



Pulmonary Embolism

National Confidential Enquiry into Patient Outcome and Death (NCEPOD)

CLINICIAN QUESTIONNAIRE

CONFIDENTIAL

DETAILS OF THE CLINICIAN COMPLETING THIS QUESTIONNAIRE

Grade: _____

Specialty: _____

What is this study about?

The aim is to explore the overall management of patients diagnosed with pulmonary embolism and to look for remediable factors in the care of these patients.

Inclusions

Patients aged 16 or over who were diagnosed (in any position) with pulmonary embolism (ICD10 codes I26.0 and I26.9) between 1st July 2017 and 31st August 2017 inclusive. Patients that present with symptoms of a pulmonary embolism and those that develop PE as an inpatient are included.

Eligible cases were identified from the hospital central record system (using ICD10 codes). Up to 6 cases per hospital have been selected for review.

CPD accreditation:

Consultants who complete NCEPOD questionnaires make a valuable contribution to the investigation of patient care. It 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.

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 a treatment escalation decision made?

Yes No

If you make a mistake, please "black-out" the incorrect box and re-enter the correct information, e.g.

Yes No

Questions or help?

If you have any queries about this study or this questionnaire, please contact:
pulmonaryembolism@ncepod.org.uk or telephone:
020 7251 9060

Further details available on our study web page:
<http://www.ncepod.org.uk/pe.html>

Thank you for taking the time to complete this questionnaire. The findings of the study will be published in summer 2019.

If you would like email confirmation of the completion of this questionnaire and a certificate at the end of the study, please clearly supply your name, job title and email address below.

I agree to NCEPOD holding my details for the purposes of the study and until the end of the study

Name: _____

email address _____

Job title: _____

NCEPOD number:

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DEFINITIONS

AMB score	FACTORS: Female sex, Age<80years, Has access to personal/public transport, IV treatment NOT anticipated by referring doctor, NOT acutely confused, MEWS score = 0, NOT discharged from hospital within previous 30 days.	If a factor is applicable to the patient they score 1 point. The maximum score is 7. If the patient has a high score then ambulatory care should be considered
Ambulatory Emergency Care (AEC)	Ambulatory Emergency Care (AEC) is defined by the AEC Network as the provision of same day emergency care for patients being considered for emergency admission. Ambulatory Emergency Care services can also facilitate early supported discharge by offering the option of early clinical review, follow up diagnostics and patient reassurance. However this should not be the main focus of the service.	
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>	
Rockwood clinical frailty scale	<p>1 VERY FIT - people who are robust, active, energetic, and motivated. These people commonly exercise regularly. They are among the fittest for their age.</p> <p>2 WELL - people who have no active disease symptoms but are less than fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.</p> <p>3 MANAGING WELL - people whose medical problems are well controlled, but are not regularly active beyond routine walking.</p> <p>4 VULNERABLE - while not dependent on others for daily help, often symptoms limit activities. A common complaint it being 'slowed up', and/or being tired during the day.</p> <p>5 MILDLY FRAIL - these people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.</p> <p>6 MODERATELY FRAIL - people need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.</p> <p>7 SEVERELY FRAIL - completely dependent for personal care from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within 6 months of life).</p> <p>8 VERY SEVERELY FRAIL - completely dependent, approaching the end of life. Typically they could not recover even from a minor illness.</p> <p>9 TERMINALLY ILL - approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.</p>	

Pulmonary Embolism Severity Index (PESI)

Predictors	Score	Low risk
Age	Years	(≤ 65 class I, 66-85, class II)
Male sex	+10	Mortality 1.9%
Cancer	+30	
Heart failure	+10	Intermediate risk
COPD	+10	(86-105 class III, 106-125 class IV)
HR ≥ 110 bpm	+20	
SBP < mmHg	+30	Mortality 18.4%
RR > 30 breath per minute	+20	
BT < 36C	+20	High risk
Delirium	+60	(>125 class V)
SaO2 <90%	+20	

