

National Confidential Enquiry Into Perioperative Deaths

38-43 LINCOLN'S INN FIELDS, LONDON WC2A 3PN

ANAESTHETIC QUESTIONNAIRE (INDEX CASE) 1991-1992

QUESTIONNAIRE No. **A**

DO NOT PHOTOCOPY ANY PART OF THIS QUESTIONNAIRE

QUESTIONNAIRE COMPLETION

The whole questionnaire will be shredded when data collection is complete.
The information you supply is important. It must be accurate if valid conclusions
are to be drawn.

Neither the questions nor the choices for answers are intended to suggest
standards of practice.

Please **enclose** a copy of the ANAESTHETIC record and of the fluid balance
chart(s). Any identification will be removed in the NCEPOD office.

Many of the questions can be answered by "Yes" or "No".

Please insert the relevant number in the appropriate box eg

- | | |
|----------------------------|---------|
| <input type="checkbox"/> 1 | for Yes |
| <input type="checkbox"/> 2 | for No |

Where multiple choices are given, please insert the relevant letter(s) of your
answer in the box(es), and leave the remaining boxes blank.

Eg question 6b

C	
D	

indicates that advice was sought from both a Senior Registrar and a Consultant.

Consultants or junior staff may write to the NCEPOD office under separate
cover, quoting the questionnaire number.

All original copies of correspondence will be confidential (**but do not retain**
copies of your correspondence).

In case of difficulty, please contact the NCEPOD office on:

071 831 6430

**HAVE YOU ENCLOSED COPIES OF THE ANAESTHETIC
RECORD AND FLUID BALANCE CHARTS?**

HOSPITAL

1. In what type of hospital did the anaesthetic take place?

1

- | | |
|---|-----------------------------------|
| A | District General Hospital |
| B | University/Teaching Hospital |
| C | Surgical Specialty Hospital |
| D | Other Acute/Partly Acute Hospital |
| E | Community Hospital |
| F | Defence Medical Services Hospital |
| G | Independent Hospital |
| H | Other (please specify) |

2. Is this hospital part of, or wholly, an NHS Trust?

Yes = 1 No = 2

PROXY ANAESTHETISTS

3. If you were not involved in any way with this anaesthetic and have filled out this questionnaire on behalf of someone else, please indicate your position.

٦

- A Chairman of Division
B College Tutor
C Duty Consultant
D Other Consultant
E Other (please specify)

appropriate letter for each person present.

THE ANAESTHETIST(S)

- | | |
|---|------------------------|
| A | SHO |
| B | Registrar |
| C | Senior Registrar |
| D | Consultant |
| E | Staff Grade |
| F | Associate Specialist |
| G | Clinical Assistant |
| H | General Practitioner |
| I | Hospital Practitioner |
| J | Other (please specify) |

5. Were any of the above anaesthetists employed in a locum capacity? 5a

Yes = 1 No = 2

If yes, specify grade(s)

b

6. Did the anaesthetist (of whatever grade) **seek advice** at any time from another anaesthetist (not mentioned in question 4)?

6a

6b

If yes, grade(s) of anaesthetist(s) from whom advice sought:

- A SHO
- B Registrar
- C Senior Registrar
- D Consultant
- E Staff Grade
- F Associate Specialist
- G Clinical Assistant
- H General Practitioner
- I Hospital Practitioner
- J Other (please specify)

Yes = 1 No = 2

7. Did any colleague(s) (not mentioned in question 4) **come to help** at any time?

7a

Yes = 1 No = 2

If yes, grade(s) of anaesthetist(s) who came to help:

7b

A

B

C

D

E

F

G

H

I

J

- A SHO
- B Registrar
- C Senior Registrar
- D Consultant
- E Staff Grade
- F Associate Specialist
- G Clinical Assistant
- H General Practitioner
- I Hospital Practitioner
- J Other (please specify)

We want to know about the experience of the **most senior anaesthetist** in the operating room at the start of this procedure

Questions 8 to 10 inclusive refer to this anaesthetist

REMINDER

8. Year of primary medical qualification 8a
and the university (or institution) awarding this qualification: _____

8b

If not in UK, please state country: _____

8c
 8d

9. Year of first full-time anaesthetic training post 9a

9a
 9b

Which higher diploma in anaesthesia is held?

