire until the stoma is large enough to fit a suitable tube. Adjustable tapes (and sometimes sutures) are used to secure the tracheostomy tube in place. This is the most commonly used technique in Critical Care.

## 6.4. Tracheostomy or laryngectomy?

6.4.1. The distinction between a tracheostomy and a laryngectomy is critically important, but the appearance of patients with either from the end of the bed can be very similar. Patients with a laryngectomy have had their larynx removed.

A patient who has had a laryngectomy does not have any communication between the upper airways (nose, mouth, pharynx) and the lungs and can only be oxygenated and ventilated via the laryngectomy opening.

- 6.4.2. Importantly in comparison, the patient with a tracheostomy has a potentially patent upper airway as an alternative means of ventilating and oxygenating if the tracheostomy should become blocked or displaced. A laryngectomy stoma is shown on the right figure below, compared with a standard tracheostomy on the left.



- 6.4.3. What problems can occur with laryngectomy?

A patient with a laryngectomy has had the normal upper airway humidification mechanisms bypassed in the same way as a tracheostomy patient has. They are at risk of blockage of the trachea with secretions or blood.

The airway is often more secure than with tracheostomy as the tracheostomy tube can be displaced. The airway of a patient with a laryngectomy can still become compromised however, particularly within the first few days after formation.

Laryngectomy stomas are usually simple open stomas without a tube inserted. There are a variety of covers, valves and humidification devices available, which can make distinguishing between a tracheostomy and laryngectomy very difficult. Tubes are sometimes inserted into laryngectomy stomas, especially when they have just been created or to prevent narrowing of the stoma or if the patient requires invasive ventilation or repeated suctioning.

Tracheostomy tubes are usually used, although specific laryngectomy tubes are also available. The use of bedhead signs, alerting staff that a patient does not have a patent upper airway, are essential, especially in an emergency.

One of the commonest problems with a laryngectomy, particularly in an emergency, is that responders fail to appreciate that the patient has had their larynx removed and there is no connection between the face and lungs. There are many incident reports of patients following a laryngectomy who are mistakenly given oxygen via the face or who have had attempts at managing their upper airway fail.

For this reason, RCHT have adapted the colour coded 'bed head' signs and algorithms to immediately distinguish Laryngectomy from tracheostomies as recommended by the NTSP, 2020 and ICS, 2019. (See Appendices 3 and 4)

## 6.5. Physiological changes with a tracheostomy

- 6.5.1. As well as changing airway anatomy, airway physiology is also altered when a patient has a tracheostomy inserted. Depending on the type of tube and presence of a cuff, the upper airway may be isolated completely. The tracheostomy will generally remain in place until the indication for insertion has resolved. In some instances, however, the tracheostomy will be permanent. Some of the physiological changes are advantageous to us as clinicians treating these patients. Others necessitate extra vigilance and care.
- 6.5.2. Upper airway anatomical dead space can be reduced by up to 50%; this can be advantageous when weaning patients from mechanical ventilation. Dead space takes no part in gas exchange and adds to the work of breathing. Reducing this can help patients with critical respiratory reserves wean off a ventilator.
- 6.5.3. When a tracheostomy is formed, the natural warming, humidification and filtering of air that usually takes place in the upper airway are lost. As a result, secretions will become thick and dried and can easily obstruct a stoma or tube. This situation is made worse if there are copious secretions.
- 6.5.4. The patient's ability to speak is removed which is a significant problem for the patient and can lead to distress and anxiety. Sometimes, we can use aids like one-way valves to help patient's vocalise, but attentive nursing staff is probably the most valuable source of help. Writing, communication boards, alphabet or picture boards can also be useful if a patient is unable to vocalise (NTSP, 2020).



Example of a communication board, NTSP, 2013

- 6.5.5. Sense of taste and smell can be lost; this can reduce appetite and general wellbeing of the patient. Patients report this as a significant problem, but it can be easy to overlook this when managing their 'medical' problems.
- 6.5.6. Altered body image is an important factor as tracheostomy insertion can have a major psychological impact. If possible, the patient should have careful preoperative explanation. If this is not possible the patient must receive explanation and support postoperatively.
- 6.5.7. Inform the patient that scarring will be minimal when the tracheostomy is removed, and the stoma has healed, and that voice will return (as long as the vocal cords remain intact). On average the stoma will heal fully within 6 weeks. However, this may vary from patient to patient depending on factors affecting wound healing. In addition, if the tracheostomy is removed with a few days of being inserted the stoma may close over almost immediately.
- 6.5.8. Between 11% and 93% of patients with a tracheostomy will experience swallowing difficulties. A nasogastric tube or similar feeding route may be used to establish nutrition. National guidance recommends that Speech and Language Therapy should always be involved in decisions relating to the safety oral intake and be involved with new tracheostomy patients to establish communication methods.
- 6.5.9. The image below shows an inflated tracheostomy tube. The cuff is pressing on the oesophagus behind the trachea; this may cause a physical obstruction to swallow particularly if the cuff is over inflated. The tracheostomy tube can tether the anterior structures of the neck and limits the amount of movement of the larynx and upper airways that is required for normal, safe swallowing (NTSP, 2020).

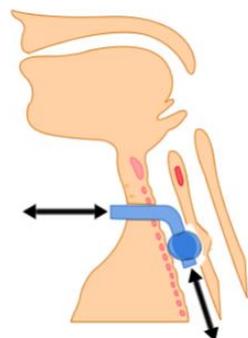


Image shows an inflated tracheostomy tube. NTSP 2013.

## 6.6. Different types of tracheostomy tubes used at RCHT

- 6.6.1. RCHT has deliberately limited the availability of different types / brands of tracheostomies for use primarily for safety reasons. Availability is routinely reviewed to ensure the ones we use meet our patients' requirements and decisions made by relevant MDTs and the Tracheostomy Steering Group.

- 6.6.2. The different types of tubes available can seem confusing but can be described by the presence or absence of a cuff at the end of the outer tube and by the presence or absence of an additional hole in the tube, called a 'fenestration.'

**Best Practice**

All patients with a tracheostomy should have a double lumen tube whilst an inpatient at RCHT.

This means the tracheostomy should have an outer tube and a removable inner tube inserted prior to being transferred to the ward from critical care to prevent obstruction caused by blockage of the tracheostomy tube, as per NSPA, 2008 guidance.

- 6.6.3. Tubes can be made of different materials with different diameters and lengths. Most modern tubes are made from medical grade polyvinyl chloride, polyurethane, silicone or a combination of these materials. Some are lined with special films to reduce the 'biofilm' that may develop inside the lumen. There are illustrations and diagrams of the different functions of the range of tubes available via the e-learning section of the NTSP (2020) website.

- 6.6.4. **Double Lumen Tubes – all of the tracheostomy tubes used at RCHT and discussed below are double lumen.**

Double lumen tubes have an outer tube to keep the airway open and an inner tube, which acts as a removable liner to facilitate cleaning of impacted secretions. Inner tubes must be checked and cleaned a minimum of every 8 hours, as suggested by NTSP guidance. They should be cleaned by flushing with tap water at the sink ensuring a disposable receiver is in place to catch the water and secretions which is then to be disposed of in the sluice, if necessary, use a tracheostomy cleaning sponge. Inner tubes may need changing and cleaning more frequently for patients with a heavy secretion load.

Patients discharged from specialist areas with a tracheostomy should have a double lumen tracheostomy in place. Regular care of the inner tube can prevent build-up of secretions and reduce the risk of tube blockage.

A spare inner tube should be kept in a clean, dry container at the patient's bedside when not in use.

**Best Practice**

When the inner tube is removed from cleaning it must be immediately replaced with a clean inner tube – this is for safety reasons to ensure a patent tube at all times (ICS, 2019).

Videos demonstrating inner tube care and cleaning can be found by following the NTSP (2020) website:

<https://www.youtube.com/channel/UCLKm3tMq8BL4PeBqX4ejgAg>

There are a small proportion of patients within the community who may have a single lumen tracheostomy tube in place. They should always bring spare tracheostomy tubes with them. If a patient is admitted to the Royal Cornwall Hospital with a single lumen tracheostomy, then ensure routine and emergency equipment is available for the patient and refer to Critical Care Outreach who can assist with assessment and organisation of tracheostomy tube change whilst the patient remains within the hospital setting.

#### 6.6.5. **Cuffed Tubes**

##### **(Portex Blue line Ultra SUCTIONAID or Portex UNIPERC adjustable flange)**

Cuffed tubes have a soft balloon close to the distal end of the tube, which when inflated 'seals the airway', meaning that air can no longer escape from the trachea to the upper airway. Cuffed tubes are necessary when positive pressure ventilation is required or in situations where airway protection is essential to minimize aspiration of oral or gastric secretions (although inflated cuffs are not an absolute barrier to secretions).

If the tracheostomy tube lumen is occluded when the cuff is inflated, the patient will not be able to breathe around the tube, assuming the cuff is correctly positioned and inflated within the trachea.



Images showing a portex suctionaid tracheostomy tube and portex adjustable flange tracheostomy tube. NTSP, 2013.

#### 6.6.6. **Adjustable Flange Tracheostomy Tubes**

These tubes are used in patients who have an abnormally large distance from their skin to their trachea, in which a standard tube would not fit properly. There are now dedicated kits for inserting these tubes. Standard tubes may not be the correct size for many critical care patients and increasing numbers may require these tubes. Clinical examination, ultrasound and endoscopic inspection before and after a tracheostomy procedure may help to decide which patients require these types of tubes.

#### 6.6.7. Particular indications for an adjustable flanged tube are:

- Patients with deep tracheas, where normal sized tracheostomy tubes may be too short to remain securely in the trachea.
- Patients with very large neck girth including bariatric patients.
- Oedema caused by burns classically or a capillary leak syndrome (sepsis etc.).
- Actual or anticipated oedema after surgical procedures (including tracheostomy insertion itself).

