Western Health and Social Care Trust

Tracheostomy Policy

Policy Title	**Tracheostomy Policy**
Policy Reference Number	**Acute20/001**
Implementation Date	**7 May 2020**
Review Date	**May 2023**
Responsible Officer	**Angela McKeever**

1 INTRODUCTION

The aim of this policy is to ensure the safe management of adult patients with a tracheostomy insitu.
This policy outlines the standard of care that adult patients with a tracheostomy in the Western Trust within the acute hospital setting are expected to receive.
The policy has been supported by guidelines from:
National Tracheostomy Safety Project; http://www.tracheostomy.org.uk/
The Trust also endorses the Critical Care Network Northern Ireland (CCaNNI) Guidelines on the management of patients with a Tracheostomy following discharge from Critical Care,
http://.ccanni.org.uk/images/documents/trach13.pdf
NCEPOD On the Right trach (2014)

2 PURPOSE

To provide clear guidance for Trust staff caring for patients with a tracheostomy to safely manage, to understand, prevent and manage complications and to reduce the risk of inappropriate airway management

3 SCOPE OF THE POLICY

This policy applies to **all** staff caring for adult patients with a Tracheostomy.
The policy includes:

- Management and care of surgical tracheostomy patients
- Specific guidance for Head and Neck Surgical tracheostomy's and management of these.

Patients with Laryngectomy are **NOT** included in this policy.
Paediatric Tracheostomies are **NOT** included in this guidance

4 ROLES AND RESPONSIBILITIES

All staff, clinicians and managers that are involved in the care of the patient with a Tracheostomy insitu will be responsible for implementing and adhering to the policy. This includes Outpatient settings, Accident and Emergency department and day care settings.

5 KEY POLICY PRINCIPLES

5.1 Location of Patients

5.2 The ward must consider placement of patient within open ward area to facilitate close observation. When this is not possible i.e. on a ward with only single rooms, staff must ensure that patients with tracheostomy in place are nursed close to the nursing station. A risk assessment must be completed by the ward manager (Appendix 12)

5.3 Placement of the patient in a side room is not necessary unless clinically indicated e.g. infection control risk. Following risk assessment, if the patient requires a side room and is at risk of dislodging or occlusion of the Tracheostomy, the patient should be cared for on a one to one basis by a member of staff with appropriate competence in Tracheostomy Care. Ideally this should be a member of the wards own staff complement i.e. the ward nurse must provide the 1:1 care. The ward manager assesses the delegation of this task to agency nursing staff or other.

5.4 Decision to allocate a special (1:1) to a tracheostomy patient should be based on patient need and risk assessment (Appendix 12). The level of 1:1 supervision (Registered nurse, or Health Care Assistant) is assessed by the ward manager.

5.5 Every tracheostomy patient to be risk assessed daily, or when changes in condition or environment

5.6 Outside of the Critical Care Unit, patients with a Tracheostomy **must** be cared for in designated areas where the staff have the necessary knowledge and skills to competently care for these patients (5.1.8)

5.7 Patients with a Tracheostomy should not be admitted to any other areas in the Western Trust. They should only be admitted to one of the designated Tracheostomy wards where specialised equipment will be readily available. Patients admitted under other specialities may be treated as outliers in one of the designated wards

5.8 Hospital Co-ordinators/Patient Flow Team/Site Managers who are responsible for patient placement/bed allocation are aware of and adhere to local policy in relation to co-horting tracheostomy patients

5.9 The wards currently designated for Tracheostomy patients in the Western Trust Altnagelvin site are as follows:

Altnagelvin Hospital
Critical Care Unit (HDU/ICU)
Ward 3 -Head and Neck

Ward 24 - General Medicine
Ward 26 -Respiratory Medicine
Ward 44/CCU- Cardiology
Ward 31- General Surgery

5.10 Ward Discharges from Critical care

5.10.1 Discharge of a patient with a Tracheostomy from the Critical Care Unit to another ward should be planned with the medical and nursing staff and the CCOS (Critical Care Outreach Service). Discharge should not occur after 5pm or at weekends.

5.10.2 Handover should occur between the Critical Care medical staff and the medical team receiving the patient in the ward.

5.10.3 There should be clear documentation and handover of all aspects relating to the Tracheostomy using the Nursing Handover Form for Tracheostomy Care (Appendix 1) including reason for the Tracheostomy, type of tube that is in place, nursing care, weaning status on discharge and when the Tracheostomy is due to be changed.

5.10.4 Prior to stepping down from a Critical Care setting, patients must have a Tracheostomy with a removable inner cannula in place. Where possible, this should be non-cuffed and fenestrated especially if a speaking valve is being used. Exceptions to this must be clearly documented in the patient's medical notes and a date for review determined. At least one spare inner cannula should be sent with the patient on discharge to the ward.

5.10.5 All patients will be discharged from Critical Care with a Tracheostomy Emergency Box specific to their needs. This should remain with the patient at their bedside and on transfer from one area to another. For patients who are admitted to the hospital with a Tracheostomy, boxes will be available from CCOS during 08:00 – 18:00. Outside these hours, boxes can be collected from the Critical Care Unit. Patients being transferred in from another hospital should have details of their Tracheostomy requirements prior to transfer to ensure

appropriate equipment is available in Tracheostomy Emergency Box.

5.10.6 The Patient will remain under the care of their Medical/Surgical Consultant and must have a regular review by the Medical/Surgical team responsible for the patient.

6 PATIENT MANAGEMENT

The admitting consultant retains responsibility for all aspects of the patient's care.

- Advice, support and education on Tracheostomy care is available from:
- The Critical Care Outreach Team / ENT ward / Clinical Nurse Specialists Head and Neck Cancer;
- ENT and Maxillo-Facial Consultants
- All Clinical Staff hold responsibility for escalating any patient safety concerns in order to minimise risk. An incident form must be completed for any identified issue arising from unsafe or sub-optimal Tracheostomy care or management in to order ensure patient safety.

