



# SUBARACHNOID HAEMORRHAGE STUDY

National Confidential Enquiry into Patient Outcome and Death (NCEPOD)

## CLINICIAN QUESTIONNAIRE- SECONDARY CARE\* CLINICIAN

**CONFIDENTIAL**

NHS number of patient:

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### DETAILS OF THE CLINICIAN COMPLETING THIS QUESTIONNAIRE:

Grade: \_\_\_\_\_ Specialty: \_\_\_\_\_

#### What is this study about?

#### How to complete the form:

The aim of this study is to explore remediable factors in the process of care of patients admitted with the diagnosis of subarachnoid haemorrhage, looking both at patients that underwent a procedure and those managed conservatively

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.

#### Specific inclusions/exclusions:

Did the patient undergo an intervention?

All patients (aged 16+) admitted to hospital during the time period: 01/07/2011- 30/09/2011 with a diagnosis of aneurysmal subarachnoid haemorrhage will be included in the study.

Yes     No     Unknown

Patients with non-aneurysmal SAH and paediatric patients (aged <16) will be excluded. For patients that are transferred to a neurosurgical centre, data will be collected from both the referring and receiving hospitals.

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

Yes     No     Unknown

#### CPD Accreditation:

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

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

A list of definitions is provided on the back page of the questionnaire.

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

**Please return the completed questionnaire to NCEPOD in the SAE provided.**

A copy **MUST NOT** be kept in the patient's notes

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#### Questions or help?

Further information can be found on our website <http://www.ncepod.org.uk/sah.htm>

If you have any queries about the study or this questionnaire, please contact NCEPOD on: 020 7600 1893 or

[sah@ncepod.org.uk](mailto:sah@ncepod.org.uk)

**Thank you for taking the time to complete this questionnaire. The findings of the full study will be published in Autumn 2013.**

*\*Please see definitions on back page.*

**FOR NCEPOD USE ONLY**

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7 4 4 8 3 0 1 8 4 4 4 7 4

This patient has been selected for this study because their admission to your hospital has been coded as a suspected or proven aneurysmal subarachnoid haemorrhage (SAH). You have been identified by your hospital's central records as the consultant responsible for them in secondary care (see definitions on back page)

If you believe the coding was not correct or diagnostic tests have confirmed that the patient did NOT suffer an aneurysmal SAH (e.g. their SAH was the result of trauma) please mark the check box below, and return the form to NCEPOD for review (you do not need to complete the questionnaire)

This patient did not suffer an aneurysmal SAH

## A. CLINICIAN DETAILS

1. Please state your specialty (using the national specialty codes listed on the back page):

2. Please state your involvement with the patient:

- I assessed the patient personally       The patient was admitted under my care but I was not personally involved in their management
- My junior staff assessed the patient and I advised on management       Other (please state)

## B. PATIENT DETAILS

3. NHS number

D D M M Y Y Y Y

4. Date of Birth

5. Gender  Male  Female

6. Weight    kg OR   st   lb  Unknown

7. Height    cm OR  ft   in  Unknown

## C. ADMISSION DETAILS

8. Please select the category that best describes this hospital:

Small DGH (≤ 500 beds)       Large DGH (> 500 beds)       University teaching hospital

Other

9a. What was the date and time of first presentation to this hospital? (please use 24 hour clock)

Date         Time

D D M M Y Y Y Y      h h m m

9b. What was the date and time of admission to the ward in this hospital? (please use 24 hour clock)

Not applicable- patient not admitted to ward

Date         Time

D D M M Y Y Y Y      h h m m

10. Under what specialty was the patient first admitted (please use specialty codes provided on the back page)     Not applicable- patient not admitted to ward





Please mark the boxes that apply to this hospital admission:

11.

- Direct from GP following clinical review by GP
- Direct from GP following telephone consultation with patient
- Sent by GP to the emergency department

If referred by a GP, was a differential diagnosis of SAH included in the referral letter?  Yes  No  Unknown

- Self referral to the emergency department
- Emergency (999) admission from home
- Emergency (999) admission from other location (work/street etc)
- SAH whilst an inpatient for other treatment
- Admission from outpatient clinic
- Other (Please specify: )

12. Please select the patient's pathway of care in this hospital

- Admission to the emergency department. Patient did not survive
- Admission to the emergency department and direct transfer to neurosurgical centre
- Admission to emergency department and transfer to other department: please specify:-
  - Medical admissions unit or equivalent  Stroke unit  ITU  HDU
  - Medical ward  Other (Please specify: )
  - Neurological ward
- Direct admission to: (please specify as appropriate):
  - Medical admissions unit or equivalent  Stroke unit  ITU  HDU
  - Medical ward  Other (Please specify: )
  - Neurological ward
- Other pathway (please specify: )
- Unknown

## D. INITIAL ASSESSMENT

13. What was the grade of the most senior clinician who assessed this patient immediately following presentation in this hospital? (please use the grade codes listed on the back page)   Unknown

