



# TRACHEOSTOMY CARE STUDY

National Confidential Enquiry into Patient Outcome and Death (NCEPOD)

## CRITICAL CARE DISCHARGE/DECANNULATION QUESTIONNAIRE

**CONFIDENTIAL**

Hospital number:                     NHS number:

### Who completed this questionnaire?

Name: \_\_\_\_\_ Position: \_\_\_\_\_

Hospital: \_\_\_\_\_ Trust: \_\_\_\_\_

To be completed on all patients who are admitted to critical care (those who have their tracheostomy placed percutaneously or surgically on the critical care unit and those admitted to critical care following a surgical tracheostomy insertion) at the time of tracheostomy REMOVAL, DEATH or DISCHARGE from the unit

### What is this study about?

NCEPOD is examining remediable factors in the process of care of ADULT patients (16 years or older) who undergo the insertion of a tracheostomy. Data is being collected over a 4 month period from all sites where the insertion of a tracheostomy is undertaken across England, Wales, Northern Ireland, Jersey, Guernsey and the Isle of Man, from both the public and the independent sector (where applicable). Both surgical and percutaneous insertions undertaken on either an emergency or elective basis will be included in the data collection.

### How to complete the form:

Information will be collected using two methods; box cross and free text, where your opinion will be requested. This form will be electronically scanned. Please use a black or blue pen. Please complete all questions with either block capitals or a bold cross inside the boxes provided e.g.

Was this a standalone tracheostomy procedure?  
 Yes  No

### CPD accreditation:

Consultants who complete NCEPOD questionnaires make a valuable contribution to the investigation of patient care. Completion of questionnaires also provides an opportunity for consultants to review their clinical management and undertake a period of personal reflection. These activities have a continuing medical and professional development value for individual consultants. Consequently, NCEPOD recommends that consultants who complete NCEPOD questionnaires keep a record of this activity which can be included as evidence of internal/self directed Continuous Professional Development in their appraisal portfolio.

If you make a mistake, please "black-out" the incorrect box and re-enter the correct information, e.g.  
 Yes  No

If you (the clinician completing the questionnaire) would like email confirmation of the completion of this questionnaire for your records, please clearly supply your email address below.

**Unless indicated, please mark only one box per question.**

### Questions or help?

A list of definitions is provided on page 2 of the questionnaire. If you have any queries about this study or this questionnaire, please contact [tracheostomy@ncepod.org.uk](mailto:tracheostomy@ncepod.org.uk) Or telephone: 020 7251 9060 Thank you for taking the time to complete this questionnaire. The findings of the study will be published in 2014.

**FOR NCEPOD USE ONLY**

     

## DEFINITIONS

Elective procedure/operation	A procedure or operation that is planned or booked in advance of routine admission to hospital.
Levels of ward care	<p>Level 0: Patients whose needs can be met through normal ward care in an acute hospital.</p> <p>Level 1: Patients at risk of their condition deteriorating, or those recently relocated from higher levels of care whose needs can be met on an acute ward with additional advice and support from the critical care team.</p> <p>Level 2: (e.g. HDU) Patients requiring more detailed observation or intervention including support for a single failing organ system or post operative care, and those stepping down from higher levels of care. (NB: When Basic Respiratory and Basic Cardiovascular support are provided at the same time during the same critical care spell and no other organ support is required, the care is considered to be Level 2 care).</p> <p>Level 3: (e.g. ICU) Patients requiring advanced respiratory support alone or basic respiratory support together with support of at least two organs. This level includes all complex patients requiring support for multi-organ failure. (NB: Basic Respiratory and Basic Cardiovascular do not count as 2 organs if they occur simultaneously (see above under Level 2 care), but will count as Level 3 if another organ is supported at the same time).</p>
Critical care	Level 2 and 3 care
Bed head signs	A sign available at the patient's bed space which allows the quick and easy communication of information, (National Tracheostomy Safety Project, 2012. Page 46)

