

Airway management problem occurring in the Emergency Department

Inclusion criteria

1. Please indicate the inclusion criteria by selecting one or more from the list below:

- Death
- Brain damage
- Emergency surgical airway or needle / cannula cricothyroidotomy
- Unanticipated ICU admission

2. Please indicate the **primary airway** problem: - *radio buttons to select any one*

- Aspiration of gastro-oesophageal contents
- Failed mask ventilation
- LMA or supraglottic airway related problem
- Difficult or delayed intubation
- Failed intubation
- Tracheal tube misplacement
- Obstruction of tracheal tube or anaesthetic circuit
- CICV - the can't intubate can't ventilate scenario
- Iatrogenic airway trauma
- Extubation related problems
- Tracheostomy related problems
- Other

Other [please specify *free text limit to 50 letters*]

3. What was the root cause of the poor outcome?

- Hypoxaemia due to airway obstruction Yes No
- Hypoxaemia due to tracheal tube misplacement or displacement Yes No
- Hypoxaemia due to equipment failure Yes No
- Aspiration of gastroesophageal contents Yes No
- Cardiac or neurological complications caused by hypo/hypertension during airway management Yes No
- Pharyngeal / oesophageal or other life-threatening soft-tissue trauma Yes No
- Other Yes No

Other [please specify **free text limit to 50 letters**]

4. About the person(s) completing this form:-

You are:-

- The clinician responsible for the patient's care (or one of team responsible for the patient's care)
- The local reporter
- Both

Clinician Job Title: **Free text limit to 50 letters**

Outcome Details

5. Please provide additional information on the inclusion criteria

Death
Please provide the cause of death. ... **free text limit to 50 letters**

Brain damage
Select the worst outcome observed

Delayed awakening

CVA

Seizures

Behavioural or cognitive impairment

Other [please specify **free text limit to 50 letters**]

Emergency surgical or needle/cannula airway

Unanticipated ICU admission as a result of a problem with a airway management.

Reason for ICU admission

Aspiration of gastro-oesophageal contents

Myocardial infarction or cardiac problem

Airway trauma/oedema

Failure to awaken or elective ventilation to treat suspected brain injury

Other [please specify **free text limit to 50 letters**]

6. Outcome at time of form completion

Death

Partial recovery **specify** **free text limit to 50 letters**

Full recovery

7. Time to 'recorded outcome' from airway incident

Immediate

<24hrs

24hrs -1wk

1wk-1month

>1mth

8. Please provide a brief description of the event *Do not include any patient identifying details*

..... **free text limit to 250 letters**

Circumstances surrounding the event

9. Please record the planned procedure, operation or presentation
..... **free text limit to 200 letters**

10. Please indicate below who was responsible for managing the airway

- EM physician
- Anaesthetist
- ICU physician (non-anaesthetist)
- EM physician then anaesthetist
- EM physician then ICU physician (non-anaesthetist)
- Anaesthetist then emergency physician (non-anaesthetist)
- Anaesthetist then ICU physician (non-anaesthetist)
- ICU physician (non-anaesthetist) then emergency physician
- ICU physician (non-anaesthetist) then anaesthetist
- Other... **free text limit to 20 letters**

11. Grade of most senior emergency physician present at the start of the airway event

- Professor
- Consultant
- Associate Specialist
- Staff Grade
- Trust Grade
- Specialist trainee ST 1-7 **dropdown list to select one ST1, ST2, ST3, ST4, ST5, ST6, ST7**
- No emergency physician present
- Other, please indicate :... **free text limit 20 letters**

12. Was this person a locum? Yes No

13. Grade of most senior anaesthetist present at the time of the airway event

- Professor
- Consultant
- Associate Specialist
- Staff Grade
- Trust Grade
- Specialist trainee ST 1-7 **dropdown list to select one ST1, ST2, ST3, ST4, ST5, ST6, ST7**
- No anaesthetist present