It is essential to review the position of the flange (hence the length of the tube) at least once per shift. If the patient has neck swelling, as this worsens or resolves, the flange may need adjusting by a senior anaesthetist or ENT surgeon.

Adjustable flange tracheostomy tubes are more difficult to use and are associated with additional complications, some of which may be life threatening. Adjustable flange tracheostomy tubes have an inner tube, but an adjustable length on the outer tube, which is secured by blue locking clip when in position as depicted below.

Checking the length/position of the visible outer tube is routine practice and part of the ongoing checks. Measuring from the locking clip to the tip of the outer lumen.

#### 6.6.8. Un-cuffed Tubes

##### (Shiley Uncuffed fenestrated)

Un-cuffed tubes do not have a cuff that can be inflated inside the trachea and tend to be used in longer-term patients who require ongoing suction to clear secretions. These tubes will not allow sustained effective positive pressure ventilation, as the gas will escape above the tracheostomy tube. It is essential that patients with these tubes have an effective cough to protect them from aspiration, as there is no cuff to 'protect' the airway. Un-cuffed tubes are rarely used in acute care.



(Example of an uncuffed tracheostomy tube courtesy of NTSP 2013)

Each tracheostomy is made up of a variety of components that all have specific roles and functions.

### 6.6.9. Fenestrated / Non-Fenestrated Tubes

Fenestrated tubes have an opening(s) on the outer cannula, which allows air to pass through the patient's oral/nasal pharynx as well as the tracheal opening. The air movement allows the patient to vocalise and produce cough. However, the fenestrations increase the risk of oral or gastric contents entering the lungs. It is therefore essential that patients who are at high risk of aspiration or on positive pressure ventilation do not have a fenestrated tube, unless a non-fenestrated inner tube is used to block off the fenestrations. A non-fenestrated tube does not have these openings.

Suctioning with a fenestrated tube should only be performed with the non-fenestrated inner tube in situ, to ensure correct guidance of the suction catheter into the trachea.

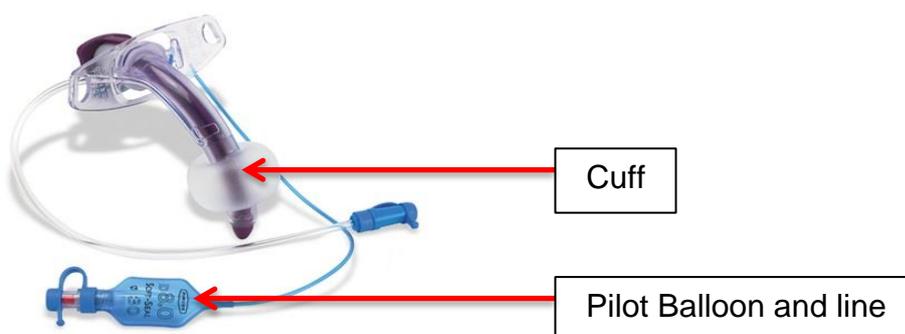


Examples of fenestrated and non-fenestrated inner cannulae, NTSP 2013.

### 6.6.10. Cuff

This is a balloon at the distal part of the tracheostomy outer tube that is inflated following insertion to provide a seal to enable positive pressure ventilation and provide some protection against aspiration.

Portex tubes come with an external pilot balloon (Blue pilot balloon and line demonstrated in picture below). This indicates to the health care worker whether the cuff is inflated or deflated. (Flat external pilot balloon = deflated cuff).



#### Pilot Balloon

An external balloon connected by an inflation line to the internal cuff. When the internal cuff is inflated the pilot balloon is also inflated and vice versa.

## Best Practice

The pressure from the cuff may cause damage to the tracheal mucosa by reduction of tissue perfusion. This may lead to tissue necrosis and tracheal stenosis; these risks are increased with over inflated or excessive cuff pressure (Russell and Matta, 2010)

Although tracheostomies are typically made with low-pressure cuffs to reduce this risk, cuff pressure should be checked and documented every shift. (NTSP, 2020)

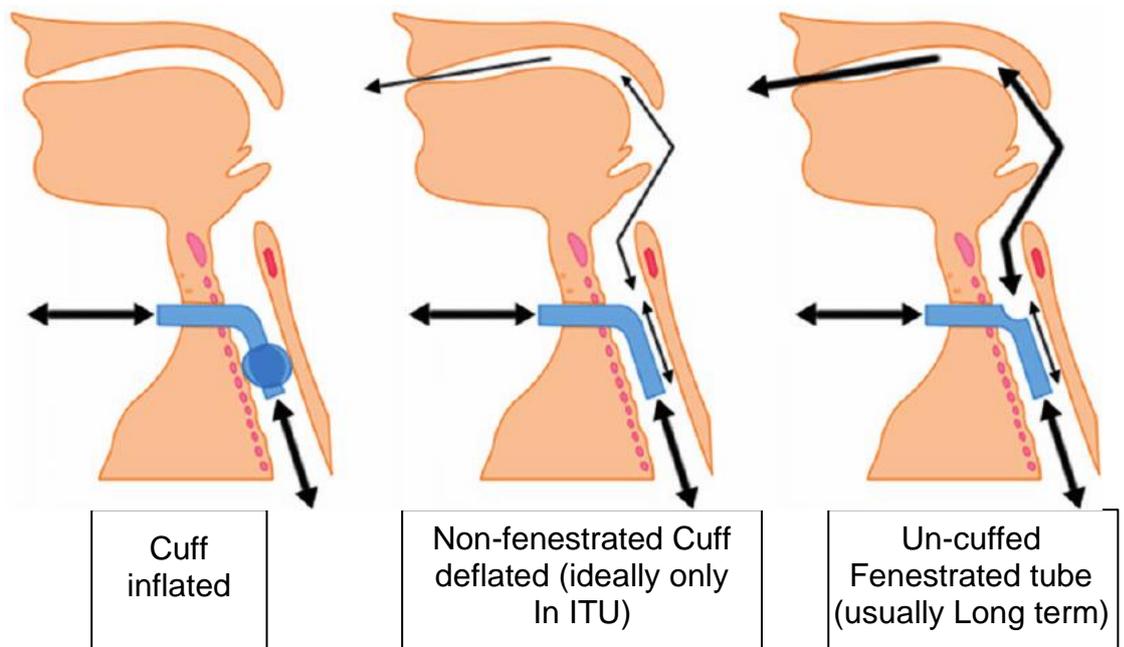
### 6.6.11. Inner tubes –

For Portex Blue line Ultra SUCTIONAID or Portex UNIPERC adjustable flange tracheostomy tubes there is only one type of inner cannula respectively available in the full range of sizes.

Shiley cuffless fenestrated tracheostomy tubes have several inner cannula types available in all sizes. There is a standard non fenestrated inner cannula (white topped), and a fenestrated inner cannula (green topped). There are also non-fenestrated inner cannula for temporary use (whilst cleaning of another inner cannula is ongoing) these are red topped for easy recognition.

### 6.6.12. How airflow is affected by different tracheostomy tubes.

The images below demonstrate different airflow patterns with different tubes inserted. Demonstrations are available on the NTSP, 2020 online



6.6.13. For further information on different tracheostomy tubes not mentioned within this guideline please contact CCOT/ENT/ ward Physiotherapist for support and/or advice.

## 6.7. Routine tracheostomy Practices and Equipment

Daily checks of bedside equipment are essential to ensure patient safety is maintained at all times. Equipment should be checked at least once per shift, documented as checked and missing items or non-working equipment be replaced.

Please note whilst standard advanced airway equipment can be found on the cardiac arrest trollies, patients with tracheostomies require specialised airway equipment in an emergency and this can be found in tracheostomy emergency boxes located on each of the wards caring for adult patients with tracheostomies.

### 6.7.1. Tracheostomy documentation

All information regarding tracheostomy patients should be recorded, in addition to the medical notes in the patients **Tracheostomy Passport (CHA4419)**.

Document includes:

- Emergency Algorithm.
- Tracheostomy Insertion record.
- Bedside Safety Checks.
- Tracheostomy Care Documentation.
- Multi-Disciplinary Team (MDT) Record.
- Decannulation Assessment/Record.

### 6.7.2. Tracheostomy Routine Care Trolley

This will have the daily equipment needed for routine care of the patient with a tracheostomy tube. Suction will need to be set up and working at the patients' bedside.

The contents list for the tracheostomy routine care trolley is provided in Appendix 5.

### 6.7.3. Tracheostomy Emergency Boxes

Two Boxes of the following equipment should be available on each ward that cares for tracheostomy patients. The checking of these should be documented on the Tracheostomy Emergency Box checklist form CHA4471V1.

- Laminated Algorithm.
- Size 6.0 Endotracheal Tube.
- Size 6.0 Portex Suction aid tracheostomy tube.

- Boogie.
- Tracheostomy dilators.
- Robert Artery forceps.
- Suction Catheters (x3 each, of sizes 10,12and 14).
- Mapleson C Circuit.
- Gauze Squares.
- Stich cutter.
- Scalpel handle with size 10 blade.
- Paediatric face mask.
- Occlusive stoma dressing.
- Non-rebreather face mask (Oxygen reservoir mask).

#### 6.7.4. Routine Tracheostomy Care

Each patient requires individual assessment and should be regularly reassessed to establish the required frequency of Care. Care such as suctioning, inner cannula changes/checks, dressing and tape changes. The process for each of these practices can be found within the Care of an Adult Patient with a Tracheostomy Competency document at Appendix 8.

#### Best Practice

Regular assessment and care for a tracheostomy is advised to be undertaken as a **minimum** on an eight hourly basis, as per NTSP 2020 guidance, although the frequency may be determined by the clinical judgment.