## CODES FOR SPECIALTY

### SURGICAL SPECIALTIES

100 = General Surgery	107 = Vascular Surgery	161 = Burns Care
101 = Urology	110 = Trauma & Orthopaedics	170 = Cardiothoracic Surgery
103 = Breast Surgery	120 = Ear, Nose & Throat (ENT)	172 = Cardiac Surgery
104 = Colorectal Surgery	130 = Ophthalmology	173 = Thoracic Surgery
105 = Hepatobiliary & Pancreatic Surgery	140 = Oral Surgery	180 = Accident & Emergency
106 = Upper Gastrointestinal Surgery	145 = Maxillo-Facial Surgery	190 = Anaesthetics
	150 = Neurosurgery	192 = Critical/Intensive Care Medicine
	160 = Plastic Surgery	

### MEDICAL SPECIALTIES

300 = General Medicine	330 = Dermatology	430 = Geriatric Medicine
301 = Gastroenterology	340 = Respiratory Medicine	500 = Obstetrics & Gynaecology
302 = Endocrinology	350 = Infectious Diseases	501 = Obstetrics
303 = Clinical Haematology	352 = Tropical Medicine	502 = Gynaecology
306 = Hepatology	360 = Genito-Urinary Medicine	800 = Clinical Oncology
307 = Diabetic Medicine	361 = Nephrology	810 = Radiology
314 = Rehabilitation	370 = Medical Oncology	820 = General Pathology
315 = Palliative Medicine	400 = Neurology	823 = Haematology
320 = Cardiology	410 = Rheumatology	

## CODES FOR GRADE

01 – Consultant	02 – Staff grade/Associate specialist
03 – Trainee with CCT	04 – Senior specialist trainee (ST3+ or equivalent)
05 – Junior specialist trainee (ST1&ST2 or CT equivalent)	06 – Basic grade (HO/FY1 or SHO/FY2 or equivalent)
07 - Nursing	08 - Physiotherapy
09 - Other	



## SECTION 1

### STRUCTURED COMMENTARY

Please provide a brief summary of this case, adding any comments or information you feel relevant, (please write clearly for the benefit of the specialist advisory group who will be reviewing the questionnaires). You may also type on a separate sheet. You may like to fill in the summary once you have completed the rest of the questionnaire.

NCEPOD attaches great importance to this summary. Please give as much information as possible about the care of this patient.





## A. PATIENT DETAILS

1. Age at the time of insertion:
2. Sex:  Male  Female
- 3a. Date of hospital tracheostomy insertion:        Unknown  
d d m m y y y y
- 3b. Time of tracheostomy insertion:   (24 hour clock)  Unknown  
h h m m
4. Reason for questionnaire completion:
- Decannulation
- Discharge out of the critical care with the tracheostomy in situ (please see definitions P2)
- Death

## B. TRACHEOSTOMY TUBE CHANGES

5. Was a Trust or ward guideline for changing the tracheostomy tube followed for this patient?  Yes  No  Unknown

### FIRST CHANGE

- 6a. Please specify the date of the first change        Unknown  
d d m m y y y y

If NA, please go to question 15

- NA - Not changed
- 6b. Time of first change   (24 hour clock)  Unknown  
h h m m

- 7a. Was this:  Planned  Unplanned  Unknown

- 7b. If UNPLANNED, what were the reasons for this?
- Tube blocked  Tube displaced
- Unknown  Other (Please specify)

8. If PLANNED, how many trained/skilled members of staff were present for the tube change?   Unknown





9a. What type of tracheostomy tube was used to replace? (Please answer all)

- |      |  |   |                                  |
|------|--|---|----------------------------------|
| i)   | <input type="checkbox"/> Cuffed                      | <input type="checkbox"/> Uncuffed                       | <input type="checkbox"/> Unknown |
| ii)  | <input type="checkbox"/> Non-fenestrated             | <input type="checkbox"/> Fenestrated                    | <input type="checkbox"/> Unknown |
| iii) | <input type="checkbox"/> Inner tube                  | <input type="checkbox"/> No inner tube                  | <input type="checkbox"/> Unknown |
| iv)  | <input type="checkbox"/> Sub glottic aspiration port | <input type="checkbox"/> No sub glottic aspiration port | <input type="checkbox"/> Unknown |
| v)   | <input type="checkbox"/> Standard length             | <input type="checkbox"/> Adjustable flange tube         | <input type="checkbox"/> Unknown |
| vi)  | <input type="checkbox"/> Minitracheostomy            |   |                                  |
| vii) | <input type="checkbox"/> Other (please specify)      | <input type="text"/>                                    |                                  |

9b. Please give details as to why this tube was used:

9c. What size tracheostomy was used?