Other... *free text limit to 20 letters*

14. Was this person a locum? Yes No

15. Grade of most senior ITU/HDU doctor present at the time of the airway event

Professor

Consultant

Associate Specialist

Staff Grade

Trust Grade

Specialist trainee ST 1-7 *dropdown list to select one ST1, ST2, ST3, ST4, ST5, ST6, ST7*

No ITU/HDU doctor present

Other... *free text limit to 20 letters*

16. Was this person a locum? Yes No

17. Time of day of the airway event

00:00 - 08:00

08:01 - 18:00

18:01 – 24:00

18. Location of airway event

ED resuscitation room

ED “majors” area

ED “minors” area

ED observation or clinical decision unit

Radiology department

During transfer (to a site within the same hospital)

During transfer (between hospitals)

Pre-hospital (prior to hospital arrival)

Other *free text limit to 50 letters* ...

Patient characteristics at the time of the airway event

19. Gender Male Female

Age <1
 1- 4
 5 -10
 11- 20
 21- 40
 41- 60
 61 – 80
 > 81

ASA Grade I / II / III / IV / V (click one option)

Weight __:__ kg Height __:__ mts BMI

Body habitus cachectic
 normal
 obese

20. Co-morbidities

- | | |
|--|--|
| <input checked="" type="checkbox"/> Ischaemic heart disease | <input checked="" type="checkbox"/> Anticoagulated |
| <input checked="" type="checkbox"/> Left ventricular failure | <input checked="" type="checkbox"/> Obesity |
| <input checked="" type="checkbox"/> Aortic stenosis | <input checked="" type="checkbox"/> Obstructive sleep apnoea |
| <input checked="" type="checkbox"/> Chronic obstructive pulmonary disease | <input checked="" type="checkbox"/> Scleroderma |
| <input checked="" type="checkbox"/> Asthma | <input checked="" type="checkbox"/> Rheumatoid arthritis |
| <input checked="" type="checkbox"/> Renal failure | |
| <input checked="" type="checkbox"/> Liver disease | <input checked="" type="checkbox"/> Burns (acute or chronic) |
| <input checked="" type="checkbox"/> Diabetes mellitus | <input checked="" type="checkbox"/> Previous radiotherapy to |
| head/neck | |
| <input checked="" type="checkbox"/> Pregnancy | <input checked="" type="checkbox"/> Congenital deformity of |
| head/neck | |
| <input checked="" type="checkbox"/> Other free text limit to 50 letters | |

21. In trauma patients please list *relevant* major injuries

free text limit to 50 letters

22. Were problems with ventilation or oxygenation evident or suspected before the airway event?

Yes

No.

If yes please indicate why? **free text limit to 50 letters**

Suspected cause/diagnosis **free text limit to 50 letters**

23. What was the pre-event SpO₂ **free numerals** on what FiO₂ **free numerals**

Airway assessment

24. Was difficulty with airway management anticipated? Yes No If no go to next page
If yes was this:-

- Difficult pre-oxygenation
- Difficult face mask ventilation
- Difficult laryngoscopy and or intubation
- Difficult LM or SAD placement
- Difficult direct tracheal access

25. Was patient co-operation anticipated to be a problem? Yes No

26. Was an airway assessment recorded? Yes No

27. Which of the following tests were performed and suggested a potential airway problem

Mallampati	<input checked="" type="radio"/> Normal	<input checked="" type="radio"/> Abnormal	<input checked="" type="radio"/> Not done
Mouth opening	<input checked="" type="radio"/> Normal	<input checked="" type="radio"/> Abnormal	<input checked="" type="radio"/> Not done
Neck movement	<input checked="" type="radio"/> Normal	<input checked="" type="radio"/> Abnormal	<input checked="" type="radio"/> Not done
Jaw protrusion	<input checked="" type="radio"/> Normal	<input checked="" type="radio"/> Abnormal	<input checked="" type="radio"/> Not done
Thyromental distance	<input checked="" type="radio"/> Normal	<input checked="" type="radio"/> Abnormal	<input checked="" type="radio"/> Not done
Sternomental distance	<input checked="" type="radio"/> Normal	<input checked="" type="radio"/> Abnormal	<input checked="" type="radio"/> Not done