7 STAFF TRAINING / COMPETENCIES

- All staff caring for patients with a Tracheostomy must complete the WHSCT Tracheostomy Course, which is provided by CEC. Training is mandatory and should be completed **every two years** to ensure up to date knowledge and skills are retained which reflect current best practise.
- Tracheostomy Simulation Sessions are also mandatory and must be completed **annually** for staff in the dedicated Tracheostomy wards.
- All staff caring for a patient with a tracheostomy must complete In-hospital resuscitation training as per clinical area
- Training of medical staff likely to be first responders in an emergency situation (anaesthetics, ENT, OMFS) will run on a cyclical basis and all relevant junior staff will be included upon rotating to the trust.
- Competencies must be completed and signed off by a competent tracheostomy practitioner as specified in the Competencies.

8 CLINICAL MANAGEMENT OF TRACHEOSTOMY

- If any additional training is necessary then please contact the Critical Care Outreach Team, Head & Neck Clinical Nurse Specialists or ENT nursing staff.

- Portable suction and a full cylinder of oxygen must be available to transport patients to other clinical areas

- A member of staff competent in Tracheostomy care must escort the patient, when they leave the ward environment to attend X-ray department or when transferring the patient to another area.

- All patients receiving oxygen must have it delivered via a humidified circuit and an appropriate Tracheostomy mask applied to neck stoma.

- Tracheostomy care must be completed at least 6 hourly and all care must be recorded in the Tracheostomy Care Bundle (Appendix 2)

- Suction must be carried out as required (Appendix 3) and recorded on the suction record chart (Appendix 4)

- IPCC guidelines must be followed in relation to AGPs (Aerosol Generating Procedures) when performing suction of the tracheostomy tube

9 EQUIPMENT

- The appropriate equipment must be available in all areas caring for tracheostomy patients (Appendix 5)

- Patients with a tracheostomy tube insitu must have the emergency Tracheostomy box at the bedside at all times and the standard emergency resuscitation equipment close by (Appendix 6)

- This equipment must be kept at the patient's bedside for 7 days post decannulation (removal of tracheostomy)

- Registered Nursing staff are responsible for the delivery of safe Tracheostomy Care. They are also responsible for ensuring that equipment checks are undertaken once per shift and accurate up to date documentation is completed as per WHSCT Tracheostomy Bundle.

- It is the responsibility of the nurse in charge of the patients care and the ward manager to ensure appropriate Tracheostomy Bed-head signs are complete and displayed above the patients bed alongside the Emergency algorithm (Appendix 7).

- Tracheostomy trollies must be checked daily if in use, and weekly if not in use. Replacement stock must be ordered by the ward as required

10 TRACHEOSTOMY TUBE CHANGES

It is recommended that tubes are not left unchanged for any longer than 30 days (EEC, 1993). In practice the frequency with which the tube requires changing will be affected by the individual patient's condition and type of tube used.
Tube change should be avoided within the first 72 hours of the stoma being formed unless essential.

Responsibilities:

- It is the responsibility of the team who performed the Tracheostomy to make the first tube change, most likely that team will be either critical care, ENT and/or maxillo-facial surgeons

- It is recommended that someone that possesses advanced airway skills undertake the first change. This is a two-person procedure. At least one person must be experienced, confident and competent at changing tracheostomy tubes.

- Further tube changes must be carried out by staff with the necessary knowledge and skills i.e. Medical or Nursing staff with appropriate, advanced airway skills or an alternative competent skilled practitioner e.g. specialist nurse or specialist physiotherapist

- It is the responsibility of medical /surgical team to liaise with the appropriate team to arrange tracheostomy tube changes

- IPC guidelines must be followed in relation to AGPs when conducting a tracheostomy change.

There are two commonly used methods:

- Guided exchange using a tube exchange device -usually required for early changes and for patients with a high risk of airway loss

- Blind exchange using an obturator – for patients with formed stomas and a low risk of airway loss (Appendix 8)

11 HEAD AND NECK SURGICAL PATIENTS

- Patients, who have had major Head & Neck surgeries for cancer i.e. major oral resection with reconstruction, often have tracheostomy tubes in place. Special consideration regarding weaning and emergency care for these patients is required.
- See appendix 9 for specific guidance

12 WEANING

- **All** patients with a tracheostomy tube in place will undergo a weaning process prior to decannulation
- There are **TWO** weaning guides/pathways
- Appendix 10 is a standard weaning guide that can be utilised for short term and long-term tracheostomy tubes.
- Appendix 11 is a specific weaning pathway for Head and Neck Surgical Patients, prior to decannulation.
- The weaning process in WHSCT must be a multi-disciplinary approach
- Weaning and decannulation must be documented clearly in the patients clinical notes, and verbally relayed to staff looking after the patient

13 EMERGENCY

- In the event of an airway emergency fast, bleep the Anaesthetist **AND** ENT doctor on call on 6000 via switchboard.
- For out of hour emergencies, fast bleep anaesthetist as first responder AND contact the patients parent team
- The Trust endorses the National Tracheostomy Safety Project Algorithms for emergency care and these should be displayed alongside the Bed Head Sign at each Tracheostomy patient's bed space and follow the Tracheostomy Emergency Algorithm and for 7 days post decannulation (Appendix 7)
- There is a Bed Head sign for when the tracheostomy is in place.
- When the tracheostomy is removed, there is a Bed Head sign stating that the patient has had a tracheostomy in place – this needs to be displayed above the patent's bed for 7 days post decannulation

14 RESUSCITATION

- Bed head signs should be used in conjunction with the United Kingdom Resuscitation Guidelines: http://www.tracheostomy.org.uk/

15 SWALLOWING AND SPEECH/ALTERNATIVE FORMS OF COMMUNICATION

- Any patient covered by this policy, identified by medical or nursing staff as having a swallowing difficulty or at being at risk of aspiration should be referred to Speech and Language Therapy
- Patients with a tracheostomy who have difficulty communicating should be referred to Speech and Language Therapy

16 SPEAKING VALVES

- The patient must be assessed for suitability for speaking valve use by a practitioner who is competent in the use of speaking valves
- Speaking valves, if used, should only be used with an **uncuffed tube**, or a cuffed tube with the **cuff deflated**. If speaking valves are used on general wards, staff must be familiar with them, the risk of blockage, and know how to remove them.

17 EATING AND DRINKING

As per Trust guidelines all inpatients should be screened using MUST nutrition screening tool which can be found in the in the Nutrition & Hydration section of the nursing admission booklet. Patients should be referred to the Dietitian as per Department of Nutrition and Dietetics Referral Criteria.