- 6     7     8     9     Unknown  
 Other

**SECOND CHANGE**

10a. Please specify the date of the second change:

- Unknown  
           d d            m m            y y y y  
 NA - Not changed

**If NA, please go to question 15**

10b. Time of second change:

- (24 hour clock)     Unknown  
           h h            m m

11a. Was this:

- Planned     Unplanned     Unknown

11b. If UNPLANNED, what were the reasons for this?

- Tube blocked     Tube displaced  
 Unknown     Other (Please specify)

12. If PLANNED, how many trained/skilled members of staff were present for the tube change?

- Unknown

13a. What type of tracheostomy tube was used to replace? (Please answer all)

- |      |  |   |                                  |
|------|--|---|----------------------------------|
| i)   | <input type="checkbox"/> Cuffed                      | <input type="checkbox"/> Uncuffed                       | <input type="checkbox"/> Unknown |
| ii)  | <input type="checkbox"/> Non-fenestrated             | <input type="checkbox"/> Fenestrated                    | <input type="checkbox"/> Unknown |
| iii) | <input type="checkbox"/> Inner tube                  | <input type="checkbox"/> No inner tube                  | <input type="checkbox"/> Unknown |
| iv)  | <input type="checkbox"/> Sub glottic aspiration port | <input type="checkbox"/> No sub glottic aspiration port | <input type="checkbox"/> Unknown |
| v)   | <input type="checkbox"/> Standard length             | <input type="checkbox"/> Adjustable flange tube         | <input type="checkbox"/> Unknown |
| vi)  | <input type="checkbox"/> Minitracheostomy            |   |                                  |
| vii) | <input type="checkbox"/> Other (please specify)      | <input type="text"/>                                    |                                  |





13b. Please give details as to why this tube was used:

13c. What size tracheostomy was used?  6  7  8  9  Unknown

Other

14a. Were there more than two tracheostomy tube changes since insertion?  Yes  No  Unknown

14b. If YES, how often thereafter was this patient's tracheostomy tube changed as a planned procedure?

- |  |  |
|--|--|
| <input type="checkbox"/> Weekly          | <input type="checkbox"/> More than once weekly   |
| <input type="checkbox"/> No fixed policy | <input type="checkbox"/> Other (Please specify) <input style="width: 150px;" type="text"/> |
| <input type="checkbox"/> Unknown         |  |

### C. HUMIDIFICATION

15. What was the predominant method used for this patient in critical care?

- |  |  |
|--|--|
| <input type="checkbox"/> Hot water humidification  | <input type="checkbox"/> Cold water humidification   |
| <input type="checkbox"/> Heat & moisture exchanger | <input type="checkbox"/> Stoma filter or bib   |
| <input type="checkbox"/> None                      | <input type="checkbox"/> Other (Please specify) <input style="width: 150px;" type="text"/> |
| <input type="checkbox"/> Unknown                   |  |

### D. CUFF PRESSURE MONITORING

16. Do you have the equipment to measure cuff pressure?  Yes  No  Unknown

17a. Was cuff pressure monitored?  Yes  No  Unknown

Not applicable - equipment not available  
**Please go to question 17b**

Not applicable - cuffed tube not used  
**Please go to question 21**

17b. Was the cuff continuously inflated?  Yes  No  Unknown

17c. If NO, how often was the cuff deflated? (Please specify)





