Medical Admissions into Adult General Intensive Care Units
Questionnaire Assessment Form

Questionnaire number ☐☐☐☐

DOCUMENTATION PROVIDED:

☐ Admission notes

☐ Medical notes for 3 days prior to ICU admission ☐ 1 ☐ 2 ☐ 3 ☐ R

☐ Nursing notes for 3 days prior to ICU admission ☐ 1 ☐ 2 ☐ 3 ☐ R

☐ Patient monitoring charts for 3 days prior to ICU ☐ 1 ☐ 2 ☐ 3 ☐ R

☐ Drug prescription charts for 3 days prior to ICU ☐ 1 ☐ 2 ☐ 3 ☐ R

☐ Inpatient discharge summary as sent to the GP

☐ Autopsy report

PATIENT DETAILS

Age ☐☐☐   Gender ☐ Male   ☐ Female

Admission to hospital: **Admission to ICU:**

Date ☐☐ ☐☐ ☐☐   Date ☐☐ ☐☐ [0][3]
Day *Month* *Year*   *Day* *Month* *Year*

Day ☐☐☐   Day ☐☐☐

Time ☐☐ : ☐☐ *(24-hour clock)*   Time ☐☐ : ☐☐ *(24-hour clock)*

SECTION I. Data extracted from case notes for the 3 days prior to ICU admission

A. PHYSIOLOGICAL INSTABILITY

1. Date and time patient met criteria below for the **first time:**
(For dates, only day and month are entered)

Insufficient case notes provided to accurately complete this question: ☐

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a. Cardiorespiratory arrest ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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b. Respiratory rate: <8 breaths/min ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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c. Respiratory rate: >30 breaths/min ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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d. SaO$_2$ <90% on Oxygen ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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e. Difficulty speaking ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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f. Pulse rate: <40 beats/min ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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g. Pulse rate: >130 beats/min ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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h. Systolic blood pressure <90mmHg ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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i. Repeated or prolonged seizures ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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j. Any unexplained decrease in consciousness ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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k. Agitation or delirium ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

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l. Concern about patient status not detailed above ☐ Yes ☐ No ☐ Insufficient data

If **YES,** Date ☐☐ ☐☐ Time ☐☐ : ☐☐

(Criteria based on Medical Emergency Team[1-2])

2. Details of patient reviews in the 3 days prior to ICU admission (this excludes the admission entry, if applicable, but includes the referral entry):

	Date (Day and month)	Time (24-hour clock)	Planned	Unplanned	Insufficient data	Grade of reviewer (see definitions)	Speciality of reviewer (see definitions)	Contact details of reviewer recorded		
								Yes	No	Insufficient data
1	▢▢ ▢▢	▢▢ : ▢▢	▢	▢	▢	▢▢	▢▢	▢	▢	▢
2	▢▢ ▢▢	▢▢ : ▢▢	▢	▢	▢	▢▢	▢▢	▢	▢	▢
3	▢▢ ▢▢	▢▢ : ▢▢	▢	▢	▢	▢▢	▢▢	▢	▢	▢
4	▢▢ ▢▢	▢▢ : ▢▢	▢	▢	▢	▢▢	▢▢	▢	▢	▢
5	▢▢ ▢▢	▢▢ : ▢▢	▢	▢	▢	▢▢	▢▢	▢	▢	▢
6	▢▢ ▢▢	▢▢ : ▢▢	▢	▢	▢	▢▢	▢▢	▢	▢	▢
7	▢▢ ▢▢	▢▢ : ▢▢	▢	▢	▢	▢▢	▢▢	▢	▢	▢
8	▢▢ ▢▢	▢▢ : ▢▢	▢	▢	▢	▢▢	▢▢	▢	▢	▢
9	▢▢ ▢▢	▢▢ : ▢▢	▢	▢	▢	▢▢	▢▢	▢	▢	▢
10	▢▢ ▢▢	▢▢ : ▢▢	▢	▢	▢	▢▢	▢▢	▢	▢	▢

▢ Further reviews attached as an appendix.