#### 6.7.5. Dressing and tape changes

Secretions which collect above the cuff ooze out of the stoma site and cause wetness around the tracheostomy site, which can cause irritation leading to skin maceration and excoriation.

Pressure ulceration can be caused from tight tracheostomy tapes (NTSP, 2020).

Tracheostomy dressings are used to absorb drainage and secretions from the tracheostomy site, promote healing of the surgical incision, prevent infection, prevent pressure damage from the tracheostomy flange and promote patient comfort, reducing irritation from the tube rubbing on the skin (NTSP, 2020).

Tapes are essential to prevent dislodgement/ misplacement of the tracheostomy. It is the registered practitioners' responsibility to ensure that the tracheostomy remains secure at all times. Tapes should be used even in the presence of sutures.

#### Best practice

Tapes should be assessed every 24 hours. If evidence of soiling, stretching or other degeneration of material they must be immediately replaced. The dressing requires replacing a minimum of every 24 hours although please note that some patient's secretion levels may require increased frequency to ensure skin integrity is maintained (NTSP, 2020).

#### 6.7.6. Suctioning

All suctioning events must be recorded on the form found in the patients Tracheostomy Passport. The following should be documented:

- Date and time.
- Colour, amount and consistency of secretions.
- Depth of adjustable flange if in situ.
- Type of humidification required.
- Cuff inflated or deflated.
- Type of inner tube in situ (i.e. fenestrated or non-fenestrated).
- Respiratory Rate.
- Saturations.
- Amount of oxygen the patient requires.
- Use of one way valve (these will be discussed in more detail further on).
- Oral hygiene if performed.

The correct sized suction catheter is essential for safe and efficient suctioning. It should be no more than half the internal diameter of the tube. The correct size can be calculated as follows;

Suction catheter size French gauge (FG) = 2 x (size of tracheostomy tube – 2):

For example, size 8.0 tracheostomy tube: 2 x (8 – 2) = 12 FG

Note: Although the above is the ideal size suction catheter, please be aware that thick, tenacious secretions may require a larger suction catheter. The above suction calculation is a guide and should be used in conjunction with individual patient assessment.

Monitoring should always be applied (minimum continuous oxygen saturations) and the number of times a patient is suctioned in one period should be dependent on the patient's secretion level and ability to tolerate the suctioning process (maximum of 3 times in one period before rest).

Caution should be exercised in the presence of hypoxia (although this may be caused by secretions) or if there are blood stained secretions that may be caused by airway trauma. If the patient's secretions become blood stained or the patient is not tolerating suctioning due to hypoxia then advice should be sought from the ward physiotherapist and the critical care outreach team (CCOT).

Typically, a patient with a tracheostomy will require a minimum of 4 hourly suctioning. However, this needs to be individually assessed and changed accordingly (Russell and Matta, 2010).

#### Best Practice

Difficulty in passing a suction catheter may be due to a partially blocked or dislodged tracheostomy tube. This needs immediate attention (NTSP, 2020) as it may represent an airway emergency and would require anaesthetic or ENT involvement with CCOT support.

#### 6.7.7. Infection Control Considerations for Oral care

Oral care is important as it has a role to play in preventing healthcare associated infections. Dental plaque and the oropharynx can become colonized by bacteria and a 'biofilm' can develop on the inside of airway devices. Secretions can also pool in the subglottic region and the mouth.(NTSP, 2020).

Patients should have a mouthcare assessment completed on maxims to help determine the frequency, assistance and equipment required for oral care.

Any obvious dental problems should be assessed promptly by an oral hygienist. There is an increasing amount of data in the literature which suggests that simple measures such as teeth cleaning and intermittent removal of oral secretions can have a significant impact on hospital-acquired infections such as ventilator-associated pneumonia. (NTSP, 2020)

There is no reason why patients with tracheostomies cannot wear their dentures. (NTSP, 2020)

#### 6.7.8. PPE –personal protective equipment

- Hand washing is essential both before and after all procedures

- Gloves must be worn and contaminated gloves changed between procedures.
- Sterile gloves should be worn for suctioning and changing a tracheostomy tube, or dressing.
- Aprons should be worn at all times, and changed between procedures.
- Eye protection should be worn for suctioning, dressing changes and tube changes or where there is any risk a patient may cough secretions towards the carer.

#### 6.7.9. Cuff Management

It is usual that the initial tracheostomy tube inserted will be a cuffed tube. The cuff provides a sealed airway. A cuffed tube is usually a temporary measure until the patient is weaned from a ventilator and, but may be required long term if the underlying condition does not improve sufficiently as discussed earlier.

Management of the cuffed tracheostomy tube focuses on the appropriate management of the distal cuff. The complications from the continued use of an over inflated cuff include.

- Tracheal stenosis (scarring and narrowing of the trachea)
- Tracheomalacia (the cartilaginous structure of the trachea becomes weakened, and the trachea is prone to collapse)
- Tracheo-oesophageal fistula (an un-planned communication between the rear wall of the trachea and the oesophagus, which lies behind. This can lead to gastric contents contaminating the airway causing lower respiratory tract infection).
- Tracheo-innominate artery fistula – An artery near the trachea can become damaged due to prolonged pressure causing bleeding into the airway. This can be a fatal complication.

In addition, a patient with an inflated cuff will experience loss of voice a reduced cough reflex and de-sensitisation of the larynx.

Too low a cuff pressure will cause an air leak and lead to ineffective positive pressure ventilation. The cuff will develop longitudinal folds, which permit micro- aspiration of secretions that can collect above the cuff. This subsequently increases the risk of nosocomial pneumonia. The accepted pressure is the minimum pressure required to prevent a leak, but which must not exceed 30cmHO<sub>2</sub>.

Recommendations suggest that the cuff pressure should be kept around 25cmHO. As directed by NTSP, 2020 guidance regular cuff pressure checks (minimum 8 hourly) should be performed by competent, assessed practitioners. More regular assessments of cuff pressure may be required, dependent upon the situation.

#### 6.7.10. **Cuff leaks**

A cuff leak can vary in its significance from being irritating to staff and the patient owing to ventilator alarms, through to life threatening complications from aspiration or ventilation failure. The leak can come from a number of sources and importantly, may be associated with a partially displaced tube.

Sources of leaks include:

- Defective or damaged cuff (sometimes occurs on insertion of the tube).
- Cuff not adequately inflated (see above).
- Tube does not fit the airway: simply too small or inappropriate use of a standard tube when an adjustable flange tube is required.
- Positional changes causing a leak.
- Tracheomalacia or wound breakdown.

Simply adding more air to a cuff or precariously positioning the tube or patient is not a solution to an intermittent cuff leak. Timely assessment by physiotherapist, SLT, ENT team, anaesthetics or CCOT is required to advise management of cuff leaks.

#### 6.7.11. **Cuff Pressure Checks**

There is a balloon at the distal part of the tracheostomy tube that is inflated following insertion to provide a seal providing some protection against aspiration of secretions. The external pilot balloon indicates when the cuff is inflated or deflated.

##### **Best Practice**

Cuff pressure should be checked and documented at least a minimum eight-hourly or pre and post intervention in both Critical Care and ward areas. Ward Physiotherapists and Speech and Language Therapists will support the ward areas with cuff checks and the bedside nurse must observe the pilot balloon at least once per 8 hours and after every intervention to ensure it is inflated or deflated as directed (NTSP, 2020).

#### 6.7.12. **Humidification**

Formation of a tracheostomy bypasses the normal upper airway mechanisms for humidification, filtration and warming of inspired gases. This results in increased viscosity of mucus, which depresses ciliary function and therefore muco-ciliary transport. This in turn can lead to increased risk of infection, impaired secretion removal and micro atelectasis (small airway closure). Failure to provide adequate humidification can lead to obstruction of the major airways and the tracheostomy tube.

There are various ways to provide humidification according to the patient's individual needs, it is most important to ensure the patient is adequately hydrated, for example by the enteral or intravenous route. Patients with minimal or low oxygen requirements can receive adequate humidification via a heat moisture exchanger (HME) or cold-water humidification system.

Patients with more tenacious sputum, or who require high flow oxygen therapy will require additional saline nebulisers (which must be prescribed) and heated water humidification (NTSP, 2020) ideally using a Fisher and Paykel system.

RCHT have a variety of humidification devices available. Patient's humidification requirements need to be assessed a minimum of every 24hours, or sooner if their condition deteriorates. The assessment should be carried out by the registered practitioner in conjunction/discussion with the ward physiotherapist/CCOT to ensure proactive management of their secretions. See principles below for guidance and rationale of selection.

Humidification devices available at RCHT:

- Fisher and Paykal heated water humidification (currently only on Critical Care).
- Cold water system (Cold humidified Low flow oxygen / Aqua Pak System).
- Swedish Nose.
- Bibs.
- Nebulisers/sprays.

## 6.8. Ongoing Management

Ongoing care of a patient with a tracheostomy should be discussed by a multiple disciplinary team (MDT), who remain involved with patient's journey and care.

Examples of topics that should involve MDT discussion include weaning, cuff deflation, decannulation and discharge planning (NCEPOD, 2014).

The MDT should be inclusive of but not limited to responsible medical team, physiotherapy, speech and language therapy (SLT), critical care rehabilitation team, ENT, anaesthetics, CCOT, ward nursing team, the patient and their family members.

### 6.8.1. Weaning and Preparation for Decannulation

Tracheostomies may be only a short term requirement for patients and should be removed as soon as they are no longer needed.

This process can take several days or even weeks for the patient to progress through the stages of weaning from ventilator support in order to meet the criteria allowing successful decannulation.

#### Best practice

Tracheostomy tubes may cause permanent anatomical or physiological damage to the airway and related structures and therefore timely weaning, where indicated, is advantageous.