Two-level PE Wells Score

Criterion	Score	Clinical Probability simplified scores
Clinical signs or symptoms of DVT	3	
Alternative diagnosis less likely than PE	3	PE likely - > 4 PE unlikely - ≤ 4
Heart rate > 100 beats per minute	1.5	
Immobilization (>3 days) or surgery in last 4 weeks	1.5	
Previous history of DVT or PE	1.5	
Hemoptysis	1	
Active cancer within the last 6 months	1	

CODES FOR GRADE

01 – Consultant	06 – Basic grade (FY1/ FY2 or equivalent)
02 – Staff grade/Associate specialist	07 – Specialist nurse (nurse consultant, nurse practitioner, clinical nurse specialist)
03 – Trainee with CCT	08 – Senior staff nurse, enrolled nurse
04 – Senior specialist trainee (ST3+ or equivalent)	10 – Non-registered staff (HCA etc.)
05 – Junior specialist trainee (ST1&ST2 or CT equivalent)	





A. Case summary - all patients

1a. What type of PE presentation was this?

A patient who presented to hospital with symptoms of PE

A patient who developed PE during the current hospital stay

1b. If the patient presented to hospital with symptoms of PE how were they managed?

As an inpatient On an Ambulatory care pathway (see definitions)

Other (please describe)

1c. Please use the box below to provide a brief summary of this case, adding any additional comments or information you feel relevant.

Please give as much information as possible about the care of this patient.





B. Patient details - all patients

2. Age at presentation to hospital: years 3. Gender Male Female Transgender

4a. Weight at presentation to hospital: kg Not recorded 4b. Height: cm Not recorded

4c. BMI at time of presentation to hospital . Not recorded

5. Please indicate the patient's documented known co-morbidities/risk factors for VTE at the time of presentation/admission to hospital

- | | | |
|--|---|---|
| <input type="checkbox"/> Personal history of VTE (please provide details in Q8) | <input type="checkbox"/> Recent hospitalisation (within 6 weeks of this presentation) | <input type="checkbox"/> Chronic liver disease/ Cirrhosis |
| <input type="checkbox"/> Factor V Leiden | <input type="checkbox"/> Major surgery within 12 weeks of this presentation | <input type="checkbox"/> Diabetes mellitus |
| <input type="checkbox"/> Antiphospholipid syndrome | <input type="checkbox"/> Pregnancy/puerperium (6 weeks post-partum) | <input type="checkbox"/> Chronic kidney disease |
| <input type="checkbox"/> Heparin induced thrombocytopenia | <input type="checkbox"/> Paresis or paralysis | <input type="checkbox"/> Heart failure |
| <input type="checkbox"/> Other hypercoagulable states (please specify below) | <input type="checkbox"/> Family history of VTE | <input type="checkbox"/> Chronic lung disease |
| <input type="text"/> | <input type="checkbox"/> Nursing/care home resident | <input type="checkbox"/> Auto-immune disorder(s) |
| <input type="checkbox"/> Active cancer (treatment ongoing, within 6 months, or palliative) | <input type="checkbox"/> Obesity (BMI > 30) | <input type="checkbox"/> Chronic inflammatory disease(s) |
| <input type="checkbox"/> Trauma or fracture | <input type="checkbox"/> Oestrogen therapy | <input type="checkbox"/> Bedridden for 3 days or more in the last 4 weeks |
| <input type="checkbox"/> Orthopaedic limb immobilisation | <input type="checkbox"/> Central line or pacemaker placement | <input type="checkbox"/> IV drug abuse |
| <input type="checkbox"/> Travel/immobility for longer than 4 hours | <input type="checkbox"/> Other (please specify) | <input type="text"/> |

6a. Was the patient's mental health considered on presentation? Yes No Unknown

6b. Did the patient have a known or newly diagnosed mental health condition? Yes known Yes newly diagnosed
 No Unknown

6c. If Yes what condition?