- A none
B FFARCS/FCAnaes/FFARCSI/FFARACS
C DA (ie Part 1 FCAnaes)
D Other (please specify) _____

A
 B
 C
 D

Year of award of higher qualification: _____

9c
 9d

10. If the most senior anaesthetist present was **not** in a training grade, please enter the appropriate letters in the boxes provided if he/she has regular weekly (ie more than 50 operations per year) NHS commitments in anaesthesia for the following:

10

- A cardiac surgery
B children under 3 years old
C neurosurgery
D plastic surgery

A
 B
 C
 D

THE PATIENT

11. Date of patient's birth 11

11
 12
 13

12. Age of patient at time of operation _____ Y _____ M 12

12
 13

13. Date of admission to hospital in which operation took place
eg 05 04 91 (5th April 1991).

Have you enclosed copies of the anaesthetic record and fluid balance charts?

THIS FORM IS THE PROPERTY OF THE NCEPOD
If you wish to inform the NCEPOD of any other details of this case, please do so here or on a separate sheet.

Please send it to NCEPOD

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LONDON
WC2A 3PN

in the reply paid envelope provided

93. Were other sedative/hypnotic or other analgesic (non-narcotic) drugs given? 93

Yes = 1 No = 2

If yes, please specify drug(s), dose(s), times and routes

14. Time of admission

--	--	--	--	--	--

use 24 hour clock

D	D	M	M	Y	Y

D	D	M	M	Y	Y

D	D	M	M	Y	Y

15. Date of operation

--	--	--	--	--	--

16. Date of discharge

D	D	M	M	Y	Y

D	D	M	M	Y	Y

17. Was the patient transferred from another hospital?

--	--	--	--	--	--

Yes = 1 No = 2

--	--	--	--	--	--

If no, please go to question 26
If yes, please answer questions 18 to 25

18. From what type of hospital was the patient transferred?

--	--	--	--	--	--

18

--	--	--	--	--	--

19. Who accompanied the patient during transit?

--	--	--	--	--	--

A	B	C	D	E	F

A District General Hospital

B University/Teaching Hospital

C Surgical Specialty Hospital

D Other Acute/Partly Acute Hospital

E Community Hospital

F Defence Medical Services Hospital

G Independent Hospital

H Other (please specify)

DISCHARGE

D	D	M	M	Y	Y

94.

Date of discharge

94

95.

Was this later than anticipated?

95

Yes = 1 No = 2

If yes, why?

96.

To which destination was the patient discharged?

96

a Home

b Another hospital

c Convalescent home

d Rehabilitation

e Other (please specify) _____

97.

Do you have audit meetings in your department?

97

Yes = 1 No = 2

If yes, why?

98.

Do you have meetings combined with other disciplines?

98

Yes = 1 No = 2

If yes, why?

99. Has a consultant anaesthetist seen and agreed this form?

--	--	--	--	--	--

14

Yes = 1 No = 2

If yes, why?

99

F other (please specify)

20. Was there any special care of the airway during transfer?

Yes = 1 No = 2

If yes, which

- A added oxygen
- B pharyngeal airway
- C tracheal tube
- D controlled ventilation
- E other (please specify)

20a

D septicaemia

20b

A

B

C

D

E

F

G

H

I

21. Did the patient's condition deteriorate during transfer?

Yes = 1 No = 2 Not known = 3

If yes, please explain:

22. What was the patient's clinical circulatory state on arrival?

- A well-perfused and warm
- B cold and vasoconstricted

22

91. Were narcotic analgesic drugs given in the first 48 hours after operation?

Yes = 1 No = 2

If yes, please specify drug(s), dose(s), frequency and route(s):

23. What was the patient's state of clinical oxygenation on arrival?

- A well oxygenated
- B mild hypoxaemia
- C severe hypoxaemia

23

92. Did complications occur as a result of these analgesic methods?

92

Yes = 1 No = 2

If yes, please explain (eg fluids, inotropes etc) :

90b

D

90c

E

90d

F

90e

G

90f

H

continued

Please specify location of patient, treatment and outcome.