### 6.8.2. Considerations prior to progressing towards decannulation

- Is the upper airway patent? (may require fibrotic endoscopic assessment).
- Can the patient maintain and protect their airway spontaneously?
- Are they haemodynamically stable?
- Are they maintaining target SaO<sub>2</sub> on <40% O<sub>2</sub>.
- No signs of chest deterioration or changes on CXR in last 48 hours.
- Patient able to obey commands (in non-neurologically compromised patient).
- Adequate cough – able to clear secretions effectively and independently out of tracheostomy or to mouth.
- Consider checking blood results as necessary, e.g. platelet count in context of severe thrombocytopenia.
- Are they absent of fever or active infection?
- Do they have control of saliva + / - a competent swallow.
- Are there any planned procedures requiring anaesthesia within next few days?
- Does this patient have any specific clinical concerns? (NTSP, 2020).

### 6.8.3. Patient with potential risks also include

- Neurological or neurosurgical conditions.
- Anatomical changes e.g. post-surgery to oral cavity, pharynx or larynx.

- Smoke inhalation/burns injury to oropharynx.
- High spinal injury, anterior approach cervical spine surgery.
- Any cranial nerve damage affecting lip, tongue, soft palate or larynx.
- Weak or absent cough.
- Poor management of own saliva/drooling.
- Any patient with suspicion of oro-pharyngeal swallowing disorder.
- Tolerant of endotracheal tube (ETT) when off sedation, prior to tracheostomy.

The principles of working towards decannulation involve gradually returning the airflow patterns in the upper airways back towards 'normal' thus restoring normal physiological functions. Some patients may require a smaller tracheostomy tube to allow sufficient airflow around and/or through the tube to the upper airways (NTSP, 2020).

#### 6.8.4. **When to progress towards decannulation**

Preparing for decannulation is an advanced assessment technique and practice. It should therefore be assessed by an experienced practitioner i.e. ENT staff, physiotherapist, Speech and Language Therapy, critical care rehab team or CCOT practitioner.

#### 6.8.5. **Cuff deflation**

Deflation of the tracheostomy cuff will allow air to pass into the upper airway on expiration. Cuff deflation needs to be performed with a syringe to ensure all air is removed from the cuff using a synchronised suction/cuff deflation technique to deflate the cuff slowly. Phonation can be achieved as air is directed into the larynx, however the strength of the voice will be weaker as some air will pass out of the open tracheostomy. Downsizing to a smaller tracheostomy tube may allow increased passage of air between tube and the tracheal walls on exhalation (St. George's Healthcare, 2020).

#### 6.8.6. **One Way Speaking Valve**

The use of a one way valve allows air to be inhaled via the tube opening but not exhaled through this route. Air flow is then redirected through the larynx on exhalation permitting voicing.

The use of a valve is dependent on the patient's ability to tolerate cuff deflation.

Failure to deflate the cuff when the speaking valve is applied will result in total occlusion of the patient's airway and respiratory arrest (NTSP, 2020).

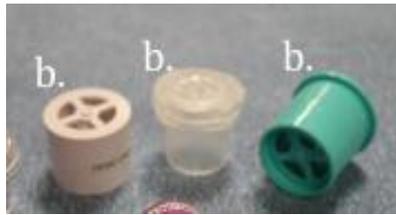


Image showing different types speaking valve, NTSP, 2013.

In some circumstances it is possible for one way valves (Passy Muir Valves) to be used on ventilated patients, but this is a critical care practice and should only be undertaken in an critical care environment decision and undertaken by the critical care consultants and critical care Speech and Language Therapy and physiotherapy teams.

#### 6.8.7. **Contraindications for One-way Valve use**

- Inability to tolerate cuff deflation.
- Airway obstruction – lack of airflow to mouth and nose on cuff deflation.
- Unstable medical/pulmonary status.
- Laryngectomy.
- Severe anxiety/cognitive dysfunction.
- Severe tracheal/laryngeal stenosis.
- End stage pulmonary disease.
- Excessive secretions.

(St. George's Healthcare, 2020)

#### 6.8.8. **Decannulation/ Removal of a Tracheostomy Tube**

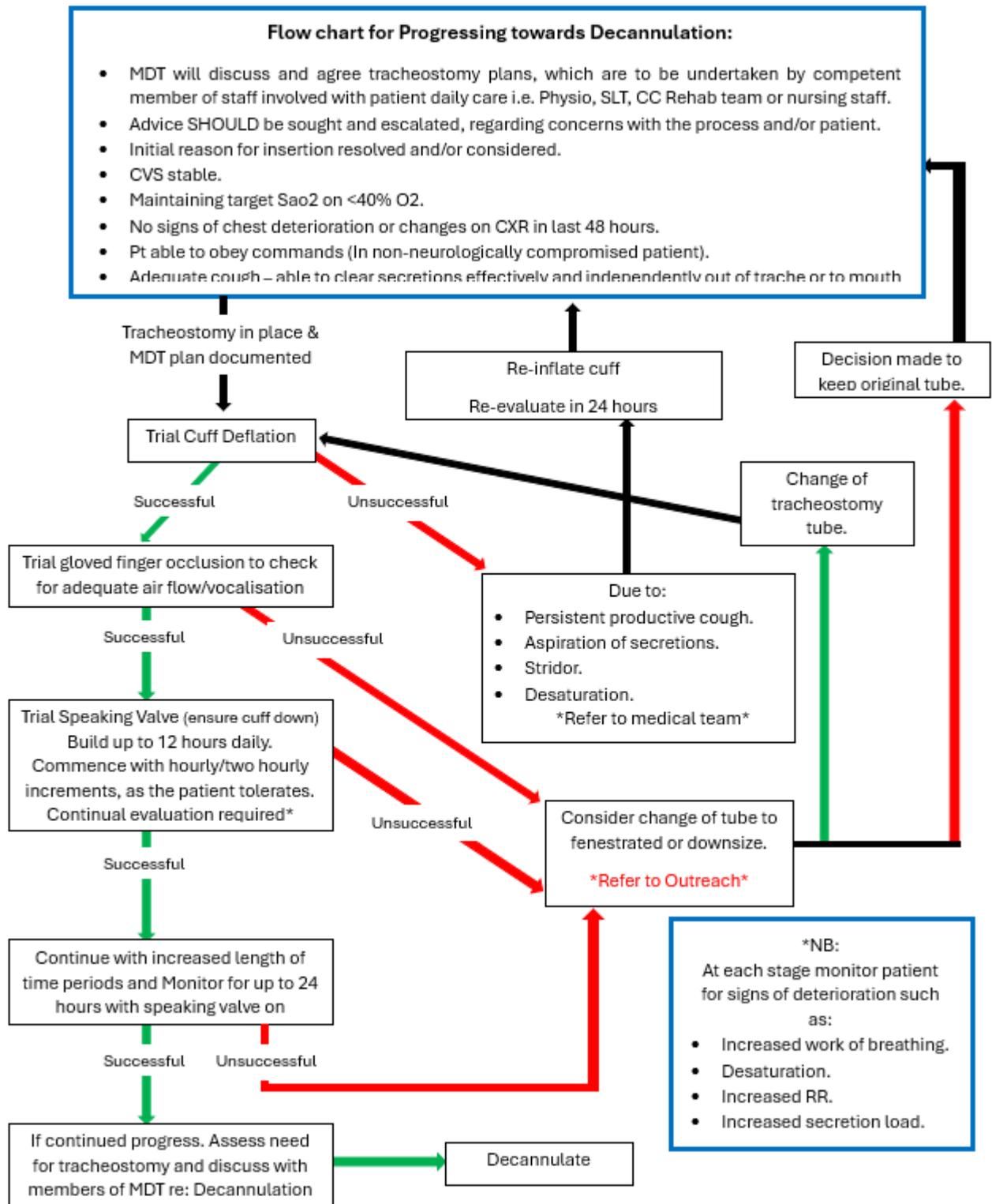
The removal of the tracheostomy tube should occur as soon as there is no further need for it to remain in place and with the **agreement of the MDT** caring for the patient; this should include ward doctors, consultants, nurses, physiotherapists, SLT and CCOT (if required).

Decannulation should not be performed until the patient can tolerate cuff deflation for a specific period agreed by the MDT (NTSP, 2020).

#### **Best practice**

Decannulation should only be performed by a competent practitioner who has received training and been assessed as competent in advanced skills to support the patient's airway if difficulties occur (ICS, 2019)

### 6.8.9. Keep all emergency equipment at the bedside for first 24 hours.



## 6.9. Transferring patients with a tracheostomy

6.9.1. Transferring a patient with a tracheostomy can be associated with complications and should only be undertaken by staff who feel competent to manage situations that may arise. For advice on transferring a tracheostomy patient, contact the CCOT Bleep (3504)

6.9.2. Consideration for type of transfer are listed below these should be looked at in conjunction with the RCHT [Safe Transfer of Patients Between Care Areas or Hospitals Policy](#)

6.9.3. **Medium To High Risk Transfer**

- Newly formed stoma.
- High O2 requirements.
- High suction requirements.
- New MAXFAX/ENT operations.
- Difficult or complicated airway.
- Long distance transfer.
- Severe agitation.
- Low GCS (<8).

6.9.4. **Low To Medium Risk Transfer**

- Formed stoma.
- Permanent tracheostomy.
- Not needing O2 supplement or low requirements.
- Self-caring patient (managing stoma independently).
- Medically fit.

6.9.5. **Transfer Equipment**

- Spare tracheostomy tube (same size and 1 size smaller).
- Spare inner tube.
- Tracheostomy Emergency Box.
- Portable suction.
- Suction tubing and suction catheters.
- Yankauer.
- Monitoring.
- Non-rebreathing mask.
- Two CD O2 cylinders.