- 18a. Was a daily assessment made of the need for cuff deflation?  Yes  No  Unknown
- 18b. Was a daily assessment made on the outcome of deflation whilst a cuffed tube was in use?  Yes  No  Unknown
19. How often does the protocol/guideline (if present) suggest that cuff monitoring should be undertaken?
- |  |  |
|--|--|
| <input type="checkbox"/> No protocol/guideline | <input type="checkbox"/> Continuous monitoring                       |
| <input type="checkbox"/> Once every shift      | <input type="checkbox"/> More than once a shift but not continuously |
| <input type="checkbox"/> Unknown               | <input type="checkbox"/> Other (Please specify) <input type="text"/> |
20. How often was cuff pressure monitored and recorded?
- |  |  |
|--|--|
| <input type="checkbox"/> Continuous monitoring                       | <input type="checkbox"/> Once every shift                            |
| <input type="checkbox"/> More than once a shift but not continuously | <input type="checkbox"/> Cuff pressure not monitored                 |
| <input type="checkbox"/> Unknown                                     | <input type="checkbox"/> Other (Please specify) <input type="text"/> |

## E. INNER CANNULA CLEANING

21. Was an inner cannula used for this patient at any stage whilst on this ward?  Yes  No  Unknown

**If NO, go to question 24**

**If YES:**

22. How often does the protocol/guideline (if present) suggest that the inner cannula inspection and cleaning (if required) should be undertaken?
- |  |  |
|--|--|
| <input type="checkbox"/> No protocol/guideline | <input type="checkbox"/> Hourly                                      |
| <input type="checkbox"/> Two hourly            | <input type="checkbox"/> Four hourly                                 |
| <input type="checkbox"/> Eight hourly          | <input type="checkbox"/> Once every shift                            |
| <input type="checkbox"/> Patient specific      | <input type="checkbox"/> Other (Please specify) <input type="text"/> |
| <input type="checkbox"/> Unknown               |  |
23. How often is it documented that the inner cannula was inspected and cleaned (if required) for this patient?
- |   |  |
|---|--|
| <input type="checkbox"/> Hourly           | <input type="checkbox"/> Two hourly                                  |
| <input type="checkbox"/> Four hourly      | <input type="checkbox"/> Eight hourly                                |
| <input type="checkbox"/> Once every shift | <input type="checkbox"/> Other (Please specify) <input type="text"/> |
| <input type="checkbox"/> Unknown          |  |

## F. COMMUNICATION

- 24a. Were attempts made to facilitate patient communication?  Yes  No  Unknown





**24b.** If YES, what methods were used to facilitate communication?

- |   |   |
|---|---|
| <input type="checkbox"/> Fenestrated tube       | <input type="checkbox"/> Other insufflation devices |
| <input type="checkbox"/> Picture/alphabet chart | <input type="checkbox"/> Pen/paper                  |
| <input type="checkbox"/> Speaking valve         | <input type="checkbox"/> Other electronic device    |
| <input type="checkbox"/> Other (please specify) | <input type="text"/>                                |

**24c.** Was the use of a speaking valve considered?  Yes  No  Unknown

**24d.** Please give further details:

**25.** Was advice sought from Speech & Language Therapy (SALT) regarding communication for this patient?  Yes  No  Unknown

**26a.** Was the patient allowed to drink?  Yes  No  Unknown  Not applicable

**26b.** IF YES to 26a, was this with cuff deflation?  Yes  No  Unknown  Not applicable

**26c.** If YES to 26b, was this:

- |  |   |
|--|---|
| <input type="checkbox"/> Before Speech & Language Therapy assessment | <input type="checkbox"/> After Speech & Language Therapy assessment |
| <input type="checkbox"/> Other assessment (please specify)           | <input type="checkbox"/> Unknown                                    |

**26d.** IF YES to 26a, was this with cuff inflation?  Yes  No  Unknown  Not applicable

**26e.** If YES to 26d, was this:

- |  |  |
|--|--|
| <input type="checkbox"/> Before Speech & Language Therapy assessment | <input type="checkbox"/> After Speech & Language Therapy assessment  |
| <input type="checkbox"/> Unknown                                     | <input type="checkbox"/> Other (please specify) <input type="text"/> |





## G. COMPLICATIONS ON CRITICAL CARE

27. Did the patient have any of the following complications on critical care, and if so, please note the number of days post insertion that these occurred for the first time, whether they happened more than once, and how these complications were managed (answers may be multiple)