25. What was the patient's neurological status at the time of arrival?

- A Glasgow Coma Scale less than 7
- B Glasgow Coma Scale 7 or more

Glasgow Coma Scale					
	Eye opening	Verbal response	Pts	Motor response to pain (best limb)	Pts
Spontaneous	4	Orientated verbal response	5	Obey's commands	5
Eye opening to speech	3	Confused verbal response	4	Localisation	4
Eye opening to pain	2	Inappropriate words	3	Flexion normal/ abnormal	3
None	1	Incomprehensible sounds	2	Extension	2
		No verbal response	1	No motor response	1

THE OPERATION

26. Primary diagnosis

90. Were there **early** (ie up to 7 days) complications or events after this operation?

90a
Yes = 1 No = 2

Please enter a letter for each, and specify in the space below each category:

- A ventilatory problems (eg pneumonia, pulmonary oedema)
- B cardiac problems (eg acute LVF, intractable arrhythmias, post-cardiac arrest)
- C hepatic failure

27. What operation was planned?

90b A
 B
 C

28. What operation was performed, if different?

86. If the patient was not admitted to a recovery room, where did this patient go on leaving theatre?

86

- A ward
- B high dependency unit
- C intensive care unit
- D specialised ICU
- E home
- F another hospital
- G other (please specify) _____

CONDITION BEFORE OPERATION

- 31 31. Was a record of the patient's weight available?
- If yes, what was this weight? _____ kg
If no, the estimated weight was _____ kg
- 32 32. Was a record of the patient's height available?
- If yes, what was this height? _____ cm
If no, estimated height was _____ cm
- 33 33. Was an anaesthetist consulted by the surgeon (as distinct from informed) before the operation?
- If yes = 1 No = 2
- 34 34. Did an anaesthetist visit the patient before the operation?
- If yes, why?
A respiratory inadequacy
B control of intracranial pressure or other neurosurgical indications
C part of the management of pain
D other reasons (please specify) _____
- 34a 34b
- If yes = 1 No = 2
- If yes, was this anaesthetist present at the start of the operation?
Yes = 1 No = 2

35. Were any investigations done before the operation? (Including tests carried out in the referral hospital and available before the operation.)

Yes = 1 No = 2

If yes, which of the following?

PLEASE WRITE RESULTS IN THE SPACE NEXT TO THE TEST NAME

INDICATE WHICH TEST(S) BY INSERTION OF THE APPROPRIATE LETTER IN EACH BOX

35a

N

N CVP
O direct arterial BP (invasive)
P pulmonary arterial pressure
Q intracranial pressure
R other (please specify)

35b

A
 B

A the most senior anaesthetist
B another anaesthetist
C surgeon
D nurse
E other (please specify)