Specifically in this patient group, the following patients should be referred to Dietetics:

- MUST >2
- Modified consistency diet recommended by Speech and Language Therapy
- If enteral feeding is required

18 HANDOVER

Nursing staff must identify patients with a tracheostomy at every handover/safety briefing. ITU medical staff should ensure all patients on the unit with tracheostomy, or within 48 hours of decannulation, remain on the handover even if technically discharged from care of critical care.

19 DISCHARGE

The WHSCT Tracheostomy Discharge Pack (Available on intranet) should be commenced at the beginning of post-operative phase. Patients must be provided with emergency contact numbers, and contact details of keyworkers involved in their pathway upon discharge (this is found in the Tracheostomy Discharge Pack)

- Cuffed tracheostomy's should be removed and a non-cuffed tube placed prior to discharge home.
- In some instances, cuffed tubes can be used in primary care settings where staff are appropriately trained in management of cuffs (e.g. Hospice)
- This must be assessed on an individual basis, and requires MDT input and risk assessment by the primary care provider.

MONITORING

Ward Sisters/Charge Nurse, Senior Medical staff and Critical Care Outreach staff should continually monitor practice and ensure adherence to the recommendations detailed in these guidelines.

CONSULTATION PROCESS

This policy was circulated for Trust wide consultation.

APPENDICIES

Appendix 1 - Critical Care Nursing Handover Form
Appendix 2 – Tracheostomy Care Bundle
Appendix 3 – Suction Procedure
Appendix 4 – Suction Record Chart
Appendix 5 – Tracheostomy Equipment
Appendix 6 – Tracheostomy Emergency Box
Appendix 7 - NTSP Bed Head Sign and Algorithm
Appendix 8 – Tracheostomy Tube Change Guideline
Appendix 9 – Head and Neck Surgery Patients with Tracheostomy
Appendix 10 – WHSCT Tracheostomy Weaning Guideline
Appendix 11 –Head and Neck Tracheostomy Weaning Pathway
Appendix 12 – General Risk Assessment

EQUALITY STATEMENT

In line with duties under the equality legislation (Section 75 of the Northern Ireland Act 1998), Targeting Social Need Initiative, Disability discrimination and the Human Rights Act 1998, an initial screening exercise to ascertain if this policy should be subject to a full impact assessment has been carried out. The outcome of the equality screening for this policy, procedure, guideline or protocol is:

Major impact ☐

Minor impact ☐

No impact ☐

SIGNATORIES

Policies & Procedures should be signed off by the author/responsible officer of the policy/procedure and the identified responsible director. Guidelines and Protocols do not require to be signed.

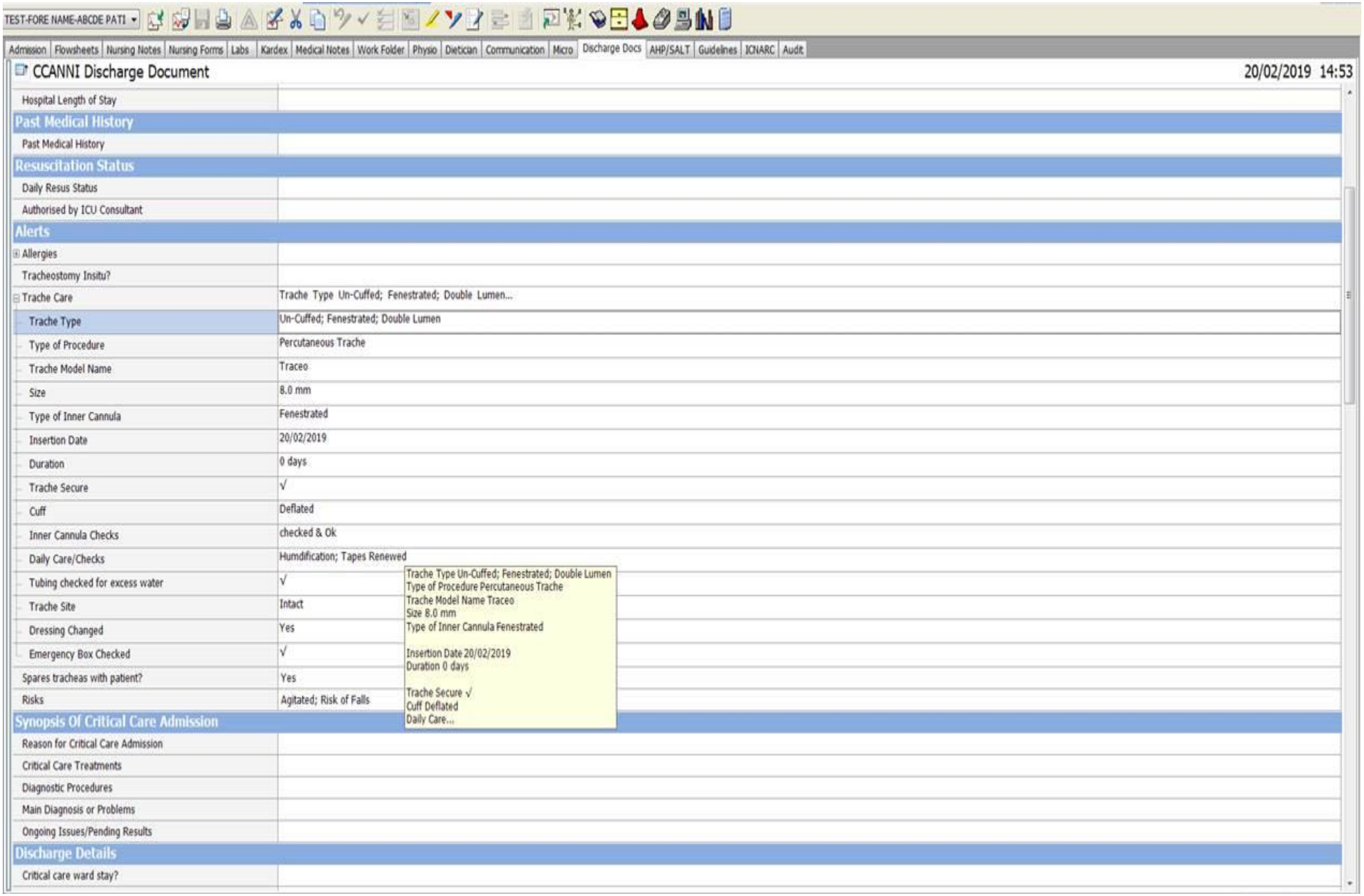
In relation to policies negotiated and agreed with Trade Union Side a signature from the Chair of Trade Union Side may also be included. In some circumstances Trade Union Side may decide not to sign a policy. Where this occurs a note should be made at the signatories section to say that the policy has been negotiated and consulted with Trade Union Side, however, not agreed.