7. Rockwood clinical frailty scale score at presentation (see definitions on page 2) - please estimate from your review of the casenotes:

- 1 - Very fit 2 - Well 3 - Managing well 4 - Vulnerable 5 - Mildly frail
 6 - Moderately frail 7 - Severely frail 8 - Very severely frail 9 - Terminally ill

8a. Had the patient had a previous diagnosis of VTE? Yes No (go to Q9) Unknown

8b. If Yes was this a: DVT PE Other (please specify)





8c. If Yes to 8a how long prior to the current episode did the last diagnosis for VTE occur? < 3 months 3-6 months 6-12 months
 > 12 months Unknown

8d. On how many previous occasions to this episode had the patient been diagnosed with VTE? Unknown

8e. Was the last episode of PE Provoked Unprovoked Not recorded

9a. Was the patient on prophylactic or therapeutic anticoagulation when they developed the current episode of PE? Prophylactic Therapeutic
 Neither Unknown

9b. If Yes, in your opinion was the drug and dosing correct? Yes No Unknown

9c. If No to 9b, please expand on your answer

9d. If the patient wasn't on prophylactic or therapeutic anticoagulation, in your opinion should they have been? Yes prophylactic Yes therapeutic
 No Unknown

9e. Is there evidence that the patient was non compliant with medication? Yes No Unknown
 Not applicable

10a. For this presentation when did the patient first notice symptoms of PE?

Date unknown 24 hr clock Time unknown
 d d m m y y y y h h m m

Not applicable - patient developed PE as an inpatient **(please go to section C)**

10b. If the date is unknown please approximate the duration of the patient's symptoms weeks days hours

11a. Prior to this hospital attendance, did the patient contact/engage with healthcare services relating to this episode of PE. Yes No

Not applicable patient developed PE as an inpatient **(please go to section C)**

11b. If Yes which services (please mark all that apply)?

- GP 111 / NHS 24 services
- Urgent Care Centre Community nurse
- DVT clinic/ service at this hospital Other out-of-hours services
- DVT clinic/ service at another hospital Emergency department of another hospital

Emergency department at this hospital Other (please specify)

12a. In your opinion, was there an avoidable delay in presentation to hospital? Yes No Unknown

12b. If yes, how long was the delay? weeks days hours

12c. What was the reason for the delay? Patient factors Health care provider factors

Other (please specify)



C. Presentation to hospital - all patients

13a. Time/date of arrival to hospital: 24 hr clock Time not recorded
h h m m d d m m y y y y

13b. Was this episode/admission Non-elective Elective (please go to section Diii)

13c. If Non-elective, did the patient arrive by ambulance? Yes No

13d. Mode of presentation (please select all that apply)?

- Self referral
- Referred by radiology
- Directly seen in ambulatory care unit / area / service
- GP referral
- Referred from outpatient clinic
- Other (please specify):

14a. Where was the patient first assessed?

- Emergency department (ED) - Resuscitation
- ED Majors
- ED other area/area unknown
- Acute medical unit
- Ambulatory care centre / unit (see definitions)
- Ambulatory care pathway but on the ward
- Other (please specify)

14b. Was the patient treated on an ambulatory care pathway? (for the entire or some part of this episode of PE) Yes No No ambulatory care pathway available

14c. If No, In your opinion should they have been? Yes No

14d. If Yes to 14c please expand on your answer?

Di). Ambulatory care patients (including patients who were later admitted)

15a. What time/date was the patient first assessed by a clinician for this episode of care, prior to being placed on the Ambulatory pathway (this could be the patients GP, triage nurse etc)?

Time 24 hr clock Time unknown Date
h h m m d d m m y y y y

15b. When was the patient referred to ambulatory care?

Time 24 hr clock Time unknown Date
h h m m d d m m y y y y

15c. When was the patient accepted by ambulatory care?

Time 24 hr clock Time unknown Date
h h m m d d m m y y y y

15d. Grade and speciality of the person who made the decision to accept this patient for ambulatory care:

Grade: (see definitions) Speciality: Not documented

15e. Time/date patient arrived in ambulatory care area/unit

24 hr clock Time unknown Date
h h m m d d m m y y y y

16a. Were any formal criteria for ambulatory referral documented? Yes No Unknown

16b. If Yes, what criteria were used to select this patient for ambulatory care?