None

**Please go to question 29**

Complication (significant enough amount to cause clinical concern or need an intervention)		If YES, number of days post insertion of the first occurrence:	Did this reoccur	How were these complications managed? Please use the following codes and give further details where appropriate: A = Readmission to critical care B = Reventilation C = Antibiotics D = Emergency theatre attendance E = Other (please specify)
a) Surgical emphysema	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
b) Pneumo-mediastinum	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
c) Pneumothorax	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
d) Accidental decannulation/displacement	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
e) Obstruction	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
f) Bleeding - minor	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
g) Bleeding - major	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
h) Infection - local	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
i) Infection - mediastinitis	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
j) Infection - respiratory	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
k) Aspiration	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
l) Fistula formation - trache-oesophageal	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
m) Fistula formation - trache-arterial	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="text"/> <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	



27. Continued...

Complication (significant amount to cause clinical concern or need an intervention)	If YES, number of days post insertion of the first occurrence:	Did this reoccur	How were these complications managed? Please use the following codes and give further details where appropriate: A = Readmission to critical care B = Reventilation C = Antibiotics D = Emergency theatre attendance E = Other (please specify)
n) Tracheal damage - to tracheal ring/necrosis	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
o) Dysphagia	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>Other</b> (please specify) If multiple please list the most important			
p)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
q)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	
r)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="text"/> Days	<input type="checkbox"/> Yes <input type="checkbox"/> No	

28. If the patient experienced one of the following MAJOR complications, please give details of the most senior members of medical staff present during the first hour of their management.

Complication	Grade (Please use codes P2)	Specialty (Please use codes P2)
a) Bleeding - major <input type="checkbox"/> NA - did not experience complication	<input type="text"/> Grade <input type="checkbox"/> Unknown	<input type="text"/> Specialty <input type="checkbox"/> Unknown
	<input type="text"/> Grade <input type="checkbox"/> Unknown	<input type="text"/> Specialty <input type="checkbox"/> Unknown
	<input type="text"/> Grade <input type="checkbox"/> Unknown	<input type="text"/> Specialty <input type="checkbox"/> Unknown
	<input type="text"/> Grade <input type="checkbox"/> Unknown	<input type="text"/> Specialty <input type="checkbox"/> Unknown
b) Pneumothorax <input type="checkbox"/> NA - did not experience complication	<input type="text"/> Grade <input type="checkbox"/> Unknown	<input type="text"/> Specialty <input type="checkbox"/> Unknown
	<input type="text"/> Grade <input type="checkbox"/> Unknown	<input type="text"/> Specialty <input type="checkbox"/> Unknown
	<input type="text"/> Grade <input type="checkbox"/> Unknown	<input type="text"/> Specialty <input type="checkbox"/> Unknown
	<input type="text"/> Grade <input type="checkbox"/> Unknown	<input type="text"/> Specialty <input type="checkbox"/> Unknown



28. Continued...

Complication	Grade	Specialty
c) Accidental decannulation/ displacement  <input type="checkbox"/> NA - did not experience complication	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
d) Obstruction  <input type="checkbox"/> NA - did not experience complication	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
e) _____	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
f) _____	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
g) _____	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown
	<input type="checkbox"/> <input type="checkbox"/> Grade <input type="checkbox"/> Unknown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Specialty <input type="checkbox"/> Unknown

**H. ADVERSE EVENTS RELATING TO THE TRACHEOSTOMY**

29a. Were there any periods of significant or prolonged clinical hypoxia (SaO2 <90% for >5 minutes) related to tracheostomy complications during the critical care period?

Yes     No     Unknown

29b. If YES, was this as a result of a tracheostomy related complication?

Yes     No     Unknown





29c. If YES, please give details for each episode:

29d. If YES, what was the cause of the problem? (Please tick all that apply)

Tube blockage

Tube displacement

Unknown

Other (Please specify)

29e. What was the lowest recorded:

SaO<sub>2</sub>         %

Unknown

PaO<sub>2</sub>         .  KPa

OR

mmHg

Unknown

PaCO<sub>2</sub>         .  KPa

OR

mmHg

Unknown

29f. Do you think this episode of clinical hypoxia caused the patient harm?