Responsible Officer

Director of Acute Services

Name: Geraldine McKay Date:

Appendix 1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Admission
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Labs
Kardex
Medical Notes
Work Folder
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Communication
Micro
Discharge Docs
AHP/SALT
Guidelines
ICNARC
Audit
CCANNI Discharge Document
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Hospital Length of Stay
Past Medical History
Past Medical History
Resuscitation Status
Daily Resus Status
Authorised by ICU Consultant
Alerts
Allergies
Tracheostomy Insitu?
Trache Care
Trache Type Un-Cuffed; Fenestrated; Double Lumen...
Trache Type
Un-Cuffed; Fenestrated; Double Lumen
Type of Procedure
Percutaneous Trache
Trache Model Name
Traceo
Size
8.0 mm
Type of Inner Cannula
Fenestrated
Insertion Date
20/02/2019
Duration
0 days
Trache Secure
√
Cuff
Deflated
Inner Cannula Checks
checked & Ok
Daily Care/Checks
Humdification; Tapes Renewed
Tubing checked for excess water
√
Trache Site
Intact
Dressing Changed
Yes
Emergency Box Checked
√
Spares tracheas with patient?
Yes
Risks
Agitated; Risk of Falls
Trache Type Un-Cuffed; Fenestrated; Double Lumen
Type of Procedure Percutaneous Trache
Trache Model Name Traceo
Size 8.0 mm
Type of Inner Cannula Fenestrated
Insertion Date 20/02/2019
Duration 0 days
Trache Secure √
Cuff Deflated
Daily Care...
Synopsis Of Critical Care Admission
Reason for Critical Care Admission
Critical Care Treatments
Diagnostic Procedures
Main Diagnosis or Problems
Ongoing Issues/Pending Results
Discharge Details
Critical care ward stay?

APPENDIX 2

PATIENT LABEL

TRACHEOSTOMY CARE BUNDLE
(Complete at least 6 hourly)

TYPE OF TUBE ***(please tick as appropriate)***

SINGLE LUMEN		**DUAL LUMEN**	
CUFFED		**UNCUFFED**	
FENESTRATED		**NON-FENESTRTATED**	

TRACHEOSTOMY NAME:		**SIZE OF TUBE:**	
DATE TUBE INSERTED:		**DATE TUBE DUE CHANGE:**	

NEVER CAP OFF A CUFFED TRACHEOSTOMY TUBE WITH THE CUFF INFLATED

Date	**Time**	**Cuff** Inflated(CI) Deflated(CD)	**Cuff pressure** *(measure at least 6hrly)*	**Type of inner cannula in place** Fenestrated(FN) Non-fenestrated(NF)	**Inner cannula** Checked(CK) Replaced(R) Cleaned(CL)	**Humidification in place (please tick)**	**Oxygen Humidification** ***(Please tick)***		**Tracheostomy site**		**Emergency equipment** *Checked as per box list (please tick)*	**Suction working (please tick)** *See separate sheet for suctioning*	**Sign**
							Water bottle checked	Tubing checked for excess water	Intact(I) Red(R) Excoriated(E)	Dressing changed (Y/N)			

Appendix 3

Western Health and Social Care Trust

THE ROYAL MARSDEN

Procedure for Tracheal Suctioning

Essential equipment

- *Suction* source (wall or portable), collection container and tubing, changed every 24 hours to prevent growth of bacteria (Billau 2004)
- Disposable plastic apron
- Eye protection, for example goggles
- Bactericidal alcohol handrub
- Sterile *suction* catheters (assorted sizes **according to tube size**) selection of non-sterile gloves.
- Sterile bottled water (labelled '*suction*' with opening date), changed every 24 hours to prevent the growth of bacteria (Billau 2004)

Action	Rational
1 If secretions are tenacious, consider using, as prescribed, **2 hourly or more frequently 0.9% sterile sodium chloride nebulizers** or other mucolytic agents	*Suctioning* may not be as effective if the secretions become too tenacious or dry - frequent 0.9% sterile sodium chloride or acetylcysteine nebulizers may assist in loosening dry and thick secretions.
2 Explain procedure to patient and ensure upright position if possible.	To obtain the patient's co-operation and to help them relax. The procedure is unpleasant and can be frightening for the patient (Billau 2004, E). Reassurance is vital.
3 If a patient has a fenestrated outer tube, **ensure that a non fenestrated inner tube is *in situ***, rather than a fenestrated inner tube (Russell 2005).	*Suction* via a fenestrated inner tube allows a catheter to pass through the fenestration and cause trauma to the tracheal wall (Billau 2004, E).
4 Wash hands- as per WHSCT guidelines	To minimise the risk of cross-infection. E Gloves minimize the risk of infection transfer to the catheter or from the sputum to the nurse's hands (Fraise and Bradley 2009, E). Some patients may accidentally cough directly ahead at the nurse; standing to one side with tissues at the patient's tracheostomy minimizes this risk.
5 If patient is oxygen dependent, hyperoxygenate for a period of 3 minutes.	To minimize the risk of acute hypoxia (Billau 2004).
6 Ensure that the ***suction* pressure** is set to the appropriate level.	Recommended *suction* pressure is ≤100–120 mmHg (13–16 kPa) to minimize atelectasis (ICS 2008).
7 Select the correct size catheter. As a guide, the diameter of the *suction* catheter should not exceed one-half of the internal diameter of the tracheostomy tube (Griggs 1998, Hough 2001).	This ensures that hypoxia does not occur while *suctioning*: the larger the volume, the greater the bore of the tube. Incorrect choice of catheter size can cause mucosal damage. A tube with a too small diameter may not be able to remove thick secretions.