- AMB score (see definitions)
- NEWS score
- Temperature
- Oxygen saturation
- Blood pressure
- Pulse/heart rate
- Respiratory rate
- Other
- Clinical, please specify





17a. Was an early warning score (eg. NEWS) documented when the patient arrived in the ambulatory area/unit? Yes No Unknown

17b. If Yes, what was the score and when was it recorded?

Type of early warning score Score

17c. Time and date early warning score recorded?

Time 24 hr clock Time unknown Date
 h h m m d d m m y y y y

18a. When was the first clinical assessment performed in the ambulatory care area/unit?

Time 24 hr clock Time unknown Date
 h h m m d d m m y y y y

18b. Grade and specialty of the person performing this assessment (see definitions) Grade: Specialty: Not documented

18c. Was PE suspected/identified during clerking? N/A already identified in ED Yes No

Dii). Patients presenting to hospital with symptoms of PE that were managed as an inpatient. This includes patients that were initially managed on an ambulatory care pathway

19a. What was the time/date that the patient was formally admitted to hospital?

Time 24 hr clock Time unknown Date
 h h m m d d m m y y y y

19c. Where was the patient first admitted?

- Clinical Decision / Observation unit
- Acute assessment unit (eg AMU)
- Medical ward
- Surgical ward
- Level 2 (HDU)
- Level 3 (ICU)
- Other (please specify)

20a. Time/date of initial clerking:

Time 24 hr clock Time unknown Date
 h h m m d d m m y y y y

20b. Grade and specialty of doctor performing initial clerking (see definitions) Grade: Specialty: Not documented

20c. Was PE suspected/identified for the first time during clerking? Yes No

20d. If No, please select all that apply?

- Suspected by GP/ ED/ other
- Diagnostic tests sent by GP/ED/other
- Confirmed by GP/ED/other
- Confirmatory test was CTPA/VQ/other
- Other (please specify)





Diii). Patients that developed PE as an inpatient

21a. If the patient developed symptoms of PE as an inpatient, what was the original reason for their admission?

21b. Is there evidence in the notes that the patient was assessed for VTE risk at admission Yes No

21c. If Yes to 21b, what decision was made?

- | | | | |
|---|---|---|---|
| <input type="checkbox"/> No thromboprophylaxis required | <input type="checkbox"/> Anti-embolic stockings | <input type="checkbox"/> Intermittent Pneumatic Compression | <input type="checkbox"/> Aspirin |
| <input type="checkbox"/> LMWH | <input type="checkbox"/> Apixaban | <input type="checkbox"/> Dabigatran etexilate | <input type="checkbox"/> Fondaparinux sodium |
| <input type="checkbox"/> Rivaroxaban | <input type="checkbox"/> IVC filter permanent | <input type="checkbox"/> IVC filter inserted for this admission (temporary) | <input type="checkbox"/> Other <input type="text"/> |

21d. Was this plan implemented? Yes No Unknown

21e. If No to 21d, what method of thromboprophylaxis was provided?

- | | | | |
|--------------------------------------|---|---|---|
| <input type="checkbox"/> None | <input type="checkbox"/> Anti-embolic stockings | <input type="checkbox"/> Intermittent Pneumatic Compression | <input type="checkbox"/> Aspirin |
| <input type="checkbox"/> LMWH | <input type="checkbox"/> Apixaban | <input type="checkbox"/> Dabigatran etexilate | <input type="checkbox"/> Fondaparinux sodium |
| <input type="checkbox"/> Rivaroxaban | <input type="checkbox"/> IVC filter permanent | <input type="checkbox"/> IVC filter inserted for this admission (temporary) | <input type="checkbox"/> Other <input type="text"/> |

21f. Was there an avoidable delay in starting thromboprophylaxis? Yes No Not applicable

21g. If Yes please expand on your answer?

22a. When was PE first suspected 24 hr clock Time unknown
h h m m d d m m y y y y

22b. In your opinion was there a delay in recognising the patient had symptoms of PE? Yes No Unknown

22c. If Yes please give a reason for your answer?