3. Concerns expressed in nursing notes:

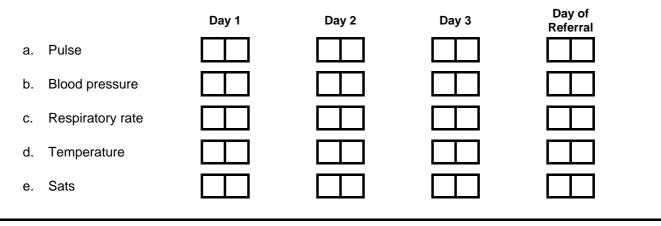| Date *(Day and month)*	Time *(24-hour clock)*	Summary of note
1 ☐☐ ☐☐	☐☐ : ☐☐	
2 ☐☐ ☐☐	☐☐ : ☐☐	
3 ☐☐ ☐☐	☐☐ : ☐☐	
4 ☐☐ ☐☐	☐☐ : ☐☐	

4. a   Is the resuscitation status documented?   ☐ Yes   ☐ No   ☐ Insufficient data

b   If **YES**, i   Date (last entry) documented: ☐☐ ☐☐   ☐ Insufficient data

ii   Time (last entry) documented: ☐☐ : ☐☐   ☐ Insufficient data

iii   Grade of doctor documenting resuscitation status: ☐☐☐ *(see definitions)*   ☐ Insufficient data

iv   Decision documented: ☐ Patient for resuscitation
   ☐ Patient not for resuscitation

v   Discussion with patient?   ☐ Yes   ☐ No   ☐ Insufficient data

vi   Discussion with family?   ☐ Yes   ☐ No   ☐ Insufficient data

C. OBSERVATIONS

5. Documented request for type and frequency of physiological observations to be made:

	Observations requested?			If **YES**, frequency of observation requested:			
	Yes	**No**	**Insufficient data**	**Hourly**	**4-hourly**	**Other**	**Insufficient data**
a. Pulse	☐	☐	☐	☐	☐	_____	☐
b. Blood pressure	☐	☐	☐	☐	☐	_____	☐
c. Respiratory rate	☐	☐	☐	☐	☐	_____	☐
d. Urine output	☐	☐	☐	☐	☐	_____	☐
e. Fluid balance	☐	☐	☐	☐	☐	_____	☐
f. Central venous pressure (CVP)	☐	☐	☐	☐	☐	_____	☐
g. Oxygen saturation (SpO2)	☐	☐	☐	☐	☐	_____	☐
h. Other	☐	☐	☐	☐	☐	_____	☐

6. Are there instructions to the nurses as to when to alert the medical staff in the event of deterioration in specific variables? ☐ Yes ☐ No ☐ Insufficient data

7. Number of times each of the following observations were recorded in the 3 days prior to ICU referral:
(These counts are taken from observation charts, where provided, and not from information in the case notes)

	Day 1	Day 2	Day 3	Day of Referral
a. Pulse	☐☐	☐☐	☐☐	☐☐
b. Blood pressure	☐☐	☐☐	☐☐	☐☐
c. Respiratory rate	☐☐	☐☐	☐☐	☐☐
d. Temperature	☐☐	☐☐	☐☐	☐☐
e. Sats	☐☐	☐☐	☐☐	☐☐

8. a. Is there evidence in the case notes that a CVC was inserted in the period prior to the 3 days before ICU admission?

☐ Yes ☐ No

b. Was a CVC inserted in the 3 days prior to ICU admission?

☐ Yes ☐ No ☐ Insufficient data

c. If **YES,** i Reason for insertion:

☐ Nutrition (TPN)

☐ Drugs requiring central route

☐ To assess volaemic state

☐ Resuscitation

☐ Not stated

☐ Other _____

ii Date of insertion: ☐☐ ☐☐
Day *Month*

iii Time of insertion: ☐☐ : ☐☐ *(24-hour clock)*

iv Grade of doctor: ☐☐☐ *(see definitions)*

v Speciality of doctor: ☐☐☐ *(see definitions)*

vi Was a plan documented for use of CVP data?