8 Open the end of the *suction* catheter pack and use the pack to attach the catheter to the *suction* tubing. Keep the rest of the catheter in the sterile packet. Use an aseptic technique throughout.	To reduce the risk of transferring infection from hands to the catheter and to keep the catheter as clean as possible. E
9 An additional clean, **disposable glove** can be used on the dominant hand at this stage.	To facilitate easy disposal of the *suction* catheter after *suction*.
10 Remove the catheter from the sleeve and **introduce the catheter to about one-third of its length or approximately 10–15 cm (ICS 2008) or until the patient coughs**. If resistance is felt, withdraw catheter approximately 1 cm before applying *suction* by placing the thumb over the *suction* port control and slowly withdraw the remainder of the catheter (Dean 1997, Wood 1998).	Gentleness is essential; damage to the tracheal mucosa can lead to trauma and respiratory infection. E The catheter should go no further than the carina to prevent trauma. R The catheter is inserted with the *suction* off to reduce the risk of trauma (Clotworthy 2006c, C).
11 Do not *suction* the patient for more than 10 seconds (ICS 2008).	Prolonged *suctioning* may result in acute hypoxia, cardiac arrhythmias (Day *et al.* 2002, C), mucosal trauma, infection and the patient experiencing a feeling of choking.
12 Wrap catheter around dominant hand, then pull back glove over soiled catheter, thus containing catheter in glove, then discard.	Catheters are used only once to reduce the risk of introducing infection
13 If the patient is oxygen dependent, **reapply oxygen immediately.**	To prevent hypoxia.
14 Rinse the suction tubing by dipping its end into the sterile water bottle and applying *suction* until the solution has rinsed the tubing through.	*suction* until the solution has rinsed the tubing through.
15 If the patient requires further *suction*, repeat the above actions using new gloves and a new catheter. Allow the patient sufficient time to recover between each *suction* (Billau 2004), particularly if oxygen saturation is low or if patient coughs several times during the procedure. The patient should be observed throughout the procedure.	To ensure general condition is stable.
16 Repeat the *suction* until the airway is clear. No more than three *suction* passes should be made during any one *suction* episode (Day 2000, Glass and Grap 1995) unless in emergency such as tube occlusion (Nelson 1999).	To minimize the risk of hypoxaemia (Day 2000, E).
Post-procedure	
17 Where appropriate, reconnect the patient to oxygen within 10 seconds post *suctioning*.	To minimize the risk of hypoxaemia (Day 2000, E).
18 Observe patient's respiratory rate and pattern, oxygen saturations, heart rate and work of breathing closely over the following 15 minutes. Observe for signs of bleeding.	*Suctioning* can be complicated by hypoxaemia, bradycardia, tracheal mucosal damage and bleeding (ICS 2008, C).

APPENDIX 4

PATIENT LABEL	**SUCTION & SECRETION RECORD** ***(to be used in addition to Tracheostomy Care Bundle OR Laryngectomy Care Bundle)***	**KEY**	
		SPUTUM AMOUNT 1. Small 2. Medium 3. Large	**SPUTUM TYPE** M= Mucoid MP= Mucopurulent P= Purulent F= Frothy

Date	Time	Oral Secretions (amount)	Yankauer required (Y/N)	Tracheal Secretions by suction (Amount and Type)	Expectorated (Y/N)	Comments	Signature

APPENDIX 5

Essential bedside equipment

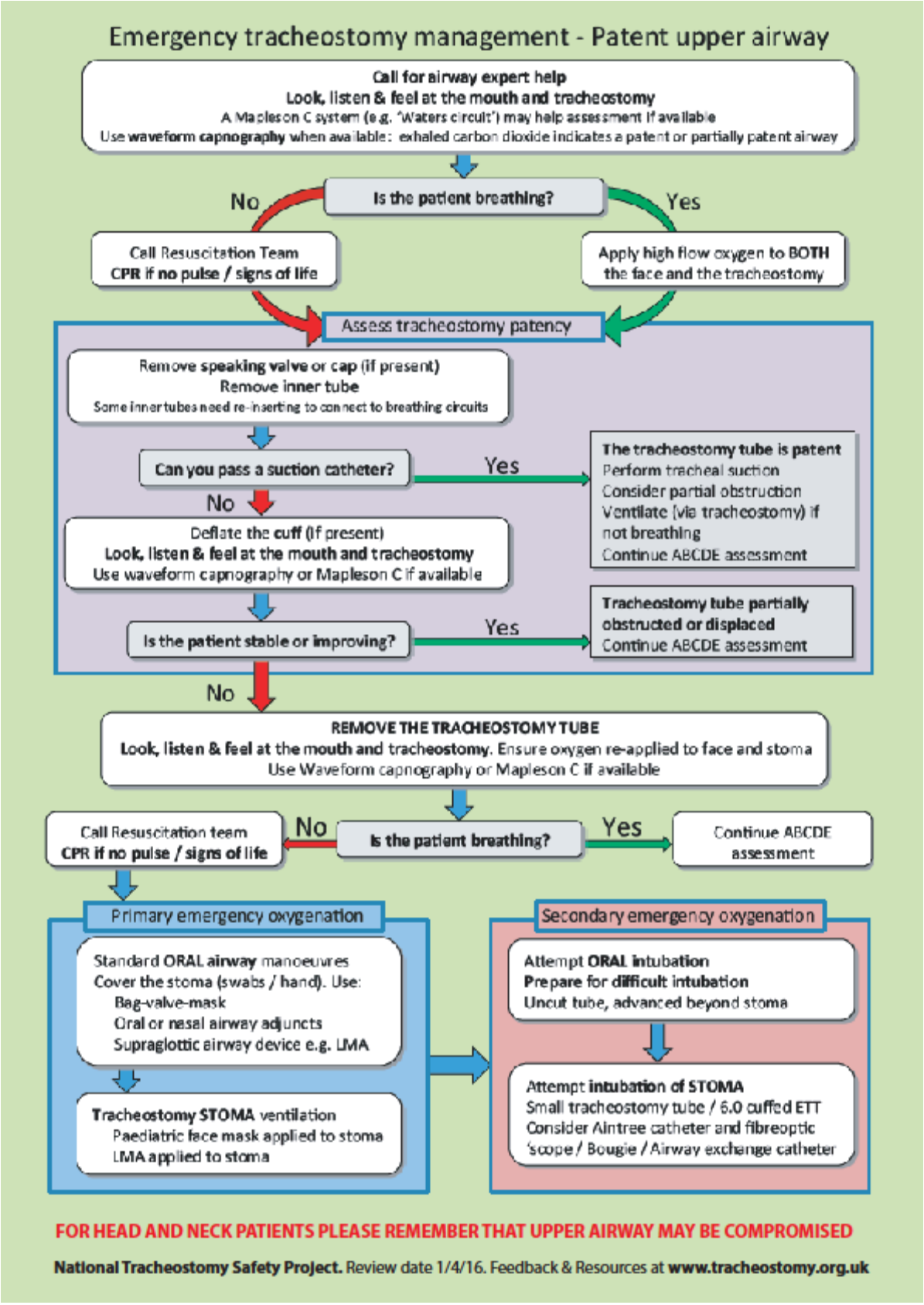
- Emergency Tracheostomy Box
- Nurse call bell
- Ambu-bag/paediatric mask/portable suction (Resus trolley)
- Oxygen port with double flow meter
- Non-Rebreathe Mask
- Humidified oxygen equipment
- Cuff pressure manometer
- Wall suction
- Yankauer suckers
- Soft suction catheters of appropriate size
- Spare inner cannula (Can use disposable inner cannulas for Shiley tubes)
- Clean pot for spare inner cannula
- Tracheostomy cleaning swab
- Sterile water for suction tubing
- Sterile dressing pack
- Tracheostomy dressing
- Tracheostomy Velcro holder
- PPE: Gloves, apron, Eye protection
- Communication aids
- Head of bed signs