22d. How long was the delay? hours

22e. In your opinion was the delay avoidable? Yes No

22f. In your opinion did the delay have an adverse impact on outcome? Yes No

23a. What type of ward was the patient on when PE symptoms were suspected? Medical Surgical Critical care Other (please specify)

23b. What type of ward was the patient transferred to after PE was diagnosed? Medical Surgical Critical care Not transferred Other (please specify)

23c. If the patient was transferred, who made the decision?

- Ward team VTE team Haematologist Respiratory physician Other (please specify)





23d. Which team managed the patient when PE was suspected?

- Medical Surgical (orthopaedics) Surgical (non orthopaedics) Obs & gynae Oncology
 VTE Critical care Critical care outreach Other (please specify)

E. Assessment, investigations and treatments - all patients

24a. What were the first set of observations recorded when PE was suspected?

- Respiratory rate Not documented Heart rate Not documented
 GCS or AVPU Not documented SpO2 Not documented
 BP / Not documented Temperature . Not documented

24b. What were the clinical symptoms when PE was suspected (please mark all that apply)?

- Chest pain Shortness of breath Haemoptysis Syncope / fainting Cough
 Panic attack / anxiety Leg pain and/or swelling Arm pain and/or swelling Other (please specify)

24c. Is there evidence that the hospital's alert system for new PE was used? Yes No Not applicable Unknown

25a. Was a clinical probability score for PE calculated? Yes No Unknown

25b. If Yes, which score was used?

- Modified Wells Score Simplified Revised Geneva Score Two level PE Wells Score
 Revised Geneva Score Pulmonary Embolism Rule Out Criteria Other (please specify)

25c. If Yes to 25a, what score was documented in the notes? .

26a. In your opinion was there a delay in recognising the patient had symptoms of PE? Yes No Unknown

26b. If Yes what were the reasons for delay?

26c. If Yes to 26a how long was the delay? hours

27a. Which of the following 'initial' investigations were carried out when PE was suspected?

- dDimer Clotting screen Troponin Blood gases ECG
 CXR U+Es FBC Point of care US / Echocardiogram BNP/ NT-proBNP
 Other (please specify)

27b. In your opinion were any initial investigations that should have been undertaken omitted? Yes No Unknown

27c. If Yes, which?

- dDimer Clotting screen Troponin Blood gases ECG
 CXR U+Es FBC Point of care US / Echocardiogram BNP/ NT-proBNP
 Other (please specify)



28a. Which of the following investigations were undertaken (these may have occurred prior to the patients attendance/admission or after their discharge)?

Investigation
(please tick all that apply)

CTPA

Date and time requested

d d m m y y

24 hr clock

h h m m

Date and time agreed

d d m m y y

24 hr clock

h h m m

Date and time done

d d m m y y

24 hr clock

h h m m

Date and time reported

d d m m y y

24 hr clock

h h m m

VQ/SPECT

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

Ultrasound of the lower and/or upper limb veins

lower upper

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

Other (please specify)

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

Other (please specify)

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m

d d m m y y

24 hr clock

h h m m





28b. In your opinion were any investigations that should have been undertaken omitted? Yes No Unknown

28c. If Yes, which? CTPA VQ/SPECT Ultrasound of the lower limb veins Formal Transthoracic Echocardiogram
 MRI/MRV Transoesophageal echocardiogram Focused Echocardiogram Other

29a. In your opinion were there any delays to carrying out any investigations once PE was suspected? Yes No Unknown

29b. If Yes how long was the delay? days hours

29c. If Yes please expand:

30. If the patient had a CTPA did the formal / final report describe:

a) the site of thrombus Central Lobar Segmental Subsegmental
 Not specified Other (please specify)

b) the size of thrombus Large Moderate Small Not quantified
 Other (please specify)

c) evidence of right heart strain Yes No No comment made

d) Other findings Malignancy or metastatic disease Pulmonary infarction Infection Chronic lung disease
 Other (please specify)

31a. Were any patient risk factors for bleeding documented before commencing treatment? Yes No

31b. If Yes what was documented?