A Haemoglobin _____ gm.litre⁻¹

F
 G

B Packed cell volume (haematocrit) _____

H
 I

C White cell count _____ $\times 10^3 \text{ litre}^{-1}$

J
 K

D Sickle cell test (eg Sickledex) _____

L
 M

E Coagulation screen _____

E
 F

F Plasma electrolytes Na _____ m mol.litre⁻¹

G
 H

G K _____ m mol.litre⁻¹

I
 J

H Cl _____ m mol.litre⁻¹

L
 M

I HCO₃ _____ m mol.litre⁻¹

N
 O

J Blood urea _____ m mol.litre⁻¹

P
 Q

K Creatinine _____ micro mol.litre⁻¹

R
 S

L Serum albumin _____ g.litre⁻¹

T
 U

M Bilirubin (total) _____ micro mol.litre⁻¹

V
 W

N Glucose _____ m mol.litre⁻¹

X
 Y

O Urinalysis (ward or lab) _____

Z
 A

P Blood gas analysis _____

B
 C

Q Chest x-ray _____

D
 E

R Electrocardiography _____

S Respiratory function tests _____

81f

N
 O
 P
 Q
 R

82. Who decided that the patient should be discharged from the recovery room?

83. Time of leaving recovery area
(enter "X" in boxes if times not recorded)

use 24 hour clock
83

84. Had this patient recovered protective reflexes before discharge from the recovery area?

82

Yes = 1 No = 2 Not known = 3

84

85. Where did this patient go next? (ie after the recovery room)

85

A ward
B high dependency unit
C intensive care unit
D specialised ICU
E home
F another hospital
G other (please specify)

80. Were you unable at any time to transfer the patient into an ICU, HDU, etc?

80a

Yes = 1 No = 2

If yes, why?

- A closed at night
- B closed at weekend
- C understaffing
- D lack of beds
- E other (please specify)

Continued

- 35b T Echocardiography _____
- U Special cardiac investigation (eg cardiac catheterization) _____
- V Special neurological investigation (ie imaging) _____
- W Others relevant to anaesthesia (please specify) _____

RECOVERY AREA/ROOM

81. Were monitoring devices used during the management of this patient in the recovery room?

81a

Yes = 1 No = 2

If yes, please indicate which monitors were used.

Enter a letter(s) in each box as follows:

- A ECG
B pulse oximeter
C indirect BP
D pulse meter
E oesophageal or precordial (chest wall) stethoscope

- F inspired gas O₂ analyser
G renal
H musculoskeletal
I haematological

- J ventilation volume
K ventilator disconnect device
L temperature (state site)
M urine output

36. Coexisting medical diagnoses (please enter the appropriate letter in a box, and specify the disorder in the space next to the category).

- 36 A _____
 B _____
 C _____
 D _____
 E _____
 F _____
 G _____
 H _____
 I _____
 J _____
 K _____

- K peripheral nerve stimulator
 L temperature (state site)
 M urine output

37. What drug or other therapy was the patient receiving at the time of operation (but excluding premedication or drugs for anaesthesia)?

Please enter each appropriate letter, and specify drugs and doses in the space below each category.

प्राचीन भारतीय साहित्य की विद्या।

37

Definitions

(as used by the Association of Anaesthetists of Great Britain and Ireland)

(as used
Ireland)

- A none _____
 - B analgesic – aspirin _____
 - C analgesic – other non-narcotic (specify) _____
 - D analgesic – narcotic (specify) _____
 - E anti-angina _____
 - F anti-arrhythmic _____
 - G anticoagulant _____
 - H anticonvulsant _____
 - I antidepressant _____

- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K
- L
- M
- N
- O
- P
- Q
- R
- S
- T
- U
- V
- W
- X
- Y
- Z

1. A recovery area is an area to which patients are admitted from an operating room, where they remain until consciousness is regained and ventilation and circulation are stable.
2. A high dependency unit (HDU or area A) is an area for patients who require more intensive observation and/or nursing care than would normally be expected on a general ward. Patients who require mechanical ventilation or invasive monitoring would not be admitted to this area.
3. An intensive care unit (ICU) is an area to which patients are admitted for treatment of actual or impending organ failure who may require technological support (including mechanical ventilation of the lungs and/or invasive monitoring).

J antidiabetic _____
K antihypertensive _____

K
78. Which special care areas (see definitions above) exist in the hospital in which the operation took place?