28. Was the patient at increased risk of aspiration?
If yes why? Yes No

- Recent ingestion
- Delayed gastric emptying
- Intestinal obstruction
- Pregnancy
- Gastroesophageal reflux
- Other **specify** *free text limit to 50 letters*

29. If the patient had previous airway problems or caused concern this information was:-

- | | | |
|--------------------------------|--------------------------------------|--------------------------|
| Recorded in notes | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Recorded in anaesthetic dept | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Supplied to patient in writing | <input checked="" type="radio"/> Yes | <input type="radio"/> No |
| Supplied to patient verbally | <input checked="" type="radio"/> Yes | <input type="radio"/> No |

Supplied to GP

Yes

No

Contained on a Medicalert bracelet

Yes

No

Unavailable at the time of the event

Yes

No

The primary plan for anaesthesia

30. What was the primary anaesthetic plan? Please select one from list below:-

- General anaesthesia
- Sedation only
- Other specify **free text limit to 50 letters**

31. Please indicate below the primary airway management plan with regard to:-

1. Anaesthesia or sedation
2. Suppression of reflexes
3. The use of airway devices

31.1 Anaesthesia

- None
- General anaesthesia intravenous induction
- General anaesthesia inhalational induction
- IV sedation
- Intubation under local anaesthesia with or without sedation

31.2 Drugs used to suppress airway reflexes

- None
- Local anaesthetic agent - topical administration
- Local anaesthetic agent – intravenous administration
- Opioid
- Suxamethonium
- Other neuromuscular blocking agent
- Other ... **free text limit to 50 letters**

31.3 Airway device—primary plan

- None
- Hudson mask / nasal cannulae
- Anaesthetic facemask +/- oropharyngeal airway,
- Laryngeal mask airway, (LM)

- ⊙ Another supraglottic device (SAD) specify **free text limit to 20 letters**
- ⊙ Tracheal intubation (TI) (including fiberoptic intubation)
- ⊙ New tracheostomy or cricothyroidotomy **free text limit to 20 letters**
(specify: surgical, large bore >3mm or small bore <3mm)
- ⊙ Rigid bronchoscopy
- ⊙ Use of already existing tracheostomy or tracheal tube
- ⊙ Other **free text limit to 50 letters**

Conduct of Anaesthesia

32. Were there any relevant problems with the anaesthetic equipment? Yes No

Was the equipment checked beforehand? Yes No

33. Please indicate below who checked the anaesthetic equipment before use

1. Anaesthetist Yes No

2. ODP/anaesthetic nurse Yes No

3. Both 1 and 2 Yes No

34. Please indicate the monitoring devices in use employed at the onset of the airway event

SpO₂ Yes No

ECG Yes No

EtCO₂ Yes No

FiO₂ Yes No

NIBP Yes No

Invasive BP Yes No

Inspired agent monitor Yes No

Depth of neuromuscular blockade Yes No

Airway management techniques employed

Please examine the following lists very carefully, then select in order each of the techniques used..Your selections will appear in order in the box opposite questions 38 and 39. If you revert to a technique used previously please record each attempt: for example if bag mask ventilation was employed first, then failed and a disposable LM was employed, which failed and then facemask was attempted again for facemask should appear first and third on the list and the disposable LM should be second.

When the list is complete please check that the final order is correct, incorrect entries may be removed with the button below.