Yes     No

30a. Did the patient have a cardiac arrest at any point during the critical care period?

Yes     No     Unknown

30b. If YES, was this as a result of a tracheostomy complication?

Yes     No     Unknown

30c. If YES, what was the cause of this complication? (Please tick all that apply)

Tube blockage

Tube displacement

Haemorrhage

Other (Please specify)

Unknown

31. Did the patient suffer any of the following tracheostomy/airway related adverse outcomes during the critical care period?

a) Respiratory arrest

Yes     No     Unknown

b) Persistent deterioration of cerebral status after airway complication

Yes     No     Unknown

c) Death

Yes     No     Unknown



## SECTION 2: END POINT

PLEASE COMPLETE ONE SECTION ONLY

### I. DECANNULATION

ONLY COMPLETE THIS SECTION IF THE PATIENT HAD THEIR TRACHEOSTOMY TUBE REMOVED WHILST STILL IN CRITICAL CARE

32a. Was a successful decannulation attempt made?  Yes  No  Unknown

32b. What was the date of tracheostomy decannulation/removal?        Unknown  
d d m m y y y y

32c. What was the time of tracheostomy decannulation/removal?     (24 hour clock)  Unknown  
h h m m

33. Was an airway endoscopy performed prior to tracheostomy decannulation/removal?  Yes  No  Unknown

34. What other preparation for decannulation/removal was made? E.g. cuff deflation, speaking valve use etc.

35. What safety measures were in place at decannulation/removal? (Please tick all that apply)

#### *Airway devices*

- A range of tracheal and tracheostomy tubes
- Laryngoscopes, bougies, airway exchange catheters and aids to intubation
- Laryngeal masks
- Ready to access fibre-optic bronchoscope

#### *Equipment*

- A means of oxygen insufflation (e.g. suction catheter or airway exchange catheter)
- A means of ventilatory support (e.g. self inflating bag)
- A means of reopening the stoma (e.g. tracheal dilator forceps)
- Access to a tracheostomy kit
- Effective suction equipment

#### *Monitoring*

- ECG  Pulse oximeter
- Automated BP recordings  Capnograph





35. Continued...

*Medications*

- |   |   |
|---|---|
| <input type="checkbox"/> Anaesthetic drugs  | <input type="checkbox"/> Atropine   |
| <input type="checkbox"/> Vasopressor agents | <input type="checkbox"/> Access to resuscitation equipment (e.g. defibrillator) |

36a. What type of tracheostomy tube was removed (Please answer all)

- |  |   |                                  |
|--|---|----------------------------------|
| i) <input type="checkbox"/> Cuffed                       | <input type="checkbox"/> Uncuffed                       | <input type="checkbox"/> Unknown |
| ii) <input type="checkbox"/> Non-fenestrated             | <input type="checkbox"/> Fenestrated                    | <input type="checkbox"/> Unknown |
| iii) <input type="checkbox"/> Inner tube                 | <input type="checkbox"/> No inner tube                  | <input type="checkbox"/> Unknown |
| iv) <input type="checkbox"/> Sub glottic aspiration port | <input type="checkbox"/> No sub glottic aspiration port | <input type="checkbox"/> Unknown |
| v) <input type="checkbox"/> Standard length              | <input type="checkbox"/> Adjustable flange tube         | <input type="checkbox"/> Unknown |
| vi) <input type="checkbox"/> Minitracheostomy            |   |                                  |
| vii) <input type="checkbox"/> Other (please specify)     | <input type="text"/>                                    |                                  |

36b. What size tracheostomy was removed?  6  7  8  9  Unknown  
 Other

37a. What was the grade of clinician undertaking the removal? (Please use grade codes on page 2)   Unknown

37b. What was the specialty of clinician undertaking the removal? (Please use grade codes on page 2)   Unknown

38. Was more than one attempt made at decannulation?  Yes  No  Unknown

39a. Are you aware of any complications arising from a decannulation attempt?  Yes  No  Unknown

39b. If YES, please give details:

## J. DISCHARGE

**ONLY COMPLETE THIS SECTION IF THE PATIENT WAS DISCHARGED ALIVE FROM THIS EPISODE OF CRITICAL CARE WITH THE TRACHEOSTOMY IN SITU**