32. Which of the following acute treatments did the patient receive and when was the first dose given?

LMWH 24 hr clock Time unknown
 h h m m d d m m y y y y

Fondaparinux 24 hr clock Time unknown
 h h m m d d m m y y y y

IV unfractionated heparin (UFH) 24 hr clock Time unknown
 h h m m d d m m y y y y

Warfarin 24 hr clock Time unknown
 h h m m d d m m y y y y

Oral anti-coagulant (please specify) 24 hr clock Time unknown
 h h m m d d m m y y y y

Supplemental oxygen 24 hr clock Time unknown
 highest % h h m m d d m m y y y y

Inotropes 24 hr clock Time unknown
 h h m m d d m m y y y y





33a. In your opinion, were the correct treatments prescribed to this patient? Yes No Unknown

33b. In your opinion were there any avoidable delays to commencing any of the treatments? Yes No Unknown

33c. If Yes how long was the delay?

33d. Was the patient involved in the treatment decision? Yes No Unknown

34a. If imaging to diagnose PE was scheduled for a later date/time (eg. the next working day), what plan was made for the interim period (please select all that apply)

Start anticoagulant therapy (details provided on previous page) If on ambulatory care pathway, patient admitted to hospital Patient was discharged with plan to re-attend at time of confirmatory scan

Information leaflet given Safety-net advice given NA - scanned same day

Other (please specify)

34b. If an ambulatory care patient was discharged with a plan to re-attend at the time of a confirmatory scan, who made this decision?

Grade of most senior Doctor (see definitions)

If not a Doctor (please specify)

34c. How was the decision to admit or discharge the patient made?

Clinical assessment Pulmonary Embolism Severity Index (PESI) score simplified PESI score

Hestia criteria NEWS score

Other (please specify) Unknown/Not documented

35. Observations at the time PE was confirmed

Respiratory rate Not documented Heart rate Not documented

GCS or AVPU Not documented SpO2 Not documented

BP / Not documented Temperature Not documented

36a. Was there an assessment of severity of PE? Yes No Unknown

36b. If Yes what? PESI score Simplified PESI score APACHE-II

euroSCORE II Glasgow Coma Scale Other (please specify)

36c. If Yes what was the severity score

36d. If Yes when was the score calculated before confirmation of diagnosis and/or after confirmation of diagnosis

37a. Were other methods of assessing severity of PE used? Yes No Unknown

37b. If Yes what?



F. Escalation

Please answer the following questions if this patient was admitted to hospital, even if they were initially on an ambulatory care pathway. If the patient was not admitted please go to section G

38a. Was a treatment escalation decision made? Yes No Unknown

38b. If Yes, what was the date and time of this decision?

Date unknown Time unknown
 24 hr clock
d d m m y y y y h h m m

38c. Please indicate what escalation decisions were made:

- For CPR Not for CPR
- For invasive ventilation Not for invasive ventilation
- For critical care referral Not for critical care referral
- For Renal Replacement Therapy Not for Renal Replacement Therapy
- For vasopressor support Not for vasopressor support
- For systemic thrombolysis Not for systemic thrombolysis
- For catheter directed thrombolysis Not for catheter directed thrombolysis
- For surgical thrombectomy Not for surgical thrombectomy
- For IVC filter Not for IVC filter

39a. Was escalation of treatment discussed with the patient? Yes No Unknown

39b. If not discussed, was the reason for this documented? Yes No

39c. If not discussed, was this due to the patient's medical condition? Yes No

39d. Was treatment escalation discussed with the patient's family or next of kin? Yes No Unknown

40a. Was the patient referred for: Level 2/3 admission Specialist procedure
 Escalation of care to another hospital Other None of the above

40b. If Referred, in your opinion was this timely? Yes No Unknown

40c. If the patient wasn't referred for any of the above, in your opinion, should they have been? Yes No

40d. If Yes, please expand on your answer

41a. Was the patient admitted to: Level 3 Level 2 Mixed Level 2/3
 Transferred to another hospital Not admitted

41b. If Yes, please provide the date and time of this level 2/3 admission: (if the patient had more than one admission to level 2/3 please put the date of the first admission)