78

L anti-infective (antibiotic,
antifungal, antiviral etc) _____

M anti-Parkinson's _____

N anxiolytic _____

A recovery area or room equipped and staffed for this purpose
 B high dependency unit
 C intensive care unit
 D other (please specify) _____

O benzodiazepines

[

P bronchodilator _____

卷之三

Q cardio- or vaso-active drug
(not otherwise specified) _____

79. After leaving the operating room, did the patient go to a specific recovery

R contraceptive

area or room (ie option "A" in question 78)

S corticosteroid (including Dexamethasone)

Yes = 1
No = 2

T cytotoxic

T

U diuretic _____

If **yes**, please continue with questions 80 and following.

V H_2 blockers

V **II**, please answer question 8 if you have gone straight to question 80.

X other (please specify) _____

X

REGIONAL ANAESTHESIA

74. If the anaesthetic included a regional technique, which method was used? 74

- | | | | | | | | | |
|-------------------|--------|---|---|---|---|---|---|---|
| A | B | C | D | E | F | G | H | - |
| epidural – caudal | lumbar | | | | | | | |
| B | | | | | | | | |
| C | | | | | | | | |
| D | | | | | | | | |
| E | | | | | | | | |
| F | | | | | | | | |
| G | | | | | | | | |
| H | | | | | | | | |
- intravenous regional
peripheral nerve block, eg paravertebral, sciatic, intercostal
plexus block (eg brachial, 3-in-1 block)
subarachnoid (spinal)
surface (eg for bronchoscopy)

38. Was there any history of a drug reaction? Please exclude minor reactions to penicillin.

Yes = 1 No = 2

38

If yes, specify drug and reaction:

75. Which agent was used? Please specify drug(s) and dosage(s)

- | | | |
|-------------|------------------------|---|
| A | B | C |
| local _____ | | |
| B | narcotic _____ | |
| C | other (please specify) | |
-
-
-

39. ASA Status (enter class number)

39

- | | | | | |
|---------|---------|---------|---------|---------|
| Class 1 | Class 2 | Class 3 | Class 4 | Class 5 |
| | | | | |
- (Note we do not use the E subclassification)

SEDATION (as opposed to General Anaesthesia)

76. Which sedative drugs were given for this procedure (excluding premedication)?

- | | | | | |
|----------|---|---|---|---|
| A | B | C | D | E |
| inhalant | | | | |
| B | narcotic analgesic | | | |
| C | benzodiazepine | | | |
| D | sub-anaesthetic doses of IV anaesthetic drugs | | | |
| E | other (please specify) | | | |
-

77. Was oxygen given?

Yes = 1 No = 2

77a

If yes, for what reason?

- | | |
|------------------------------|---------------------|
| A | B |
| routine | otherwise indicated |
| (please specify indications) | |

77b

American Society of Anesthesiology Classification of Physical Status

Class 1

The patient has no organic, physiological, biochemical, or psychiatric disturbance. The pathological process for which the operation is to be performed is localized and does not entail a systemic disturbance.

Examples: a fit patient with inguinal hernia
fibroid uterus in an otherwise healthy woman.

Class 2

Mild to moderate systemic disturbance caused either by the condition to be treated surgically or by other pathophysiological processes.

Examples: non-, or only slightly limiting organic heart disease
mild diabetes
essential hypertension
anaemia.

Some might choose to list the extremes of age here, either the neonate or the octogenarian, even though no discernible systemic disease is present.
Extreme obesity and chronic bronchitis may be included in this category.

Class 3

Severe systemic disturbance or disease from whatever cause, even though it may not be possible to define the degree of disability with finality.

Examples: severely limiting organic heart disease

severe diabetes with vascular complications

moderate to severe degrees of pulmonary insufficiency

angina pectoris or healed myocardial infarction.

Class 4

Severe systemic disorders that are already life threatening, not always correctable by operation.

Examples: patients with organic heart disease showing marked signs of

cardiac insufficiency

persistent angina or active myocarditis

advanced degree of pulmonary, hepatic, renal or endocrine

insufficiency.

Class 5

The moribund patient who has little chance of survival but is submitted to operation in desperation.

Examples: burst abdominal aneurysm with profound shock

major cerebral trauma with rapidly increasing intracranial

pressure massive pulmonary embolus.