## 6.10. Tracheostomy Hazards

- 6.10.1. Problems associated with tracheostomies are commonplace and patient safety incidents associated with their use has increased. Over 1,700 incidents were reported to the National Patient Safety Agency (NPSA) between January 2005 and December 2008 - this included over 30 deaths.
- 6.10.2. Research published by the NPSA has identified that when a clinical incident occurs relating to a tracheostomy, that the chance of some harm occurring is between 60 and 70%, (NPSA, 2008, NTSP, 2020)
- 6.10.3. Patients with tracheostomies are at risk of the following:
- Airway loss or damage.
  - Blockage or displacement.
  - Bleeding from the stoma site.
  - Pneumothorax.
  - Surgical emphysema.
  - Equipment incidents.
  - Lack of knowledge, skills and competency.
  - Late complications, e.g. bleeding, over granulation tissue etc.

### Best Practice:

Please report all tracheostomy related incidents as per RCHT Incident reporting Policy (DATIX).

## 6.11. Tracheostomy Red flags

Like most critical incidents, warning signs often precede tracheostomy related clinical problems. Because these signs are sometimes only apparent with hindsight, it is essential that you know what to look out for, so that you can trouble shoot at an early stage and stop minor problems escalating. Potential tracheostomy-related clinical problems in this context are known as 'tracheostomy red flags', although some are applicable to Laryngectomy patients too (NTSP, 2020).

It is easy to develop a false sense of security when a patient has a tracheostomy tube in situ. Remember though that this is an artificial airway, just like an ETT.

Problems that arise are therefore airway problems and they can develop quickly and dramatically into life threatening situations. Think about a patient on Intensive Care or in the operating theatre with a large air leak from an ETT - everyone would agree that this needs to be attended to as a matter of urgency. This is the same for a tracheostomy tube.

#### 6.11.1. **What should you do if you detect a red flag?**

- A prompt assessment of the tracheostomy and the patient should be made by a competent, airway trained practitioner.
- Consider interventions e.g. Patient reassurance, fibre optic inspection of the tube or airways, or replacement of the tracheostomy tube.

As with all acutely unwell patients, assessment should always start with 'A for airway'. In the case of a patient with a tracheostomy, there may be two airways to consider, or with a laryngectomy, only one (in the front of the neck, not the mouth).

Any airway problem can cause the patient to become unwell and show signs of distress. Conversely, patients with tracheostomies can become unwell with all the problems that other patients are exposed to, e.g. sepsis, pneumonia, acute abdomen etc. (NTSP, 2020).

The 'flags' can be divided into different categories:

- Airway flags.
- Breathing flags.
- Specific tracheostomy flags.
- General flags.

#### 6.11.2. **Airway flags**

If the patient has a cuffed tracheostomy correctly sited in the trachea, no gas should escape through the mouth. If the patient is talking to you, or audible air leaks or bubbles of saliva are seen or heard at the mouth or nose, then gas is escaping past the cuff.

This may imply that the cuff is damaged, or the tube tip is not correctly sited. Grunting, snoring or stridor's are also signs that there is an airway problem.

#### 6.11.3. **Breathing flags**

Listening to the patient, or observation of the patient or instrumentation, may show that the patient:

- Is not breathing (apnoea), which is detected by clinical assessment or capnography.

- Has difficulty with spontaneous breathing.
- Accessory muscle use.
- Increased respiratory rate.
- Hypoxia.
- Is making whistling noises or has noisy breathing.

#### 6.11.4. **Specific tracheostomy flags**

Careful observation may show that the patient:

- Has a visibly displaced tracheostomy tube. If this is an adjustable flange tube, check to see where it was last positioned.
- Has blood or blood-stained secretions around the tube - a recently performed or changed tracheostomy bleeds a little, but if in doubt, it should be assessed.
- Reports increased discomfort or pain.
- Requires a lot of air to keep the cuff inflated, which may indicate: the cuff is damaged or has an air leak (in which case, it needs to be replaced).
- The tube may be displaced, and the cuff needs hyper-inflation to keep it 'sealed'.

#### 6.11.5. **General flags**

Any physiological changes can be due to an airway problem. Specifically, changes in:

- Respiratory rate.
- Heart rate.
- Blood pressure.
- Level of consciousness.
- Anxiety, restlessness, agitation and confusion may also be due to an airway problem.

### 6.12. **Resuscitation / Respiratory Emergencies**

6.12.1. In the event of a cardiac or respiratory arrest it is essential to get help as soon as possible. CALL THE CARDIAC ARREST TEAM on 2222 and also call switchboard on 4444 and request the 4th on call anaesthetist to be fast bleeped to your location.

6.12.2. Do not hesitate in using the Cardiac Arrest procedure.

- 6.12.3. In Tracheostomy Emergencies **USE ALGORITHMS that are** available (see appendix 3).
- 6.12.4. In the event of a respiratory or cardiac arrest, if the tube is cuffed but the cuff is deflated, it must be RE-INFLATED with at least 7ml of air in order to hand ventilate the patient through the tracheostomy.
- 6.12.5. The securing of a patent airway via the tracheostomy tube is vital. The reason for the tracheostomy, and the type of tube in place, will determine the method used. If the patient has had part of his/her trachea removed, then resuscitation must occur through the stoma site.
- 6.12.6. Whilst waiting for the emergency team to arrive, emergency equipment should be prepared (i.e. spare tube, tracheostomy dilators, Bag Valve Mask (BVM), Waters Circuit with catheter mount, oxygen, suction). If breathing has stopped, commence actions highlighted within the **Tracheostomy Emergency Algorithm** (Appendix 3).

### 6.13. Discharge from hospital with a tracheostomy

- 6.13.1. There may be patients that require long term/permanent tracheostomy care who will be discharged from an acute ward based environment to an onward care facility or to their home with a tracheostomy in place. It is vitally important that discharge planning, training and equipment is in place for all patients that are being considered for discharge.
- 6.13.2. Discharge planning should be undertaken as early as possible and be led by an MDT meeting (including community representative/ specialist nurses) to discuss the individual needs and specific requirements, equipment and training required to support the patient within a community based environment. These needs may include:
- Suctioning requirement.
  - Equipment needs.
  - Appropriate and safe accommodation to care for needs.
  - Stoma and general tracheostomy care.
  - Frequency and risks associated with routine tube changes.
  - Ability for patients to self-care.
  - Training requirements for the patient in family members involved with care for the individual patient.
- 6.13.3. For the process of decision making around discharge planning and process please refer to appendix 3.
- 6.13.4. For further guidance and community practices refer to Cornwall Partnerships NHS foundation trust, Tracheostomy guideline for adult patients, 2019.

6.13.5. Within RCHT an information leaflet will be given to tracheostomy patients upon discharge from hospital. With a guide for patients and carers for tracheostomy care, emergency practices, contact details and links to further information sources.

## 7. Dissemination and Implementation

- 7.1. This policy will be disseminated throughout all relevant areas in the trust through lead clinicians and unit / ward leaders.
- 7.2. Provision of training is provided by the Tracheostomy Steering Group and the Learning and Development department. Training is mandatory for all staff caring for the adult patient with a Tracheostomy.

## 8. Monitoring compliance and effectiveness

<b>Information Category</b>	<b>Detail of process and methodology for monitoring compliance</b>
<b>Element to be monitored</b>	Completion of Competencies.
<b>Lead</b>	Check of return of completed Competency or self-competency Document following attendance at Tracheostomy Training.
<b>Tool</b>	A report will be completed and shared annually.
<b>Frequency</b>	The report will be sent to the Tracheostomy Steering Group Lead and discussed as a Standing Agenda item with actions identified and documented in meeting minutes.
<b>Reporting arrangements</b>	The Tracheostomy Steering Group will disseminate actions and recommendations to relevant departments and stakeholders.
<b>Acting on recommendations and Lead(s)</b>	Required changes to practice will be identified and actioned within 12 months. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders.
<b>Change in practice and lessons to be shared</b>	Completion of Competencies.

## 9. Updating and Review

This policy must be reviewed within 3 years or sooner should local or national policy imply or demand revision at any earlier date. The policy shall be reviewed by the Clinical Matron – Critical Care and Outreach.

## 10. Equality and Diversity

10.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the [Equality Diversity And Inclusion Policy](#) or the [Equality and Diversity website](#).

10.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

## Appendix 1. Governance Information

Information Category	Detailed Information
<b>Document Title:</b>	Care of the Adult Patient with a Tracheostomy Policy V2.0
<b>This document replaces (exact title of previous version):</b>	Care of the Adult Patient with a Tracheostomy Policy V1.0
<b>Date Issued / Approved:</b>	July 2024
<b>Date Valid From:</b>	August 2025
<b>Date Valid To:</b>	August 2028
<b>Author / Owner:</b>	Tracheostomy Steering Group ACCT Chair: Ashley Holt- Lead Educator ACCT.
<b>Contact details:</b>	01872 252469
<b>Brief summary of contents:</b>	Policy and guidance to facilitate safe care of adult tracheostomy patients and ensure a competent workforce.
<b>Suggested Keywords:</b>	Tracheostomy. Airway emergency. Failed intubation.
<b>Target Audience:</b>	<b>RCHT:</b> Yes <b>CFT:</b> No <b>CIOS ICB:</b> No
<b>Executive Director responsible for Policy:</b>	Chief Medical Officer
<b>Approval route for consultation and ratification:</b>	RCHT Tracheostomy Steering Group. RCHT Clinical Site Co-ordinators. Head and Neck Governance. Critical Care Governance.
<b>Manager confirming approval processes:</b>	Lisa Niemand
<b>Name of Governance Lead confirming consultation and ratification:</b>	Suzanne Barber Interim
<b>Links to key external standards:</b>	Intensive Care Society tracheostomy guidelines, National Tracheostomy Safety Project, Global tracheostomy Collaborative.