APPENDIX 6

Emergency Tracheostomy Box containing:

- Replacement tracheostomy tubes- same size and type as patient currently has, one a size smaller the same type and one a size smaller than the patient has in situ cuffed for resuscitation purpose
- Tracheal dilators
- Catheter mount with suction port
- 20 ml syringe
- Lubricating gel x2 sachets
- Tracheostomy dressing
- Tracheostomy Velcro holder
- Sterile Scissors

APPENDIX 7


Emergency tracheostomy management - Patent upper airway
Call for airway expert help
Look, listen & feel at the mouth and tracheostomy
A Mapleson C system (e.g. 'Waters circuit') may help assessment if available
Use waveform capnography when available: exhaled carbon dioxide indicates a patent or partially patent airway
Is the patient breathing?
No
Yes
Call Resuscitation Team
CPR if no pulse / signs of life
Apply high flow oxygen to BOTH the face and the tracheostomy
Assess tracheostomy patency
Remove speaking valve or cap (if present)
Remove inner tube
Some inner tubes need re-inserting to connect to breathing circuits
Can you pass a suction catheter?
Yes
The tracheostomy tube is patent
Perform tracheal suction
Consider partial obstruction
Ventilate (via tracheostomy) if not breathing
Continue ABCDE assessment
No
Deflate the cuff (if present)
Look, listen & feel at the mouth and tracheostomy
Use waveform capnography or Mapleson C if available
Is the patient stable or improving?
Yes
Tracheostomy tube partially obstructed or displaced
Continue ABCDE assessment
No
REMOVE THE TRACHEOSTOMY TUBE
Look, listen & feel at the mouth and tracheostomy. Ensure oxygen re-applied to face and stoma
Use Waveform capnography or Mapleson C if available
Call Resuscitation team
CPR if no pulse / signs of life
No
Is the patient breathing?
Yes
Continue ABCDE assessment
Primary emergency oxygenation
Standard ORAL airway manoeuvres
Cover the stoma (swabs / hand). Use:
Bag-valve-mask
Oral or nasal airway adjuncts
Supraglottic airway device e.g. LMA
Tracheostomy STOMA ventilation
Paediatric face mask applied to stoma
LMA applied to stoma
Secondary emergency oxygenation
Attempt ORAL intubation
Prepare for difficult intubation
Uncut tube, advanced beyond stoma
Attempt intubation of STOMA
Small tracheostomy tube / 6.0 cuffed ETT
Consider Aintree catheter and fibreoptic 'scope / Bougie / Airway exchange catheter
FOR HEAD AND NECK PATIENTS PLEASE REMEMBER THAT UPPER AIRWAY MAY BE COMPROMISED
National Tracheostomy Safety Project. Review date 1/4/16. Feedback & Resources at www.tracheostomy.org.uk

This patient has a

TRACHEOSTOMY

Affix patient label

Surgical/Open/Percutaneous tracheostomy

DATE PERFORMED .....

TRACHEOSTOMY TUBE SIZE .....

DATE DECANNULATED .....

Percutaneous

Slit type

Circle as appropriate

Notes:

Emergency Call: 6000

Anaesthesia: **ENT:** **MaxFax Consultant:** **Adult Cardiac Arrest Team: 6666**

This patient has had a

TRACHEOSTOMY TUBE REMOVED

(Display for 7 days following decannulation)

Affix patient label

Date tracheostomy inserted .....

Date tube removed .....

H&C number .....

Insert number of DAYS that Tracheostomy Tube has been removed:

Notes:

Emergency Call 6000:

Anaesthesia: **ENT:** **MaxFax Consultant:** **Adult Cardiac Arrest Team: 6666**

APPENDIX 8

Tracheostomy tube change

Equipment required:

- Dressing pack
- Suture cutter
- Appropriately sized tracheostomy tube and one a size smaller
- Tracheostomy tube Velcro tie
- 10ml syringe for cuffed tubes
- Water-soluble lubricant
- Sterile normal saline
- Tracheostomy dressing
- Gloves, apron and protective eye wear
- Tracheal dilators
- Functioning suction unit and appropriate sized suction catheters
- Stethoscope
- Airway exchange catheter
- Mapleson circuit for pre-oxygenation
- Resuscitation equipment

Blind exchange using an obturator

- Check emergency equipment
- Apply continuous pulse oximetry
- Explain procedure to patient and gain patient consent
- Position patient in semi-recumbent position
- Where required pre-oxygenate
- Ensure assistant is clear regarding what is expected of them
- Check and lubricate tube
- Insert obturator
- Ask assistant to suction if required, remove old dressing, inner cannula and tapes and support tube

- Deflate cuff if cuff inflated
- Remove tube on expiration
- If patient not oxygen dependent and stoma well formed, observe site, swab if site looks infected and clean stoma
- Insert tube on expiration, remove obturator (inflate cuff)
- Check for airflow through tube
- Ask assistant to support the new tube
- Dress and apply tracheostomy ties (Velcro)
- Replace inner cannula where used
- Check patient is stable
- Inflate cuff and check cuff pressure (if applicable)
- All tube changes must be documented in the patients notes along with details of the Tracheostomy tube inserted