Date unknown Time unknown
 24 hr clock
d d m m y y y y h h m m

42a. In your opinion was the transfer to level 2/3 care timely? Yes No NA not admitted

42b. If No what caused the delay? Bed availability Delayed recognition

Other (please specify)





42c. If the patient was not admitted to level 2/3, in your opinion, should the patient have been? Yes No

42d. If Yes, please expand on your answer:

If the patient was not admitted to level 2/3 care please go to section G

43. Which interventions/monitoring did the patient receive in the level 2/3 ward? (If the patient had more than one admission to a level 2/3 ward please answer the question for the first admission)

- Respiratory Cardiovascular support
 CPAP NIV High flow oxygen Invasive ventilation IABP ECMO Vasopressors Inotropes Mechanical support
 Renal Replacement Therapy Cardiac output monitoring Other
 haemodialysis haemofiltration

44a. What was the outcome of the level 2/3 stay / interhospital transfer? Discharged to ward Discharged from hospital Died

44b. For patients discharged to a ward, what was the date/time of discharge?

Date unknown 24 hr clock Time unknown
 d d m m y y y y h h m m

44c. Was the patient readmitted to a level 2/3 ward? Yes No

44d. If Yes why was the patient readmitted to a level 2/3 ward?

G. Further treatment and intervention - all patients

45a. Was the anticoagulation plan changed after the first dose was administered? Yes No Unknown

45b. If Yes what was prescribed?

- LMWH Fondaparinux Oral anti-coagulant (please specify below)
 IV unfractionated heparin (UFH) Warfarin

45c. What was the reason for the change in treatment? Planned switch to oral therapy Adverse effects (please specify)
 Clinical deterioration Other (please specify)

46a. Were additional interventions undertaken? Yes No

46b. If No, in your opinion should they have been? Yes No

46c. If Yes to 46b why do you think further intervention should have been undertaken ?

- Shock/hypotension Hypoxia Right heart strain Prevent further PE
 Residual DVT High risk for anticoagulation Contraindication for anticoagulation Other (please specify)

46d. If Yes to 46b what intervention(s) should have been undertaken ?

- Systemic (intravenous) thrombolysis Catheter directed local thrombolysis Catheter directed mechanical clot clearance Surgical thrombectomy
 IVC filter Other (please specify)





46e. Why do you think the intervention was not undertaken?

- Not available at this hospital Not available out of hours Procedure wasn't considered
 Other (please specify)

47a. Which of the following interventions were undertaken?

- Systemic (intravenous) thrombolysis - go to Q47b Catheter directed local thrombolysis - go to Q47b Catheter directed mechanical clot clearance - go to Q47b
 Surgical thrombectomy - go to Q47b IVC Filter Insertion - go to Q51a **No further interventions - please go to section H**
 Other intervention (please specify) - go to Q47b

47b. Was the reason for this intervention documented? Yes No

47c. If Yes what was the reason (answers may be multiple)?

- Shock/hypotension Hypoxia Right heart strain Other (please specify)

48. Was an appropriate consent form with details of risk and benefits completed and signed? Yes No

49. Was an inter-hospital transfer required to deliver this treatment? Yes No

50a. Did the treatment improve their condition? Yes No

50b. Did the patient suffer any complications? Yes No

50c. If Yes what?

50d. In Your opinion were any of the complications avoidable? Yes No Not applicable

50e. In Your opinion were the complications managed appropriately? Yes No Not applicable

IVC filter insertion - please complete questions 51 - 59 if the patient had an IVC filter inserted

51a. Was the reason for IVC filter insertion documented? Yes No

51b. If Yes what was the reason (answers may be multiple)?

- Prevent further PE Residual DVT High risk for anticoagulation Contraindication for anticoagulation
 Recurrent PE whilst anticoagulated Requires surgery Poor anticoagulation compliance
 Other (please specify)

51c. If the patient received a pre-operative IVC filter, what surgery did they have?

51d. When was full therapeutic anticoagulation started after surgery? days post surgery

52. Was an appropriate consent form with details of risks and benefits for IVC filter insertion completed and signed? Yes No





53. Was an inter-hospital transfer required to deliver this treatment? Yes No

54a. When was the filter inserted?
 d d m m y y y y

54b. Did the patient suffer any complications of filter insertion? Yes No

56b. If Yes what?