Information Category	Detailed Information
<p><b>Related Documents:</b></p>	<p>CCOT.</p> <p><b>References:</b></p> <p>INTENSIVE CARE SOCIETY 2019. <b>Guidelines for the Provision of Intensive Care Services</b>. [online]  <a href="https://www.ics.ac.uk/ICS/ICS/Pdfs/GPICS_2nd_Edition.aspx">https://www.ics.ac.uk/ICS/ICS/Pdfs/GPICS_2nd_Edition.aspx</a> , last accessed on 4<sup>th</sup> May 2020</p> <p>Jacobs.T,(2020), ENT UK, <b>Framework for open tracheostomy in COVID-19 patients</b>, published [online]  <a href="http://www.tracheostomy.org.uk/storage/files/ENT_UK%20COVID%20tracheostomy%20guidance_compressed.pdf">http://www.tracheostomy.org.uk/storage/files/ENT_UK%20COVID%20tracheostomy%20guidance_compressed.pdf</a>, on behalf NTSP. Last accessed 14<sup>th</sup> July 2020.</p> <p>National Tracheostomy Safety Project,(NTSP), 2020, [online] <a href="http://tracheostomy.org.uk/">http://tracheostomy.org.uk/</a> , last accessed 4<sup>th</sup> May 2020.</p> <p>NCEPOD, 2014.'On The Right Trach' [online] accessed,  <a href="https://www.ncepod.org.uk/2014report1/downloads/OnTheRightTrach_Summary.pdf">https://www.ncepod.org.uk/2014report1/downloads/OnTheRightTrach_Summary.pdf</a> , last accessed on 4<sup>th</sup> May 2020.</p> <p>RUSSELL, C. and MATTA, B. 2010, <b>Tracheostomy - a Multi-Professional Handbook</b>. Cambridge: University Press</p> <p>Saint George's Health Care NHS Trust (2020) Tracheostomy Guidelines [online] London: St. George's Healthcare Trust, accessed online <a href="https://www.stgeorges.nhs.uk/gps-and-clinicians/clinical-resources/tracheostomy-guidelines/">https://www.stgeorges.nhs.uk/gps-and-clinicians/clinical-resources/tracheostomy-guidelines/</a> , last accessed on 4<sup>th</sup> May 2020.</p>
<p><b>Training Need Identified:</b></p>	<p>Yes, training package endorsed by learning and development and booked through ESR.</p>
<p><b>Publication Location (refer to Policy on Policies – Approvals and Ratification):</b></p>	<p>Internet and Intranet</p>
<p><b>Document Library Folder/Sub Folder:</b></p>	<p>Clinical / Critical Care and Resuscitation</p>

## Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
April 2021	V1.0	Initial version	Julia Millward and Marc Taylor, Clinical Nurse Specialists, Critical Care Outreach.
May 2025	V2.0	Training flowchart changed to match current competency pathway. Wording changes to match current safety guidelines. Patient discharge (to community setting) checklist added.	Ashley Holt, Lead Educator ACCT. Sophie Medlyn, CNS Critical Care Outreach. Julie Wright, Speech and Language Therapist. Elizabeth Thomas, ENT Lead Nurse.

**All or part of this document can be released under the Freedom of Information Act 2000.**

**All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.**

**This document is only valid on the day of printing.**

### **Controlled Document.**

This document has been created following the Royal Cornwall Hospitals NHS Trust [The Policy on Policies \(Development and Management of Knowledge Procedural and Web Documents Policy\)](#). It should not be altered in any way without the express permission of the author or their Line Manager.

## Appendix 2. Equality Impact Assessment

### Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity, and Inclusion Team  
[rcht.inclusion@nhs.net](mailto:rcht.inclusion@nhs.net)

Information Category	Detailed Information
<b>Name of the strategy / policy / proposal / service function to be assessed:</b>	Care of the Adult Patient with a Tracheostomy Policy V2.0
<b>Department and Service Area:</b>	Anaesthetics and Critical Care
<b>Is this a new or existing document?</b>	Existing
<b>Name of individual completing EIA</b> (Should be completed by an individual with a good understanding of the Service/Policy):	Julia Millward and Marc Taylor, Clinical Nurse Specialists, Critical Care Outreach.
<b>Contact details:</b>	01872 252469

Information Category	Detailed Information
<b>1. Policy Aim - Who is the Policy aimed at?</b> (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	To provide guidance for all healthcare professionals involved in the care of an adult patient with a tracheostomy and to ensure that this is done both safely and effectively.
<b>2. Policy Objectives</b>	To provide safe evidence based standardised tracheostomy care to adult patients in RCHT. To provide a training pathway for staff to ensure a competent workforce.
<b>3. Policy Intended Outcomes</b>	Streamlined tracheostomy care for adult patients within RCHT. A register of staff competent in the care of adult patients with a tracheostomy.
<b>4. How will you measure each outcome?</b>	Monitoring of completed tracheostomy passport documentation and ongoing review of database of competent staff.
<b>5. Who is intended to benefit from the policy?</b>	RCHT patients and workforce

Information Category	Detailed Information
<b>6a. Who did you consult with?</b> (Please select Yes or No for each category)	<ul style="list-style-type: none"> <li>• Workforce: Yes</li> <li>• Patients/ visitors: No</li> <li>• Local groups/ system partners: No</li> <li>• External organisations: No</li> <li>• Other: No</li> </ul>
<b>6b. Please list the individuals/groups who have been consulted about this policy.</b>	<b>Please record specific names of individuals/ groups:</b> RCHT Tracheostomy steering group. Cornwall Partnership NHS Foundation Trust. Head and Neck Services.
<b>6c. What was the outcome of the consultation?</b>	Agreement with the policy.
<b>6d. Have you used any of the following to assist your assessment?</b>	<b>National or local statistics, audits, activity reports, process maps, complaints, staff, or patient surveys:</b> No.

## 7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
<b>Age</b>	No	
<b>Sex</b> (male or female)	No	
<b>Gender reassignment</b> (Transgender, non-binary, gender fluid etc.)	No	
<b>Race</b>	No	
<b>Disability</b> (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
<b>Religion or belief</b>	No	

Protected Characteristic	(Yes or No)	Rationale
<b>Marriage and civil partnership</b>	No	
<b>Pregnancy and maternity</b>	No	
<b>Sexual orientation</b> (e.g. gay, straight, bisexual, lesbian etc.)	No	

**A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.**

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Julia Millward, Clinical Nurse Specialist, Critical Care Outreach.

**If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:**  
[Section 2. Full Equality Analysis](#)

# Appendix 3. Head of Bed Signs

Head of Bed signs for RCHT use available by following the links below. Please ensure correct sign is selected and that forms are printed double sided so that the algorithm is available for use in an emergency.

**This patient has a**  
**TRACHEOSTOMY**  
There is a potentially patent upper airway (Intubation may be difficult)

**Surgical / Percutaneous**

Performed on (date) .....

Tracheostomy tube size (if present) .....

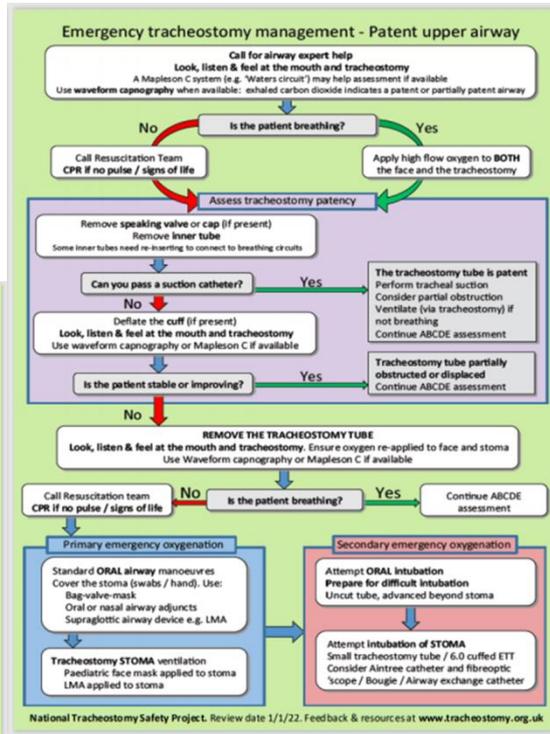
Hospital / NHS number .....

Notes: Indicate tracheostomy type by circling the relevant figure. Indicate location and function of any sutures. Laryngoscopy grade and notes on upper airway management. Any problems with this tracheostomy.

**In the event of an airway emergency call 4444 and ask switchboard to fast bleep the 4<sup>th</sup> on call Anaesthetist & Critical Care Outreach Team to your location**

[www.tracheostomy.org.uk](http://www.tracheostomy.org.uk)

Percutaneous   Björk Flap   Slit type



**This patient has a**  
**LARYNGECTOMY**  
and CANNOT be intubated or oxygenated via the mouth

Follow the LARYNGECTOMY algorithm of breathing difficulties

Performed on (date) .....

Tracheostomy tube size (if present) .....

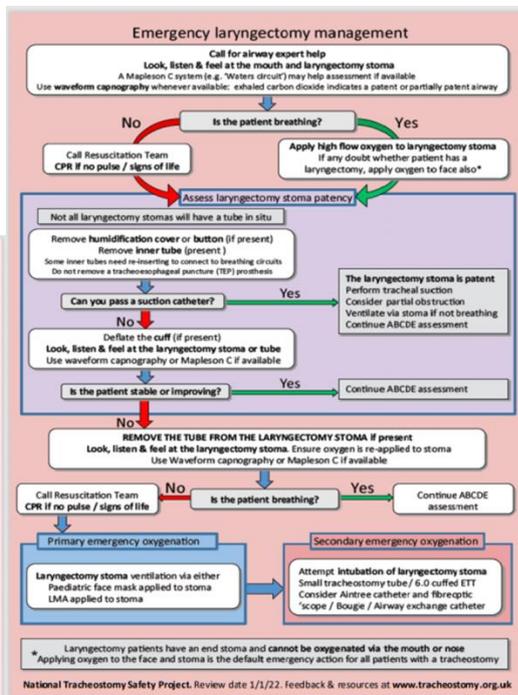
Hospital / NHS number .....