Guided exchange using a bougie device

- Check emergency equipment
- Apply continuous pulse oximetry
- Explain procedure to patient and gain patient consent
- Position patient in semi-recumbent position
- Where required pre-oxygenate
- Ensure assistant is clear regarding what is expected of them
- Check and lubricate tube
- Ask assistant to suction if required, remove old dressing, inner cannula and tapes and support the tube
- Insert bougie to length of tube
- Ask assistant to deflate the cuff
- Remove old tube over bougie
- Insert new tube over bougie
- Check for airflow through tube.
- Inflate cuff and check cuff pressure (if applicable)

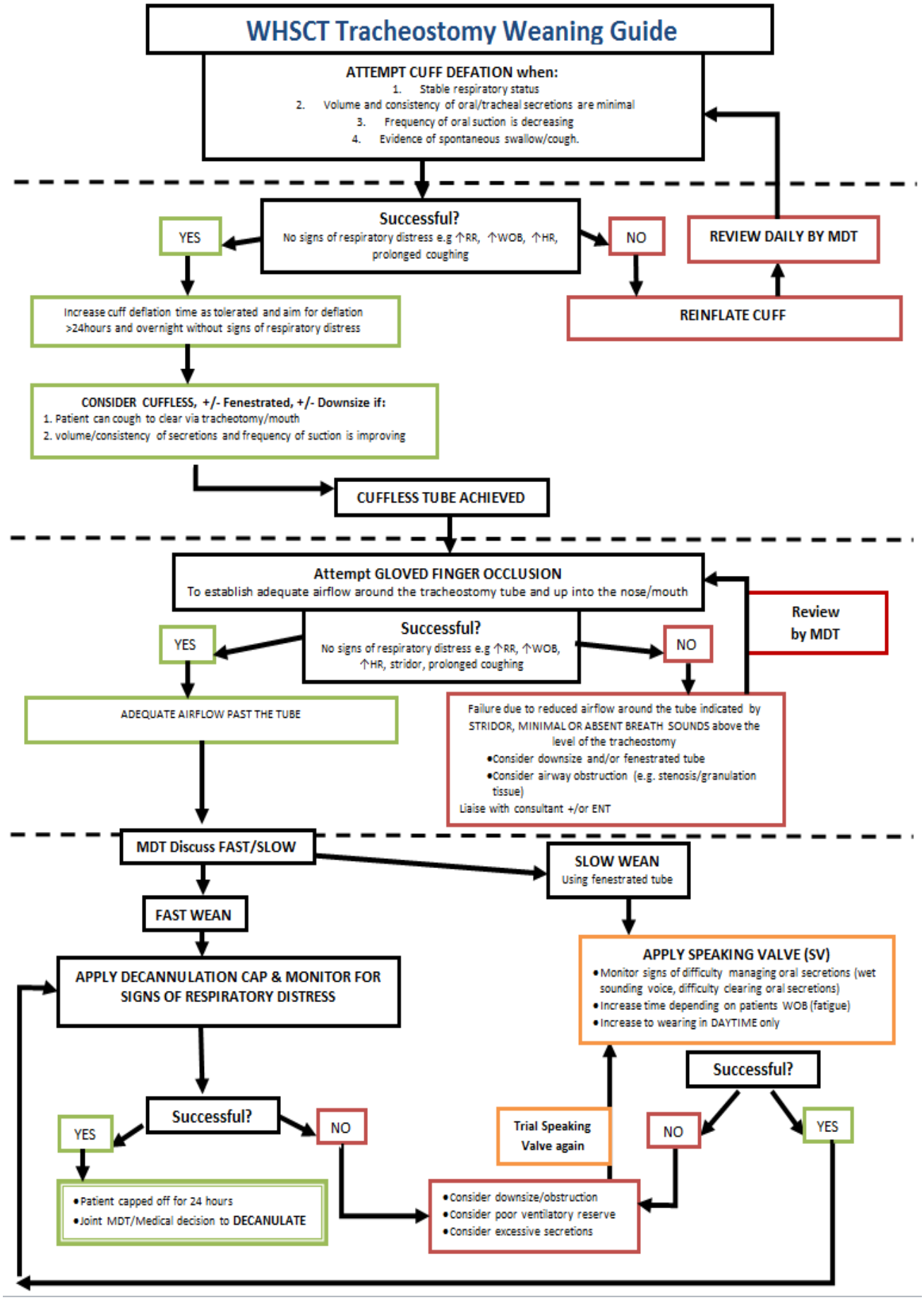
- Remove bougie
- Observe site, swab if required and clean while assistant support the tube
- Dress and apply tracheostomy Velcro tie
- Replace inner cannula
- Check patient is stable (and cuff pressure if applicable)
- All tube changes must be documented in the patients notes along with details of the Tracheostomy tube inserted

APPENDIX 9

HEAD AND NECK CANCER SURGERY PATIENTS WITH TRACHEOSTOMY TUBES

- Patients undergoing complex Head and Neck surgery will often have a surgical tracheostomy placed for acute airway cover.
- These differ from the percutaneous tubes, as the tract for surgical tracheostomy can remain patent for up to 7 days after decannulation (removal).
- Tracheostomy tubes are sutured in place to avoid ties that can restrict free flap blood flow.
- These patients will undergo tracheostomy weaning as per the Western Trust 'WHSCT Head and Neck Tracheostomy Weaning Pathway'
- Decannulation should take place after evaluation of the upper airway and discussion with the MDT.
- In the case of emergency intubation being required, transoral intubation may be difficult.
- The National Tracheostomy Safety Project Algorithm should be utilised, but front of neck access should be considered as a primary source of intubation.
- In a recently decannulated tracheostomy, stoma site should be visualised early and intubation via tracheotomy site attempted.
- Bougie guide may create false passage if trachea is not visible.
- In Head and Neck surgical patients, there may be complex reconstructive surgical changes or tumour present making oral intubation more difficult.
- Intubation of the tracheotomy can be carried out with a cuffed tracheostomy or ET (Endotracheal Tube)