Most of these patients require operation as a resuscitative measure with little if any anaesthesia.

69. Were muscle relaxants used during the anaesthetic?

Yes = 1 No = 2

If yes, please indicate which

A depolarising
B non-depolarising

69a

69b
 A
 B

69c

70

71

72
 A
 B
 C
 D

73a

73b
 mmHg

PREPARATION OF PATIENT BEFORE OPERATION

40

Yes = 1 No = 2
If yes, please explain

72

73

73a

40. When was the last fluid/food given by mouth?
 40
 A more than 6 hours before operation
 B between 4-6 hours before operation
 C less than 4 hours before operation
 D not known/not recorded
- Please specify nature and volume if known.

GENERAL ANAESTHESIA

41. Indicate measures taken to reduce gastric acidity and volume, as prophylaxis against acid aspiration.

65. Did you take precautions at induction to minimise pulmonary aspiration?

No = 2

If yes, please indicate which

A cricoid pressure
 B postural changes – head up
 C postural changes – head down
 D postural changes – lateral
 E pre-oxygenation without inflation of the lungs
 F aspiration of nasogastric tube
 G other (please specify)

66 How was the airway established during anaesthesia?

- A face mask (with or without oral airway)
- B laryngeal mask
- C orotracheal intubation
- D nasotracheal intubation
- E tracheostomy
- F other (please specify)

67. What was the mode of ventilation during the operation?

- A tube seen passing through cords
- B chest movement with inflation auscultation
- C expired CO₂ monitoring
- D oesophageal detector device
- E other (please specify) _____
- F

43. Was anything added to the above solution(s)? Yes = 1 No = 2

If yes, please specify:

41

prophylaxis against acid aspiration.

- A none
- B antacids
- C H₂ antagonists
- D metoclopramide
- E nasogastric/stomach tube
- F other (please specify)

42. Did the patient receive intravenous fluid therapy in the 12 hours before induction?

42	<input type="checkbox"/> a		
Yes = 1	No = 2		
If yes, please specify nature and volume in 12 hour pre-induction period.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Fluid (enter letter for each)</th> <th style="text-align: left; padding: 5px;">Total (mls) given in 12 hours before induction</th> </tr> </thead> </table>	Fluid (enter letter for each)	Total (mls) given in 12 hours before induction
Fluid (enter letter for each)	Total (mls) given in 12 hours before induction		

43. Was anything added to the above solution(s)?

Yes = 1 No = 2

44. Were measures (other than those specified in questions 20 and 24) taken to improve the respiratory system **before** induction of anaesthesia?

Yes = 1 No = 2

44a

If **yes**, please indicate which measure(s) by entering a letter for each.

A antibiotic therapy
B bronchodilators (nature and dose)
C chest physiotherapy
D airway management eg oral airway, tracheostomy
E other (please specify) _____

44b

45. Were premedicant drugs prescribed?

Yes = 1 No = 2

45a

If **yes**, please enter the appropriate letter in each box, and specify drugs and dose in the space next to each category.

A Atropine _____

A
 B

B Chloral hydrate _____

C
 D

C Diazepam (eg Valium) _____

E
 F

D Droperidol _____

G
 H

E Fentanyl _____

I
 J

F Glycopyrronium (Robinul) _____

K
 L

G Hyoscine (Scopolamine) _____

M
 N

H Lorazepam (eg Ativan) _____

O
 P

I Ketamine _____

Q
 R

J Metoclopramide _____

S
 T

K Methohexitone _____

L Midazolam (Hypnovel) _____

61. Did anything hinder full monitoring?

Yes = 1 No = 2

61

If **yes**, please specify: (eg bilateral arm surgery, radiotherapy, skin pigmentation, inaccessibility, non-availability of monitors)

62. What was the position of the patient during surgery?

62

A supine
B lateral
C prone
D sitting
E knee-elbow
F lithotomy (inc.Lloyd-Davies)
G jack knife
H other (please specify)

63. Was the main position changed during the procedure?

Yes = 1 No = 2

63

If **yes**, please explain

TYPE OF ANAESTHESIA

64

64. What type of anaesthetic was used?

A general alone (65-73)
B local infiltration alone
C regional alone (74-75, and 77)
D general and regional (65-75)
E general and local infiltration (65-73)
F sedation alone (76-77)
G sedation and local infiltration (76-77)
H sedation and regional (74-77)

Please now answer the questions (if any) indicated in brackets, and then continue from question 78.