Notes:

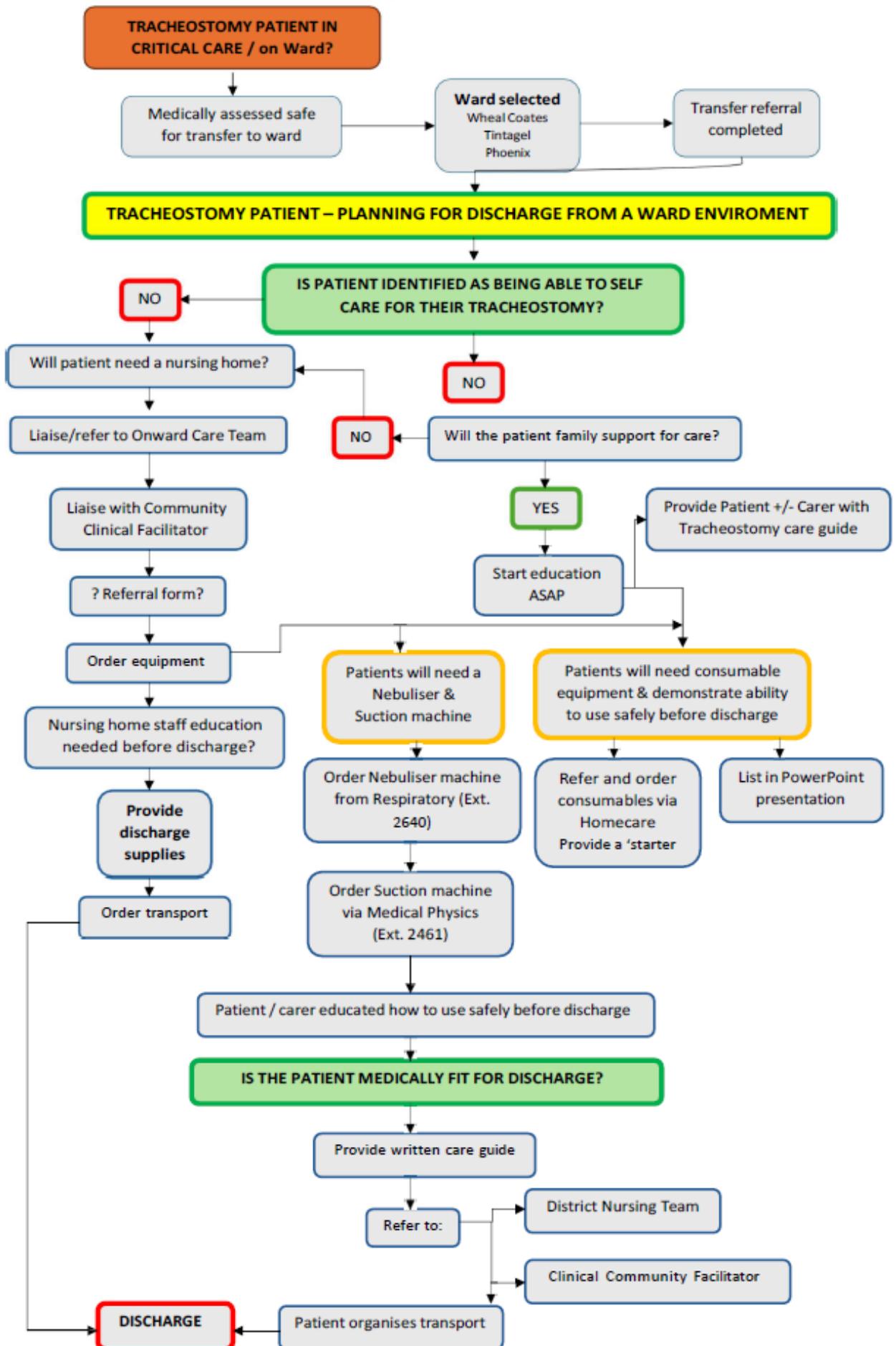
There may not be a tube in the stoma.  
The trachea (wind pipe) ends at the neck stoma

**In the event of an airway emergency call 4444 and ask switchboard to fast bleep the 4<sup>th</sup> on call Anaesthetist & Critical Care Outreach Team to your location**

[www.tracheostomy.org.uk](http://www.tracheostomy.org.uk)



## Appendix 4. Discharge Planning



## Appendix 5. Tracheostomy Routine Care Trolley Contents List

Drawer number / label	Contents
Top of trolley	<ul style="list-style-type: none"> <li>• Sterile water.</li> <li>• Clean pot for spare inner cannula.</li> <li>• Spare tracheostomy tubes for the patient – one the same size and type and one the same type and one size smaller.</li> <li>• Laminated copy of the tracheostomy Routine Care Trolley Contents list.</li> </ul>
Drawer 1 - Shiley Tracheostomy tubes and accessories	<p>Cuffless and fenestrated (CFN) Shiley Tracheostomy tubes in the following sizes (one of each in addition to the two on the top of the trolley).</p> <ul style="list-style-type: none"> <li>• 4, 6, 8 and 10.</li> </ul> <p>Spare Shiley (SIC) temporary use (red) inner tubes one box*.</p> <p>Speaking valves.</p> <p>Lubricating jelly.</p> <p>Insight tracheostomy cannula cleaning brushes (small and large).</p>
Drawer 2 – Portex Tracheostomy tubes and accessories	<p>Portex Blue Line Ultra SUCTIONAID tracheostomy tubes (cuffed) in the following sizes (one of each in addition to the two on the top of the trolley)#.</p> <ul style="list-style-type: none"> <li>• 6, 7, 8 and 9.</li> </ul> <p>Spare Portex blue line ultra inner tubes in the following sizes (one box of each).</p> <ul style="list-style-type: none"> <li>• 6, 7, 8 and 9.</li> </ul> <p>Cuff manometer for measuring cuff pressure.</p> <p>Lubricating jelly.</p> <p>Portex blue line ultra inner cannula cleaning brush.</p>
Drawer 3 – Suctioning	<p>Spare suction tubing.</p> <p>Single use sterile suction catheters in the following sizes (at least 5 of each).</p> <ul style="list-style-type: none"> <li>• 8, 10, 12 and 14.</li> </ul> <p>Single sterile gloves (at least one full box).</p>
Drawer 4 – Oxygen and humidification	<ul style="list-style-type: none"> <li>• Non-rebreathe oxygen mask for tracheostomy.</li> <li>• Tracheostomy mask.</li> <li>• Elephant tubing.</li> <li>• Humidified oxygen equipment.</li> </ul>

Drawer number / label	Contents
	<ul style="list-style-type: none"> <li>• Tracheostomy nebuliser equipment.</li> <li>• Heat and Moisture Exchanger (at least one full box).</li> </ul>
Drawer 5 – Dressings	<ul style="list-style-type: none"> <li>• Sterile dressing packs.</li> <li>• Tracheostomy dressings.</li> <li>• Tracheostomy tapes.</li> <li>• Sterile Saline for stoma cleaning.</li> </ul>

**\*These are not sized and are only for temporary use whilst the reusable inner cannulae (fenestrated or non-fenestrated) are being cleaned. They are **not** to be left in place.**

**# The inner cannulae supplied with the portex suctionaid tracheostomy tubes are reusable and only need to be replaced if kinked, damaged or blocked despite cleaning or 30 days after opening.**

**If patient has an adjustable flange tracheostomy tube then please contact CCOT #3504 for spares.**

## Appendix 6. Tracheostomy Emergency box contents.

### Tracheostomy Emergency Boxes

Two Boxes of the following equipment should be available on each ward that cares for tracheostomy patients.

- Laminated Algorithm
- Size 6.0 Endotracheal Tube
- Size 6.0 Portex Suction aid tracheostomy tube
- Boogie
- Tracheal dilators
- Robert Artery forceps
- Suction Catheters (x3 each, of sizes 10,12 and 14)
- Mapleson C Circuit
- Gauze Squares
- Stitch cutter
- Scalpel handle with size 10 blade
- Paediatric face mask
- Occlusive stoma dressing
- Non-rebreather mask (oxygen reservoir mask)

## Appendix 7. Self-Declaration of previous experience and competency in the care of adult patients with a Tracheostomy

I have completed a period of preceptorship and have at least 12 months post registration.

I have previously completed theoretical training in the care of an adult patient with a tracheostomy.

I have previously been assessed in the following practical competencies regarding the care of an adult patient with a tracheostomy:

- Inner cannula care.
- Open suctioning.
- Dressing change.

I have completed the ESR module 000 National Tracheostomy Safety Project.

I have attended an RCHT study day – care of the adult patient with a tracheostomy.

I am familiar with the trusts tracheostomy policy, guideline and documentation.

---

I feel **competent** to care for an adult patient with a tracheostomy.

Nurses' Name

(Print):.....

Signature:.....

Ward / Unit: .....

Date:.....

---

I am **satisfied / not satisfied** with the self-declaration of..... to care for an adult patient with a tracheostomy.

(If not satisfied discussion with the nurse must take place and completion of RCHT's Record of Supervised Practice – Tracheostomy Care must be undertaken).

Managers

Name(Print):.....

Signature:

.....

Ward / Unit:

.....

Date:

.....

## Appendix 8. Record of Supervised Practice-Tracheostomy Care

### Standard for supervised practice - tracheostomy care.

Before undertaking any clinical competency, you must have successfully completed the e-learning.