☐ Yes ☐ No ☐ Insufficient data

Additional notes

SECTION II. Expert opinion from case notes

In this section, you will be asked to provide opinions on the management of the patient. Please use a black or blue pen and complete all questions with either a bold cross or block capitals.

Appropriate may be defined as: The expected health benefits to an average patient exceed the expected health risks by a sufficiently wide margin to make the intervention worthwhile and that that intervention is superior to alternatives (including no intervention)[3].

E. APPROPRIATENESS AND TIMING OF REFERRAL

10. a Was referral to ICU appropriate for this patient? ☐ Yes ☐ No ☐ Insufficient data

   b If **NO,** 1 ☐ ICU referral was not appropriate due to poor chance of survival.

   2 ☐ Referral was made too early.

   3 ☐ Other:

   Please specify   **Please go to question 12**

11. a Was referral to ICU made at the correct time? ☐ Yes ☐ No ☐ Insufficient data

   b If **NO,** 1 ☐ Referral should have been made earlier.

   2 ☐ Referral was made too early.

12. a Was admission to ICU appropriate for this patient? ☐ Yes ☐ No ☐ Insufficient data

   b If **NO,** 1 ☐ ICU admission was not appropriate due to poor chance of survival

   2 ☐ Other:

13. a Could this admission to ICU have been avoided? ☐ Yes ☐ No ☐ Insufficient data

   b If **YES**, 1 ☐ Different care could have prevented need for admission.

   2 ☐ Treatment limitation decision could have avoided admission.

   3 ☐ Other:

F. PATIENT MANAGEMENT PRIOR TO ICU REFERRAL

QUESTIONS 14 – 18 REFER TO THE ADMISSION NOTE ONLY

14. Was an adequate/acceptable history taken at first contact with the patient? ☐ Yes ☐ No ☐ Insufficient data

15. Was the clinical examination complete at first contact with the patient? ☐ Yes ☐ No ☐ Insufficient data

16. a Was a diagnosis (or differential diagnoses) reached in the initial review of the patient (up to but not including the post-take ward round)? ☐ Yes ☐ No ☐ Insufficient data

b If **YES**, was this correct (or the correct diagnosis included in the differential)? ☐ Yes ☐ No ☐ Insufficient data

17. a Was there a reasonable initial treatment plan in the notes? ☐ Yes ☐ No ☐ Insufficient data

b If **YES**, was this followed? ☐ Yes ☐ No ☐ Insufficient data

18. How would you describe the appropriateness of the treatment for the condition of the patient?

1 ☐ Prompt and appropriate.

2 ☐ Prompt but inappropriate therapy.

3 ☐ Appropriate but apparent delay.

4 ☐ Inappropriate and delayed.

5 ☐ Insufficient information to comment.

19. Grade the following aspects of the management of the patient in the 3 days prior to ICU referral using 1-9 scale, where 1=very poor and 9=excellent.

Insufficient data for:

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

1 ☐ Airway management ☐ Not applicable

2 ☐ Breathing ☐ Not applicable

3 ☐ Circulation ☐ Not applicable

4 ☐ Oxygen therapy ☐ Not applicable

5 ☐ Monitoring ☐ Not applicable

20. Was the correct diagnosis (i.e. diagnosis of the condition leading to ICU referral) made by the referring physician prior to ICU admission? ☐ Yes ☐ No ☐ Insufficient data

G. ORGANISATION OF CARE

21. In the 3 days prior to referral, please grade the following on a scale of 1-9, where 1= very poor and 9 = excellent.

1 ☐ Organisational aspects of care ☐ Insufficient data

2 ☐ Knowledge ☐ Insufficient data

3 ☐ Appreciation of clinical urgency ☐ Insufficient data

4 ☐ Supervision ☐ Insufficient data

5 ☐ Advice from senior doctors ☐ Insufficient data

22. a Was an autopsy performed? ☐ Yes ☐ No ☐ Insufficient data

b If **NO,** should an autopsy have been performed? ☐ Yes ☐ No ☐ Insufficient data

I. SUMMARY OF ASSESSMENT OF CARE

23. How would you categorise the quality of care of this patient?
Please cross both 2 and 3 if there was room for improvement in both clinical and organisation aspects of care

☐ 1. Good practice – a standard that you would accept from yourself, your trainees and your institution.