59. Were monitoring devices used during the management of this anaesthetic?

Yes = 1 No = 2

If yes, please indicate which monitors were used.

Please enter appropriate letter(s) in boxes:

- | | Anaesthetic Room | Operating Room |
|---|-----------------------|-----------------------|
| A | A
B
C
D
E | A
B
C
D
E |
| B | | |
| C | | |
| D | | |
| E | | |
| F | | |
| G | | |
| H | | |
| I | | |
| J | | |
| K | | |
| L | | |
| M | | |
| N | | |
| O | | |
| P | | |
| Q | | |
| R | | |
| S | | |
| T | | |

- A ECG
 B pulse oximeter
 C indirect BP
 D pulse meter
 E oesophageal or precordial (chest wall) stethoscope
 F fresh gas O₂ analyser
 G inspired gas O₂ analyser
 H inspired anaesthetic vapour analyser
 I expired CO₂ analyser
 J airway pressure gauge
 K ventilation volume
 L ventilator disconnect device
 M peripheral nerve stimulator
 N temperature (state site)
 O urine output
 P CVP
 Q direct arterial BP (invasive)
 R pulmonary arterial pressure
 S intracranial pressure
 T other (please specify)

- 59a
 59b
 59c
 59d
 59e

46. Was **non-invasive** monitoring established **just before** the induction of anaesthesia?

46a

46b

Yes = 1 No = 2

If yes, please indicate whether

- A ECG
 B BP
 C pulse oximetry
 D other (please specify)

If yes to question 46 what was the blood pressure immediately before induction?
 _____ / _____ mmHg

60. Was there any malfunction of monitoring equipment?

Yes = 1 No = 2

If yes, please specify:

60

47. Was **invasive** monitoring established **before** induction of anaesthesia (eg CVP, arterial line)?

Yes = 1 No = 2

If yes, please specify

Continued

45b

- | | M | N | O | P | Q | R | S | T |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| M | <input type="checkbox"/> | | | | | | | |
| N | | <input type="checkbox"/> | | | | | | |
| O | | | <input type="checkbox"/> | | | | | |
| P | | | | <input type="checkbox"/> | | | | |
| Q | | | | | <input type="checkbox"/> | | | |
| R | | | | | | <input type="checkbox"/> | | |
| S | | | | | | | <input type="checkbox"/> | |
| T | | | | | | | | <input type="checkbox"/> |

46a

- P Prochlorperazine (eg Stemetil)
 Q Temazepam
 R Promethazine (eg Phenergan)
 S Trimiprazine (Vallergan)
 T Other (Please specify)

48. Was it necessary to take measures additional to those specified in questions 24 and 43 to improve the patient's cardiovascular function just before and at the induction of anaesthesia?

Yes = 1 No = 2

If no, please go to question 49.

48a

If yes, please specify (enter appropriate letter in each box below).

B Crystalloid IV fluids (Ringer lactate, 0.9% saline, etc)

48b

Yes = 1 No = 2

Please specify type and amount:

C Colloid IV fluids (Dextran, gelatin, etc)

48c

Yes = 1 No = 2

Please specify type and amount:

D Whole blood transfusion

48d

Yes = 1 No = 2

If yes, how many units?