Module National Tracheostomy Safety Project via ESR and attended a Tracheostomy Study Day. You must then complete a minimum of 3 episodes of supervised practice of each competency and maintain records of the competency matrices and document the outcome of supervised practice. Supervision must be performed by a registered practitioner who has documented proficiency in the skill. The statement of competency achievement must be signed and sent to the Learning and Development Department, Knowledge Spa, Royal Cornwall Hospital. **Competency will only be formally recorded following receipt of the signed competency statement.**

<b>Record of Supervised Practice-Tracheostomy Care</b>				
A minimum of 3 episodes of supervised practice of each competency must take place prior to The final assessment of competency. The final assessment should take place within 6 months of successful completion of the study day.				
<b>Date of Supervised Practice</b>	<b>Competency</b>	<b>Name of Assessor</b>	<b>Pass / Fail</b>	<b>Signature of Assessor</b>
	Inner Cannula Care			
	Inner Cannula Care			
	Inner Cannula Care			
	Open Suctioning			
	Open Suctioning			
	Open Suctioning			
	Dressing Change			

**Record of Supervised Practice-Tracheostomy Care**

A minimum of 3 episodes of supervised practice of each competency must take place prior to The final assessment of competency. The final assessment should take place within 6 months of successful completion of the study day.

<b>Date of Supervised Practice</b>	<b>Competency</b>	<b>Name of Assessor</b>	<b>Pass / Fail</b>	<b>Signature of Assessor</b>
	Dressing Change			
	Dressing Change			

## Supervised Practice Assessment – Management of the Inner Cannulae

The following practical elements must be observed and signed by a Registered Practitioner **who is proficient in the skill** for each episode of supervised practice.

Task – Management of the Inner Cannulae						
Pre Procedure	Tick	Signature	Tick	Signature	Tick	Signature
Explain and discuss the procedure with the patient as appropriate						
Clean hands and apply appropriate PPE						
During the Procedure	Tick	Signature	Tick	Signature	Tick	Signature
Perform tracheal suction if necessary						
With one hand stabilise the outside of the tracheostomy tube. Remove inner tube with the other hand.						
If the inner tube is clean and clear of secretions, simply reinsert						
If there is difficulty in removing the inner tube call for help from an appropriately trained healthcare professional						
If inner tube requires cleaning, replace with clean/spare inner cannula whilst cleaning is taking place						
If the inner tube is fully or partially blocked with secretions, flush with tap water at the sink ensuring a disposable receiver in place to catch water and secretions which is then to be disposed of in the sluice, if necessary use a tracheostomy cleaning sponge						
If tube is unable to be cleaned, it may need to be disposed of, and a replacement cannula placed at bedside						

**Task – Management of the Inner Cannulae**

<b>Post Procedure</b>	<b>Tick</b>	<b>Signature</b>	<b>Tick</b>	<b>Signature</b>	<b>Tick</b>	<b>Signature</b>
Shake excess water off inner cannula and place in covered clean container to dry prior to re-use						
Assess the patient and ensure comfortable and that observations are stable.						
Observe secretions, amount and consistency						

## Supervised Practice Assessment – Performing Open Tracheal Suctioning

The following practical elements must be observed and signed by a Registered Practitioner **who is proficient in the skill** for each episode of supervised practice.

Task – Performing Open Tracheal Suctioning						
Pre Procedure	Tick	Signature	Tick	Signature	Tick	Signature
Explain the procedure to the patient						
Assess patient for need to suction, encourage patient (if able) to cough to reduce excessive suctioning						
Select correct size suction catheter. (Size of tracheostomy tube -2) x 2 = correct French Gauge.						
Ensure correct pressure for suctioning. (No greater than -150mmHg or -20KPa)						
Wash hands, put on gloves, apron and goggles.						
During the Procedure	Tick	Signature	Tick	Signature	Tick	Signature
Ensure that an appropriate non-fenestrated inner tube is in place.						
Consider pre-oxygenation of receiving oxygen.						
Remove tracheostomy devices prior to open suctioning (speaking valves etc.)						
Connect suction catheter keeping catheter tip covered (sterile)						
Place top 'double' glove on dominant hand						
Do not apply suction whilst introducing the catheter, or push against resistance at any time						
Occlude suction port with gloved thumb and suction on removal of suction catheter						
Period of suction should not exceed 10 seconds						
Suctioning should be continuous not intermittent						

<b>Task – Performing Open Tracheal Suctioning</b>						
Observe the patient throughout the procedure to ensure their general condition is not affected						
For patients requiring oxygen therapy, reattach O2 within 10 seconds						
Remove the glove from the dominant hand by inverting it over the used catheter and dispose of in clinical waste bag						
<b>Post Procedure</b>	<b>Tick</b>	<b>Signature</b>	<b>Tick</b>	<b>Signature</b>	<b>Tick</b>	<b>Signature</b>
Assess the patients respiratory rate, skin colour and/or oxygen saturation to ensure they have not been compromised by the procedure and determine if they need further suction						
It is recommended that no more than 3 episodes of suctioning are carried out in succession						
If O2 delivery was increased, review for return to previous level						
Flush through the connection tubing with the clean water. Empty water receptacle and ensure this is ready for further use. Wash hands						
If the patient needs further suctioning, repeat the above actions using new glove and a new catheter						

## Supervised Practice Assessment – Stoma Care and Securing the Tube

The following practical elements must be observed and signed by a Registered Practitioner **who is proficient in the skill** for each episode of supervised practice.

Task – Stoma Care and Securing the Tube						
Pre Procedure	Tick	Signature	Tick	Signature	Tick	Signature
Explain and discuss the procedure with the patient as appropriate						
Wash hands and put on gloves, apron and eye protection if patient is high risk						
Prepare sterile dressing trolley. To include, sterile dressing pack, 0.9% sterile saline solution, sterile gauze squares, pre-cut tracheostomy dressing, tracheostomy securing device, blunt ended scissors, barrier cream, suction unit with appropriate suction catheters.						
During the Procedure	Tick	Signature	Tick	Signature	Tick	Signature
Position the patient with their neck slightly extended. Remove any clothing that will impede procedure						
Practitioner 1 holds the tracheostomy tube whilst practitioner 2 removes the tapes and dressing						
Discard old tapes and dressings into the waste bag						
Assess the stoma for signs of infection, inflammation, or trauma and record accurately on the appropriate documentation. Take a swab if there are any signs of infection.						
Observe for signs of hyper granulation						
Perform hand hygiene and change gloves to proceed with aseptic wound care and dressing application						
Sterile gauze squares soaked in saline should be used to clean the wound and around the tube to remove secretions and crusting. Gently pat dry.						

<b>Task – Stoma Care and Securing the Tube</b>						
The tube should be held firmly throughout with minimal movement of the tube						
Apply a thin layer of barrier cream if the skin is at risk of excoriation from moisture from humidification and/or secretions						
Apply a clean tracheostomy dressing						
Re-secure the tube using an appropriate tie. Allow 1 fingers distance between the tie and the neck skin						
<b>Post Procedure</b>	<b>Tick</b>	<b>Signature</b>	<b>Tick</b>	<b>Signature</b>	<b>Tick</b>	<b>Signature</b>
Assess the patient and ensure comfortable and that observations are stable.						
Re attach oxygen if required						

## **Final Statement of Competency Achievement for Tracheostomy Care.**

**Please return this form only (and not the whole workbook) to:**

**Learning and Development Department.**

**Knowledge Spa.**

**Truro.**

**TR1 3HD.**

**This ensures the statement of competency will be entered onto the Electronic Staff Record (ESR).**

**I confirm that .....**

**Employee Payroll Number .....**

**Has successfully met the assessment criteria and completed a period of supervised practice.**

**Signature.....**

<b>Please Print</b>	<b>Name</b>	<b>Job Title</b>	<b>Department</b>	<b>Date</b>
<b>Assessor</b>				
<b>Learner</b>				

## Appendix 9. Airway Discharge Checklist

Available to be printed from Unit 4.

NHS Number: _____
Name: _____
Address: _____
_____
Date of Birth: _____
CR Number: _____



### Patient Discharge Checklist Tracheostomy / Laryngectomy

See over page for specific guidance to each element of the check list

Please tick box as appropriate and keep this in the front of the patient's medical notes:

Tracheostomy  Laryngectomy

Contact the Community Clinical Skills Facilitators prior to patients discharge [cft.clinicalskillstraining@nhs.net](mailto:cft.clinicalskillstraining@nhs.net)

The Head & Neck CNS can be contacted via switchboard for advice

Please check that your patient and/or carer if appropriate is competent with the following:	Yes	No	N/A	Comment
1. Is the patient/carer independent with all care of their airway?				
2. Complete STRATA for district nurse support				
3. Can the patient/carer clean the stoma as indicated?				
4. Can they remove, clean and reinsert tube/button (laryngectomy)				
5. Can they remove, clean and reinsert inner tube (tracheostomy)				
6. Is the patient (and carer if relevant) independent in using a suction machine? (tracheostomy)				
7. Order suction machine from equipment library				
8. Obtain emergency blue box from Unit 4 and fill with supplies – code for ordering: FSM7597				
9. Laryngectomy pre-filled equipment bag provided by H&N SLT team				
10. Register the patient with Supply Company for consumables e.g. ATOS				
11. Provide patient with a 2-week supply of equipment from the ward (for tracheostomy patients)				
12. Register the patient with SWAST				
13. Is the patient/carer independent and aware of valve cleaning requirements? (laryngectomy)				
14. Does the patient know how to recognise and manage a leaking speech valve? (laryngectomy)				
15. 'Going Home with a Tracheostomy' information booklet given to patient RCHT 1869				
16. Photocopy Tracheostomy Passport and send home with patient				

Nurse Responsible for Discharge – ensure all elements of the checklist are completed and sign below.

Registered Nurse Sign: _____	Date: _____
Print: _____	