APPENDIX 10


WHSCT Tracheostomy Weaning Guide
ATTEMPT CUFF DEFATION when:
1. Stable respiratory status
2. Volume and consistency of oral/tracheal secretions are minimal
3. Frequency of oral suction is decreasing
4. Evidence of spontaneous swallow/cough.
Successful?
No signs of respiratory distress e.g ↑RR, ↑WOB, ↑HR, prolonged coughing
YES
NO
REVIEW DAILY BY MDT
REINFLATE CUFF
Increase cuff deflation time as tolerated and aim for deflation >24hours and overnight without signs of respiratory distress
CONSIDER CUFFLESS, +/- Fenestrated, +/- Downsize if:
1. Patient can cough to clear via tracheotomy/mouth
2. volume/consistency of secretions and frequency of suction is improving
CUFFLESS TUBE ACHIEVED
Attempt GLOVED FINGER OCCLUSION
To establish adequate airflow around the tracheostomy tube and up into the nose/mouth
Successful?
No signs of respiratory distress e.g ↑RR, ↑WOB, ↑HR, stridor, prolonged coughing
YES
NO
Review by MDT
ADEQUATE AIRFLOW PAST THE TUBE
Failure due to reduced airflow around the tube indicated by STRIDOR, MINIMAL OR ABSENT BREATH SOUNDS above the level of the tracheostomy
•Consider downsize and/or fenestrated tube
•Consider airway obstruction (e.g. stenosis/granulation tissue)
Liaise with consultant +/or ENT
MDT Discuss FAST/SLOW
SLOW WEAN
Using fenestrated tube
FAST WEAN
APPLY SPEAKING VALVE (SV)
•Monitor signs of difficulty managing oral secretions (wet sounding voice, difficulty clearing oral secretions)
•Increase time depending on patients WOB (fatigue)
•Increase to wearing in DAYTIME only
APPLY DECANNULATION CAP & MONITOR FOR SIGNS OF RESPIRATORY DISTRESS
Successful?
YES
NO
Trial Speaking Valve again
Successful?
NO
YES
•Patient capped off for 24 hours
•Joint MDT/Medical decision to DECANULATE
•Consider downsize/obstruction
•Consider poor ventilatory reserve
•Consider excessive secretions

APPENDIX 11

HEAD AND NECK SURGICAL TRACHEOSTOMY WEANING PATHWAY

MULTIDISCIPLINARY TEAM

MDT should include: Surgical, Medical and Nursing teams, Speech and Language Therapist, Physiotherapist

WEANING CRITERIA

- SpO2 within target range
- RR stable 14-19 / min
- HR Stable 60-104
- Patient Alert
- GCS >8 consistently
- Able to clear secretions
- Effective cough
- No planned theatre procedures

STOP CRITERIA

- SpO2 < patient target
- RR >19
- HR <60 OR >104
- GCS <8
- Patient distress or fatigue

CRITERIA FOR DECANULATION

- Tolerating Cuff down more than 24 hours
- Tolerating Speaking valve or capped off
- Minimal suction
- Managing own secretions
- Effective cough
- Stable observations
- No planned theatre procedures

Does the patient meet the criteria to consider weaning?

Has the Head & Neck Consultant given consent to commence weaning?

Stable chest status and secretion load?

NO → Keep cuff inflated

MDT to review regularly and reassess potential to commence weaning

YES ↓

Deflate the cuff using 2 person technique with synchronised suction on deflation by appropriately trained staff.

Careful attention to 'STOP CRITERIA', observe patient for deterioration, are they tolerating?

Is this tolerated without adverse effects for a minimum of 24h?

NO → Re-inflate the cuff, document patient's response to trials

Consult the MDT

Slow wean MDT approach

YES ↓

MDT REVIEW AND DISCUSSION

Head & Neck Consultants to inspect upper airway. Consider FNE if indicated. MDT to liaise and determine plan to progress weaning once up to 24 hours of cuff deflation has been tolerated: Fenestrated tracheostomy tube in situ +/- downsize of tube

YES ↓

With the cuff deflated or a cuffless tube:

Occlude tracheostomy tube with gloved finger for 2 minutes & monitor patient response

Is there adequate airflow at mouth/upper airway?

Are they able to swallow, manage saliva and voice?

NO → Liaise with MDT to review weaning plan

Liaise with SLT regarding voice/swallowing

Consider Nasendoscopy assessment if difficulties persist

YES ↓

Consider use of speaking valve or decannulation cap as part of the weaning process:

Pay close attention to 'Stop Criteria' when speaking valve or cap is on, remove if difficulty evident

Does the patient meet the criteria for decannulation?

NO → Document response to speaking valve/capping off trial

Liaise with the MDT

Liaise with SLT

YES ↓

Contact medical & surgical team for authorisation to decannulate: document discussions in notes

Request team member with decannulation competencies to review patient and Anaesthetic Team aware of plan to decannulate

AFTER →

Post decannulation increase monitoring of patient:

Every 30 minutes for 2 hours

Hourly observations for next 4 hours

4 hourly observations for next 24 hours

If deterioration with 'NEWS2', escalate to Surgical & Medical Teams

Adapted from the Oxford University Hospital NHS Foundation Trust 'Ward Tracheostomy Weaning Pathway'

APPENDIX 12

Western Health and Social Care Trust

General Risk Assessment Form

Area or Activity Being Risk Assessed:	Directorate:	Date of Assessment:
Facility:	Sub-Directorate:	Review Date:
Ward/Department:	Assessor(s):	Contact No/Ext.

Description of Hazard	Persons affected (e.g. Staff, clients, patients, contractors)	Existing Control Measures	Current Risk Rating (refer to Risk Rating Matrix) (please mark with an "X")				Further Action Required to Address Gaps in Controls	Person(s) Responsible	Date to be completed by?	Date Completed
			Low	Med	High	Ext				

Please note that if any of the above hazards cannot be adequately controlled at a local level, the Facility/Ward Manager should inform their line manager. The line manager will then consider including it on the appropriate Risk Register. Please refer to the Trust's Risk Management Strategy for further guidance on this process.

Signed by Risk Assessor(s) _____ Date: _____ 20 _____

Original Form to be retained at Ward/Facility and copy provided to line Manager. Risk Assessment must be reviewed at least yearly, or earlier if necessary (please refer to Risk Assessment Guidance document on circumstances which should prompt an earlier review).