14. What was the specialty of the most senior clinician who assessed this patient immediately following presentation in this hospital? (please use the national specialty codes listed on the back page)   Unknown

15. Please enter the best estimate for the time of onset of SAH (please use 24 hour clock)  Unknown

Date      D D    M M    Y Y    Y Y

Time      h h    m m



- 16.** Did the patient have a history of :  Diabetes  Ischaemic Stroke  Hypertension  
*Please indicate all that apply (answers may be multiple)*
- Angina, myocardial infarction, arrhythmia  Renal impairment not requiring dialysis  Renal impairment requiring dialysis  COPD  None of the above
- Other (please state)

- 17a.** Did the patient present to primary care before this admission with symptoms/ signs of subarachnoid haemorrhage?  Yes  No  Unknown

- 17b.** If YES, please give the date:          Unknown  
d d m m y y y y

- 17c.** Is there any evidence that a diagnosis of SAH was overlooked or delayed in primary care?  Yes  No  Unknown

- 17d.** If YES, please give details:
- 

- 18a.** Did the patient present to this or another hospital emergency department before this admission with symptoms/ signs of subarachnoid haemorrhage?  Yes  No  Unknown

- 18b.** If YES, please give the date:          Unknown  
d d m m y y y y

- 19a.** Is there any evidence that a diagnosis of SAH was previously overlooked or delayed in secondary care?  Yes  No  Unknown

- 19b.** If YES, please give details:
- 

- 20a.** Had this patient previously suffered from a confirmed aneurysmal SAH  Yes  No  Unknown

- 20b.** IF YES what was the month and year?        Unknown  
m m y y y y

- 20c.** If YES, what treatment did they receive?  Surgical clipping  Endovascular therapy  
 Other (please state)  Conservative treatment  Unknown

What was the patient's functional status prior to the present admission/SAH?

21.  No symptoms at all  
 No significant disability despite symptoms: Able to carry out all usual activities  
 Slight disability  
 Moderate disability: Requiring some help but able to walk without assistance  
 Moderate to severe disability: Unable to walk without assistance and unable to attend to own bodily needs without assistance  
 Severe disability: Bedridden, incontinent and requiring constant nursing care and attention  
 Unknown

22. What was the patient's first documented Glasgow Coma Score on this admission?  
Please record the separate components of the score. If the patient was intubated and ventilated, please give the best recorded motor score if available.

- Best Motor Response (1-6)     Best Verbal response(1-5)     Best Eye Response (1-4)  
 Total score (3-15)     Not assessable (patient intubated/ventilated)     Not recorded

23a. Was a neurological examination performed?     Yes     No     Unknown

23b. If YES, what was the grade and speciality of the clinician that made the assessment?  
(please use the grade codes listed on the back page)         (please use the national specialty codes listed on the back page)   

23c. If YES, what were the fundoscopic findings?     Unknown     Unknown

Not examined

23d. If YES, did the patient have a motor deficit?     Yes     No     Unknown     Not examined

23e. Please describe findings:

24. What were the pupil responses?     Bilaterally reacting     Unilateral reaction only     Not examined  
 Bilaterally unreacting     Both fixed and dilated

## E. INVESTIGATIONS

25. Which of the following investigations were performed on admission/following SAH: (complete as appropriate, please use 24 hour clock)

Investigations performed	(Answers may be multiple, please indicate all that apply)	Date			Time		
		d	d	m	y	h	m
CT Scan	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
CT angiogram	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Lumbar Puncture	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Other (please state):	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	



Were there any delays in obtaining the CT scan?  Yes  No  Not applicable

26a. If YES, please give details:

26b.

27a. Did the CT scan confirm the diagnosis of SAH?  Yes  No  Unknown  N/A

27b. Was it compatible with an aneurysm?  Yes  No  Unknown  N/A

27c. Did it show another cause?  Yes  No  Unknown  N/A

27d. If the CT scan was negative for SAH, was a lumbar puncture performed?  Yes  No  Unknown  N/A

27e. If YES did the CSF finding confirm SAH?  Yes  No  Unknown  N/A

28. If CTA was performed, did it show an aneurysm?  Yes  No  Unknown  N/A

29. Was the diagnosis confirmed by a consultant radiologist?  Yes  No  Unknown  N/A

30. Was a second opinion sought from a specialist consultant neuroradiologist?  Yes  No  Unknown  N/A

## F. EARLY MANAGEMENT

31. Please indicate the airway management of the patient at the specified time points of the patient's pathway:

	Self Ventilating		Receiving airway support	Intubated and ventilated	If the patient was intubated, was end-tidal CO2 measured?		
	Conscious	Unconscious			Yes	No	N/A
On first presentation to hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Immediately prior to CT scan (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Immediately prior to transfer (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

32a. Was the patient monitored using a neurological observation chart?  Yes  No  Unknown