35. Pre-oxygenation

↓ With Hudson type mask

(Please use numbers 1 to 10 for each selection in the order they were used)

↓ With anaesthetic mask and circuit

36. Non intubation airway maintenance

↓ Facemask +/-oropharyngeal / nasal airway

↓ Classic LMA

↓ Disposable LM: which? **free text limit to 20 letters**

↓ ILMA

↓ Proseal LMA

↓ Flexible LMA

↓ iGel

↓ Combitube

↓ Other **free text limit to 20 letters**

37. Tracheal intubation with direct laryngoscopy

↓ Macintosh laryngoscopy without bougie

↓ Macintosh laryngoscope with bougie

↓ Straightblade laryngoscope without bougie

↓ Straightblade laryngoscope with bougie

↓ McCoy without bougie

↓ McCoy with bougie

↓ Other **free text limit to 20 letters**

↓ Other laryngoscope

↓ Lighted bougie

38. Flexible fiberoptic intubation +/- aids

↓ Flexible fiberoptic intubation alone

↓ Flexible fiberoptic intubation through an SAD using a tracheal tube

↓ Flexible fiberoptic intubation using a guidewire

↓ Flexible fiberoptic intubation through an SAD using a guidewire

↓ Flexible fiberoptic intubation using an Aintree catheter

↓ Flexible fiberoptic intubation through an SAD using an Aintree catheter

39. With a rigid indirect laryngoscope

↓ Pentax AWS

↓ Upsher

↓ Bullard

↓ Wu

↓ Glidescope

↓ Airtraq

↓ TruView / Viewmax

↓ McGrath

↓ Other **free text limit to 20 letters**

40. With optical stylet

↓ Bonfils

↓ Levitan

↓ SOS (Shikani)

↓ Other **Specify free text limit to 20 letters**

41. With a conduit

↓ CTrach

42. Blind intubation

↓ Nasal apnoeic

↓ Nasal spontaneous respiration

↓ Oral apnoeic

↓ Oral spontaneous respiration

↓ ILMA without fiberoptic endoscope

43. Direct airway access

- ↓ Fine bore < 3mm needle/cannula cricothyroidotomy
- ↓ Wide bore > 3mm cannula cricothyroidotomy Uncuffed
- ↓ Wide bore > 3mm cannula cricothyroidotomy Cuffed
- ↓ Surgical cricothyroidotomy uncuffed
- ↓ Surgical cricothyroidotomy cuffed
- ↓ Surgical tracheostomy
- ↓ Percutaneous tracheostomy

44. ↓ Other

free text limit to 50 letters

Confirmation of tracheal tube placement

45. Was tracheal tube misplacement the primary airway problem? Yes No

46. How was correct tracheal tube placement confirmed?

- Tracheal intubation was not performed
- Tracheal tube seen to pass between cords
- Observation of bilateral chest movement
- Auscultation
- Oesophageal detector device (Wee type balloon or syringe test)
- Disposable CO₂ detector
- End tidal CO₂ measurement
- Fibreoptic visualisation of carina
- No active effort made to confirm position

IV sedation

47. Was sedation used without general anaesthesia?

Yes No If no go to next page

48. Drugs used for sedation  (Definition TCI = Target Controlled Infusion)

Drug name

Bolus administration Yes No Infusion Yes No TCI Yes No

Drug name

Bolus administration Yes No Infusion Yes No TCI Yes No

Drug name

Bolus administration Yes No Infusion Yes No TCI Yes No

Drug name

Bolus administration Yes No Infusion Yes No TCI Yes No

49. Sedation, please record the highest score achieved

- 1. Awake
- 2. Drowsy responding to commands appropriately
- 3. Drowsy responding to commands inappropriately
- 4. Responding to physical stimulus only
- 5. Unresponsive

50. Was supplementary O₂ delivered? Yes No

51. Was exhaled CO₂ monitored Yes No

Mask ventilation and tracheal intubation

52 Was mask ventilation or tracheal intubation employed to manage the airway event?

Yes No If no go to next page

53. Initial spontaneous ventilation

Maintenance of airway with facemask was

Maintenance of airway by (SAD) was

Optimal / impaired / inadequate / impossible / not attempted [click one option](#)

Optimal / impaired / inadequate / impossible / not attempted [click one option](#)

Drop down list of definitions when cursor is on an option

Optimal. Achieved without multiple attempts and without difficulty or complications.

Impaired. Less than optimal but achieved and able to be continued.