☐ 2. Room for improvement: aspects of **clinical** care that could have been better.

☐ 3. Room for improvement: aspects of **organisational** care that could have been better.

☐ 4. Less than satisfactory – this is a case in which the advisor has serious concerns about the patient care, although recognising that NCEPOD had incomplete information and does not know fully the local circumstances.

☐ 5. Insufficient information submitted to assess the quality of care.

24. If care was less than good practice, did the deficiencies in care contribute to the patient's death? ☐ Yes ☐ No ☐ Insufficient data

25. **Cause for concern cases**
Occasionally NCEPOD will refer cases that have been identified as 4 (Less than satisfactory) when it is felt that further feedback to the Trust concerned is warranted. This is usually due to an area of concern particular to the hospital or clinician involved, and not for issues being highlighted across the body of case-notes. This process has been agreed by the NCEPOD Steering Group and the GMC. The Medical Director of the Trust is written to by the Chief Executive of NCEPOD explaining our concerns. This process has been in operation for two years and the responses received have always been positive in that they feel we are dealing with concerns in the most appropriate manner.

If you feel that this case should be considered for such action, please cross: ☐

26. Are there any particular issues which you feel should be highlighted in the final report? ☐ Yes ☐ No ☐ Insufficient data

If **YES**, please specify overleaf.

Please provide any additional comments about the management of the patient which may be useful during further analysis.

Initials [   ]   Date [   ]

DEFINITIONS

GRADES have been coded as one of the following:

CON   Consultant
SAS   Staff grade, Associate specialist, Clinical assistant,
          Trust doctor, Clinical fellow, Hospital practitioner
SP3   SpR year 3+
SP1   SpR year 1/2
REG   Registrar, grade unspecified
SHO   Senior House Officer
PHO   Pre-registration House Officer

SPECIALTIES

A&E	Accident and Emergency	**MON**	Medical Oncology
ANA	Anaesthetist	**NEU**	Neurology
CAR	Cardiology	**NES**	Neurosurgery
CGE	Clinical Genetics	**NUM**	Nuclear Medicine
NEP	Clinical Neurophysiology	**NUR**	Nurse
PHA	Clinical Pharmacology & Therapeutics	**ORT**	Orthopaedic
DER	Dermatology	**PCA**	Paediatric Cardiology
END	Endocrinology & Diabetes	**PAL**	Palliative Medicine
GAS	*Gastroenterology*	**RAD**	Radiology
GEN	General (Internal) Medicine	**REH**	Rehabilitation Medicine
GUM	Genito-Urinary Medicine+HIV/AIDS	**REN**	Renal Medicine
GER	Geriatric Medicine	**RES**	Respiratory Medicine
GYN	Gynaecology	**RHE**	Rheumatology
HAE	Haematology	**SUR**	Surgeon
HEP	Epatology	**THO**	Thoracic Medicine
INC	Intensive Care	**OUT**	Outreach Team
ITM	Infection & Tropical Medicine		
MIC	Microbiology		

References
1. Bellomo R, Goldsmith D, Uchino S, Buckmaster J, Hart GK, Opdam H, Silvester W, Doolan L, Gutteridge G. A prospective before-and-after trial of a medical emergency team. Med J Aust. (2003) 15;179(6):283-7.
2. Lee A, Bishop G, Hillman KM, Daffurn K. The Medical Emergency Team. Anaesth Intensive Care (1995) 23(2):183-6.
3. Consensus development methods, and their use in clinical guideline development. Health Technology Assessment 1998; 2: 3.