E Blood components (packed cells, FFP, Platelets etc)

48e

Yes = 1 No = 2

Please specify type and volume:

F Antiarrhythmic drugs (Verapamil etc)

48f

Please specify drug and dose:

G Cardiac glycoside

48g

If yes, please specify:

FLUIDS DURING OPERATION

57. Did the patient receive intravenous fluids DURING the operation? 57a

Yes = 1 No = 2

57a

If yes, please indicate which:

Crystalloid

48b

Yes = 1 No = 2

Please specify type and amount:

A Dextrose 5%

57b

B Dextrose 4% saline 0.18%

C Dextrose 10%

D Saline 0.9%

E Hartmann's (Compound Sodium Lactate)

F other (please specify)

Colloid

A Modified gelatin (Gelofusine, Haemaccel)

57c

B Human Albumin solution

C Starch (HES)

D Dextran

E Mannitol (please specify concentration)

F other (please specify)

Blood

A Whole blood

57d

B Red cell component

C Other component (please specify)

58. What was the assessed blood loss during operation?

ml

56. Is there an anaesthetic record for this operation in the notes?

Yes = 1 No = 2

H Diuretics

48h

Yes = 1 No = 2

If yes, please specify:

If yes, please send a complete copy of it with this questionnaire to the NCEPOD office. (We will delete/remove identification marks).

If no, please give an account of the anaesthetic below. Please include details of anaesthetic agents, drugs, routes of administration, breathing systems, and tube size.

I Vasopressors

48i

Yes = 1 No = 2

If yes, please specify:

J Inotropic drugs by infusion (Dobutamine, adrenaline etc)

48j

Yes = 1 No = 2

If yes, please specify drug and strength, solution and dose:

K Others (please specify)

48k

Yes = 1 No = 2

49. Was there an inappropriate delay before the start of the operation?

49a

Yes = 1 No = 2

If yes, was this due to non-availability of:

49b

- | | | |
|--------------------------------------|--------------------------|---|
| A radiology | <input type="checkbox"/> | A |
| B haematology | <input type="checkbox"/> | B |
| C pathology | <input type="checkbox"/> | C |
| D operating theatre | <input type="checkbox"/> | D |
| E anaesthetist | <input type="checkbox"/> | E |
| F anaesthetist's assistant | <input type="checkbox"/> | F |
| G surgeon | <input type="checkbox"/> | G |
| H theatre staff | <input type="checkbox"/> | H |
| I portering staff | <input type="checkbox"/> | I |
| J other staff (please specify) _____ | <input type="checkbox"/> | J |
| K other (please specify) _____ | <input type="checkbox"/> | K |

50. Were any measures taken (before, during or after operation) to prevent venous thrombosis?

Yes = 1 No = 2

If yes, please enter letter for each measure taken

- A aspirin
- B heparin
- C dextran infusion
- D leg stockings
- E calf compression/stimulation
- F Warfarin
- G Other (please specify)

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A	B	C	D
E	F	G	

54. What was the grade of the most senior **surgeon** in the operating room?

--

50a

- A House Officer
- B Senior House Officer
- C Registrar
- D Senior Registrar
- E Associate Specialist
- F Clinical Assistant
- G Staff Grade
- H Consultant
- I Other (please specify)

50b

54

55. Did you have **non-medical** help with anaesthesia?

Yes = 1 No = 2

If yes, please specify

- A trained anaesthetic nurse
- B trainee anaesthetic nurse
- C theatre nurse
- D trained operating department assistant (ODA or SODA)
- E trainee ODA
- F operating department orderly (ODO)
- G ward nurse
- H physiological measurement technician
- I other (please specify)

55a

55b

A	B	C	D	E	F	G	H
I							

51. Time of start of anaesthetic
(enter "X" in boxes if times not recorded)

--	--	--	--

51

use 24 hour clock

--	--	--	--

52

use 24 hour clock

53. Time of transfer out of operating room
(ie to recovery, ITU etc)

--	--	--	--

53

use 24 hour clock

If you are not able to provide the times, please indicate total duration of operation (ie time of start of anaesthetic to time of transfer)

_____ hours _____ mins