Inadequate. Barely achieved and once achieved not sustainable for prolonged period.

Impossible. Not achieved despite best efforts.

54. Initial manual ventilation

Initial ventilation via mask was

Initial ventilation via LMA or SAD

The initial ventilation via tracheal tube was

Optimal / impaired / inadequate / impossible / not attempted [click one option](#)

Optimal / impaired / inadequate / impossible / not attempted [click one option](#)

Optimal / impaired / inadequate / impossible / not attempted [click one option](#)

Drop down list of definitions when cursor is on an option

Optimal. Achieved without multiple attempts and without difficulty or complications.

Impaired. Less than optimal but achieved and able to be continued.

Inadequate. Barely achieved and once achieved not sustainable for prolonged period.

Impossible. Not achieved despite best efforts.

55. Was laryngoscopy attempted?

Yes

No

Best view on direct laryngoscopy was 1 / 2 / 3 / 4 / D/L not performed / not recorded

[click one option](#)

If the view was poor was OELM or BURP performed? Yes No

56. On initial laryngoscopy the larynx was Normal / distorted / abnormal / not seen / not recorded [click one option](#)

Was intubation difficult despite adequate laryngeal view? Yes No

If yes why? [free text limit to 50 letters.](#)

57. Did the ability to manage the airway change?

Yes

No

If yes what changed?

Mask ventilation became

Optimal / impaired / inadequate / impossible / unchanged [click one option](#)

Ventilation via supraglottic airway device became

Optimal / impaired / inadequate / impossible / unchanged [click one option](#)

58. During intubation attempts did any of the following materially impede intubation:-

Regurgitation

Yes

No

Bleeding into the airway

Yes

No

Oedema

Yes

No

Excessive secretions

Yes

No

Pus

Yes

No

59. In total how many attempts were made to perform tracheal intubation? 0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 10+ [click one option](#)

60. Was fiberoptic intubation performed or attempted?

Yes

No

After how many previous attempts at tracheal intubation was fiberoptic intubation attempted?

0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 10+ [click one option](#)

61. Was fiberoptic intubation performed or attempted through a supraglottic airway?

Yes

No

After how many previous attempts at tracheal intubation was fiberoptic intubation through a supraglottic airway performed?

0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 10+ [click one option](#)

62. What was the time from the start of 'problems' to securing the airway or abandonment?

hh:mm

63. For what time was ventilation difficult or absent?

hh:mm

About hypoxia

64. For what time was oxygenation poor (SpO₂ recorded or estimated to be <85%)

hh:mm

Profound hypoxia

65. For what time was oxygenation very poor (SaO₂ recorded or estimated to be <70%)

hh:mm

66. What was the lowest recorded SpO₂ **free numerals**

67. Was effective ventilation and oxygenation achieved?

At this point what was the SpO₂ **free numerals** on what FiO₂ **free numerals**

Yes

No

About facemask ventilation

68. Were problems experienced with mask ventilation during management of the airway event?

- Yes No If no go to next page

69. Indicate the methods employed below

Bag / mask ventilation / jaw thrust / an oropharyngeal airway / multi-person bag-mask ventilation
(select one or more) it

It was possible to maintain oxygenation or an SpO₂ > 85%

- Throughout
- Initially possible but not possible later, i.e. situation deteriorated
- Initially not possible but possible later i.e. situation improved
- Never, at any stage was ventilation possible

70. Number of hands used ↓dropdown list One / Two / Three / Four / Five / Six

71. Mask type free text limit to 20 letters

Please indicate the cause of problems with mask ventilation?