56a. Was the IVC filter planned to be Permanent or Temporary

56b. If permanent what was reason for this?

56c. If permanent was follow up booked? Yes No

57a. If the filter was planned to be temporary, was a retrieval date booked at the time of insertion? Yes No

57b. If Yes what date was retrieval booked for?
 d d m m y y y y

57c. Was the filter retrieved? Yes No

57d. If Yes when was the filter retrieved?
 d d m m y y y y

58a. Did the patient suffer any complications? Yes No

58b. If Yes what?

59. If the filter was not retrieved what was the reason for this?

- Clot in filter Retrieval attempted but failed Clinical deterioration
 Decision changed to permanent filter Other

H. Discharge and follow up - all patients

60a. What was the date of discharge or death?
 d d m m y y y y

60b. What was the discharge location?
 Discharged to usual place of residence **Not applicable, patient died during this admission (please go to section I)**
 Discharged to another hospital Other

61a. What anti-coagulant medication and dose of medication was this patient discharged on?
 LMWH Warfarin DOAC
 Other (please specify) None Unknown

61b. What was the duration of anti-coagulant prescription – (in days)

61c. In your opinion was this adequate? Yes No

62. Did the patient receive written information about PE at discharge? Yes No Unknown





63a. Was follow up arranged for the patient? Yes No

63b. If Yes when was the first follow up arranged for?

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
d	d	m	m	y	y	y	y

63c. Which specialties were involved in follow up?

- Haematology Respiratory Critical care Acute medicine Cardiology
 Anticoagulation clinic Vascular surgery Other (please specify)

64a. Was risk of thrombophilia assessed during this follow up? Yes No

64b. If No why was risk of thrombophilia not assessed ?

65a. Was a further appointment arranged for this patient at 3 months? Yes No

65b. If Yes which specialties were involved?

- Haematology Respiratory Critical care Acute medicine
 Anticoagulation clinic Cardiology Vascular surgery Other (please specify)

66. Was a decision made about the duration of anticoagulation? Yes No Unknown

67a. Was the patient readmitted to hospital within 6 months of discharge? Yes No Unknown

67b. If Yes was this a complication of PE? Yes No Unknown

67c. If Yes please provide details (date readmitted, duration and compliation)?

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
d	d	m	m	y	y	y

duration (days) complication

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
d	d	m	m	y	y	y

duration (days) complication

I. Death - please complete this section if the patient died during this hospital attendance

68a. Speciality of consultant responsible at time of death

68b. Was death anticipated? Yes No Not documented

69a. Was treatment withdrawn? Yes No Not documented

69b. If Yes, was treatment withdrawal discussed with (please select all that apply):

- Patient Relatives Consultant physician

69c. If not discussed, please provide reasons:





70. Was the patient referred to / discussed with the palliative care team? Yes No Not documented

71. Was CPR attempted? Yes No

72. What level ward was the patient on when they died (see page 2 for definitions)?

Level 0 Level 1 Level 2 Level 3 Not documented

73. What was the cause of death recorded as?

1a)

1b)

1c)

2)

74a. Was this case reported to the coroner/procurator fiscal? Yes No Unknown

74b. Was a hospital or coronial/fiscal autopsy performed? Yes No Unknown

J. Audit and review - please complete this section for all patients

75a. Was the patient discussed at a M & M meeting? Yes No Not applicable

75b. If Yes, were remediable factors in the care of this patient identified? Yes No

75c. If Yes, what were the remediable factors and what action was taken?

76a. If the patient was not discussed at an M & M meeting, having now reviewed the case, in your opinion were there lessons to be learned? Yes No Not documented

76b. If Yes, please describe these:

77. Was the patient included in a hospital related VTE review program? Yes No Not applicable

Thank you for completing this questionnaire

This study was commissioned by The Healthcare Quality Improvement Partnership (HQIP) as part of the Clinical Outcome Review Programme into medical and surgical care.



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