40a. What was the date of discharge?     Unknown  
d d m m y y y y

40b. What was the time of discharge?   (24 hour clock)  Unknown  
h h m m





**41a.** What type of tracheostomy tube was in situ at the time of discharge (Please answer all)

- |      |  |   |                                  |
|------|--|---|----------------------------------|
| i)   | <input type="checkbox"/> Cuffed                      | <input type="checkbox"/> Uncuffed                       | <input type="checkbox"/> Unknown |
| ii)  | <input type="checkbox"/> Non-fenestrated             | <input type="checkbox"/> Fenestrated                    | <input type="checkbox"/> Unknown |
| iii) | <input type="checkbox"/> Inner tube                  | <input type="checkbox"/> No inner tube                  | <input type="checkbox"/> Unknown |
| iv)  | <input type="checkbox"/> Sub glottic aspiration port | <input type="checkbox"/> No sub glottic aspiration port | <input type="checkbox"/> Unknown |
| v)   | <input type="checkbox"/> Standard length             | <input type="checkbox"/> Adjustable flange tube         | <input type="checkbox"/> Unknown |
| vi)  | <input type="checkbox"/> Minitracheostomy            |   |                                  |
| vii) | <input type="checkbox"/> Other (please specify)      | <input type="text"/>                                    |                                  |

**41b.** What size tracheostomy was in situ?  6  7  8  9  Unknown  
 Other

**41c.** If a cuffed tracheostomy was in situ, was the cuff inflated on discharge?  Yes  No  Unknown

**42a.** Where was the patient discharged to?

- |  |  |
|--|--|
| <input type="checkbox"/> Critical care unit (different hospital) | <input type="checkbox"/> Specialist ward (same hospital) - Head & Neck   |
| <input type="checkbox"/> General ward (same hospital)            | <input type="checkbox"/> Specialist ward (same hospital) - Other (please use specialty codes on P2) <input type="text"/>                           |
| <input type="checkbox"/> Other secondary care facility           | <input type="checkbox"/> Community care (including nursing home, rehabilitation unit or other specialist unit outside of this or another hospital) |
| <input type="checkbox"/> Home                                    | <input type="checkbox"/> Unknown   |
| <input type="checkbox"/> Other (please specify)                  | <input type="text"/>   |

**42b.** Was this discharge location an area designated for patients with tracheostomies?  Yes  No  Unknown

**42c.** Do you feel this was an appropriate location for the patient with respect to the care of the tracheostomy?  Yes  No  Unknown

**42d.** Were there any concerns about the location the patient was discharged to with respect to the care of the tracheostomy?  Yes  No  Unknown

**42e.** If YES, what were the concerns? (Please tick all that apply)

- Ability to provide routine tracheostomy care
- Ability to recognise tracheostomy complications
- Ability to manage tracheostomy complications
- Follow up arrangements for tracheostomy
- Weaning and decannulation plan and practice
- Other (please specify)

**43a.** Is there a critical care discharge summary in the patient record?  Yes  No  Unknown





43b. If YES, does it detail: (Please answer all that apply)

- |   |                              |                             |                                  |
|---|------------------------------|-----------------------------|----------------------------------|
| Care requirements for the tracheostomy                      | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Follow up plan for the tracheostomy                         | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Weaning plan for the tracheostomy                           | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Who to contact if problems with the tracheostomy            | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |
| Who has responsibility for decisions about the tracheostomy | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unknown |

## K. DEATH

**ONLY TO BE COMPLETED ON PATIENTS WHO DIED ON CRITICAL CARE PRIOR TO TRACHEOSTOMY REMOVAL**

44a. What was the date of death?        Unknown  
d d m m y y y y

44b. What was the time of death?   (24 hour clock)  Unknown  
h h m m

44c. What was the cause of death as stated on the death certificate?  Unknown

45a. In the event that this patient died, was this:  Expected  Unexpected

45b. Do you believe that this was as a result of a tracheostomy related complication?  Yes  No  Unknown

45c. If YES, please give further details:

**Thank you for taking the time to complete this questionnaire**

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