72. Ineffective seal due to

- | | |
|--|--|
| <input checked="" type="checkbox"/> Beard | <input checked="" type="checkbox"/> Obesity |
| <input checked="" type="checkbox"/> Facial deformity | <input checked="" type="checkbox"/> Burns |
| <input checked="" type="checkbox"/> Radiotherapy | <input checked="" type="checkbox"/> Trismus |
| <input checked="" type="checkbox"/> Swelling | <input checked="" type="checkbox"/> Limited access to airway |

73. Loss of gas pressure

- Gas failure
- Circuit failure

74. Airway obstruction

- Limited mouth opening,
- Limited neck extension
- Lesion of or within the airway (including tumour, laryngeal oedema or foreign body)
- Laryngospasm
- Regurgitation

75. Other causes of failure please list free text limit to 50 letters

Use of supraglottic airway devices

76. Were problems experienced with a supraglottic airway during the management of the airway event?

Yes No If no go to next page

77. Device(s) used *free text limit to 20 letters*

78. Anticipated problems *free text limit to 50 letters*

79. Actual problems *free text limit to 50 letters*

80. Were all necessary sizes available Yes No

81. If a supraglottic device was used to relieve upper airway obstruction did it succeed? Yes No

82. If a supraglottic device failed what was the cause of failure

- Inability to insert
- Gas leak/ poor seal
- Airway obstruction
- Regurgitation

Intravenous general anaesthesia including muscle relaxants and / or TIVA

83. Was Intravenous general anaesthesia including muscle relaxants and / or TIVA used to manage the airway problem?

Yes No If no go to next page

84. Was rapid sequence induction (RSI) planned? Yes No

85. Was the patient pre-oxygenated? Yes No

If yes why was the patient pre-oxygenated?

RSI / routine / pre-existing hypoxaemia / airway problem anticipated

If no why not?

not considered necessary / patient uncooperative / time pressure

86. Which of the following most closely resembles the method of preoxygenation

- 100% O₂ for 3 minutes
- 3 vital capacity breaths
- Measured end-tidal O₂ level >90% before induction
- Other

87. Induction agent

STP / propofol / etomidate / ketamine/ midazolam /

other specify

88. Opioids used at or before induction

fentanyl / alfentanil / morphine / pethidine / remifentanil /

other specify

89. Muscle relaxant used at or before induction

suxamethonium / atracurium / rocuronium / vecuronium /

other

Dose of muscle relaxant mg.

90. Was cricoid force applied? Yes No

If yes

Were there problems associated with the application of cricoid force? Yes No

Was this released before confirmed tracheal intubation? Yes No

If so did laryngoscopic view improve? Yes No

Were gastric contents seen in the oropharynx?

Yes

No

If so when?

Before release of cricoid force

After release of cricoid force

91. Were there any problems with IV access? Or drug delivery?

Yes

No

Lost access

Lost drugs

Other *free text limit to 50 letters*

Direct tracheal access

92. Was direct tracheal access attempted or obtained during the management of the airway event?

Yes No If no go to next page

93. Indicate which was / were performed

- Surgical tracheostomy
- Surgical cricothyroidotomy
- Fine bore cannula cricothyotomy < 3 mm
- Large bore cannula cricothyroidotomy > 3 mm
- Percutaneous tracheostomy

Was the device cuffed uncuffed [click one option](#)

94. Which specific devices were used? [free text limit to 30 letters](#) successful / failed [click one option](#)

By Whom

1st user Speciality [free text limit to 20 letters](#) Grade dropdown list to select one of the entire list in No.12

2nd user Speciality [free text limit to 20 letters](#) Grade dropdown list to select one of the entire list in No.12

3rd user Speciality [free text limit to 20 letters](#) Grade dropdown list to select one of the entire list in No.12

95. How many attempts were made before the device was successfully placed in the trachea or was abandoned?

1 / 2 / 3 / 4 / 5 / 6 [click one option](#)

96. How long did the procedure take? [hh:mm](#)

97. How was placement confirmed?

- Aspiration of air
- Observation of chest rising and falling
- Capnography
- Auscultation
- Improved oxygenation
- inspection with fibroscope

98. Once placed did it provide effective oxygenation?
No

Yes

99. What mode of ventilation was used?

High pressure source ventilation: (if selected go to next line)

Manujet Sanders injector.

Other high pressure device specify *free text limit to 50 letters*

HFJV

Low pressure source ventilation: (if selected go to next line)

Anaesthesia machine flush

Anaesthetic circuit

Other specify *free text limit to 50 letters*

100. Were any complications seen?

Bleeding

Surgical emphysema

Pneumothorax

Pneumomediastinum

Other please list *free text limit to 30 letters*

Availability of help

101. Was additional help/advice was requested? Yes No

If yes when ?

- Before the airway problem became apparent
- At the time the airway problem became apparent
- When initial attempts to manage the problem failed
- After the problem had been managed

102. At what stage was help requested?

- Pre induction
- Induction
- Post induction

103. How long did it take for help to arrive?

1 minute / 1-4 minutes / 5-30 minutes / >30 minutes click one option

104. Help was requested from whom? And had they been informed or consulted before the event

	Grade	Specialty	informed before event	
Request 1	<small>dropdown list to select one of the entire list in No.12</small>	<small>free text limit to 30 letters</small>	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Request 2	<small>dropdown list to select one of the entire list in No.12</small>	<small>free text limit to 30 letters</small>	<input type="radio"/> Yes	<input type="radio"/> No
Request 3	<small>dropdown list to select one of the entire list in No.12</small>	<small>free text limit to 30 letters</small>	<input type="radio"/> Yes	<input type="radio"/> No
Request 4	<small>dropdown list to select one of the entire list in No.12</small>	<small>free text limit to 30 letters</small>	<input type="radio"/> Yes	<input type="radio"/> No
105. Was an alternative anaesthetic technique available?			<input type="radio"/> Yes	<input type="radio"/> No
106. Was an alternative technique discussed?		"	<input type="radio"/> Yes	<input type="radio"/> No
107. Was it essential to proceed after the event occurred?			<input type="radio"/> Yes	<input type="radio"/> No

108. If tracheal intubation was attempted please list the grade of each intubator and the number of intubation attempts each made

Intubator	Grade	Specialty	Number of attempts
1st Intubator	<small>dropdown list to select one of the entire list in No.12</small>	<small>free text limit to 30 letters</small>	<small>free numerals</small>
2 nd	<small>dropdown list to select one of the entire list in No.12</small>	<small>free text limit to 30 letters</small>	<small>free numerals</small>
3 rd	<small>dropdown list to select one of the entire list in No.12</small>	<small>free text limit to 30 letters</small>	<small>free numerals</small>

4th

dropdown list to select one of the entire list in No.12 **free text limit to 30 letters**

free numerals

5th

dropdown list to select one of the entire list in No.12 **free text limit to 30 letters**

free numerals

109. List the emergency physicians present at the start, during and at the end of the event please give grades

		At the start	During	At the end
Doctor 1	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 2	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 3	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 4	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 5	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 6	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No

110. List the anaesthetists present at the start, during and at the end of the event please give grades

		At the start	During	At the end
Doctor 1	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 2	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 3	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 4	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 5	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 6	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No

111. List the ITU/HDU doctors present at the start, during and at the end of the event please give grades

		At the start	During	At the end
Doctor 1	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 2	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 3	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 4	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 5	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No
Doctor 6	dropdown list to select one of the entire list in No.12	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input type="radio"/> No

Availability of equipment

112. Which piece of equipment most effectively improved the clinical condition? *free text limit to 50 letters*

How long did it take to arrive? *hh:mm*

113. Was all the equipment you needed to deal with this airway problem available Yes No

If no what was the root cause of the lack of availability? *free text limit to 50 letters*

114. Was available equipment not used due to lack of appropriate skills Yes No

If yes which items? *free text limit to 50 letters*

Supplementary information

115. Please record any additional information that will facilitate understanding of what occurred.

Do not include any information identifying the patient, the hospital or the clinician.

free text limit to 200 letters

116. What went well?

free text limit to 200 letters

117. What went badly?

free text limit to 200 letters

118. Which of the following played an important role in the poor outcome?

- Defective knowledge
- Defective judgement
- Inadequate or malfunctioning equipment
- Defective training
- Team behaviour