32b. If YES, what frequency were the observations monitored?  Hourly  Four-hourly  Other (please state):

33.  Unknown

Please indicate any physiological instability of the patient at the specified time points of the patient's pathway:

	Normal	Haemodynamic instability	Respiratory instability	Other physiological instability (please state)
On first presentation at hospital	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input style="width: 150px; height: 20px;" type="text"/>
Within 30 minutes prior to CT scan (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input style="width: 150px; height: 20px;" type="text"/>
Within 30 minutes prior to transfer (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> <input style="width: 150px; height: 20px;" type="text"/>



What was the patient's Glasgow Coma Score within 30 minutes prior to CT scan (if applicable) and within 30 minutes prior to transfer (if applicable)? Please record the separate components of the score. If the patient was intubated and ventilated, please give the best recorded motor score if available.

**a. Prior to CT scan**

**b. Prior to transfer**

Best Motor Response (1-6)

Best Motor Response (1-6)

Best Eye Response (1-4)

Best Eye Response (1-4)

Best Verbal response(1-5)

Best Verbal response(1-5)

Total score (3-15)

Total score (3-15)

Not assessable (patient intubated/ventilated)

Not assessable (patient intubated/ventilated)

Not recorded

Not recorded

Not applicable (no CT scan)

Not applicable (patient not transferred)

**35a.** Did the patient receive the Nimodipine during the pre-transfer period/first 24 hours of admission,

Yes  No  Not applicable  Unknown

**36a.** Did the patient receive IV fluids during the first 24 hours of admission?

Yes  No  Not applicable  Unknown

**36b.** Did the patient have raised intra-cranial pressure?

Yes  No  Not applicable  Unknown

**36c.** If YES, did the patient receive (please indicate all that apply):

Mannitol  Hypertonic saline

Other (please state)

Neither  Unknown

**G. REFERRAL & TRANSFER**

**37a.** Was the patient referred to a neurosurgical centre?

Yes  No  Unknown

**37b.** If NO, Why not?

Patient died before referral possible

Decision made to manage conservatively

Other reason (please state)

**37c.** If a decision was made to manage the patient conservatively, please state reasons:

**38a.** Was the decision (whether or not to refer the patient) discussed with the patient's next of kin?

Yes  No  Unknown

**38b.** If YES, what information was given to the next of kin?

**39.** Was there a discussion with a specialist neurosciences centre prior to the decision (whether or not to refer the patient) being made?

Yes  No  Unknown

**40.** What was the grade and specialty of the clinician that made the decision whether or not to refer the patient for transfer?

*(please use the grade codes listed on the back page)*

 

*(please use the national specialty codes listed on the back page)*

   

Unknown

Unknown





If the patient was NOT referred for transfer to another hospital/ neurosurgery department (answered NO to q37a), please proceed to question 52, if the patient was referred (answered YES to q37a), please answer questions 41-51

41. What was date and time of referral for transfer to a neurosurgical centre?

Date        Unknown Time      Unknown  
d d m m y y y y h h m m

42a. Was the patient accepted for transfer to the neurosurgical centre?  Yes  No  Unknown

42b. If YES, please state date/time transfer was accepted?

Date        Unknown Time      Unknown  
d d m m y y y y h h m m

42c. If NO, please give details:

43a. Were there any delays in obtaining a neurosurgical opinion?  Yes  No  Unknown

43b. If YES, please provide details:

44a. Were there any difficulties that the referring hospital had in finding a recipient neurosurgical centre?  Yes  No  Unknown

44b. If YES please provide details:

45. Was the patient transferred to your "usual" neurosciences centre?  Yes  No  Unknown  N/A- patient was not transferred

46. Were CT images:  Transferred with the patient  Imaged-linked to the receiving hospital

Neither, please provide details

47a. Were there any delays in the transfer of the patient to a neurosurgical centre:  Yes  No  Unknown  N/A- patient was not transferred

47b. If YES, was this due to: (please mark all answers that apply)

Lack of equipment in referring hospital/department  Lack of beds in neurosurgical centre

Lack of availability of staff to transfer in referring hospital/department  Ambulance service

Other reason (please state)







48a. At the time of transfer did the patient require haemodynamic therapy?  Yes  No  Unknown  N/A- patient was not transferred

48b. If YES, what did this comprise?  Vasoactive agents  Inotropes  Unknown

Other (please state)

49. Were relatives informed of the patients transfer?  Yes  No  Unknown  N/A- patient was not transferred

50a. If patient was ventilated at time of transfer, did an anaesthetist escort the patient on the transfer?  Yes  No  Unknown  N/A patient was not ventilated

50b. If YES, which grade? (please use the grade codes listed on the back page)   N/A patient was not transferred

51. Which other healthcare professional(s) accompanied the patient? (please mark all that apply)

Operating Department Practitioner  Nurse  Other doctor (please state specialty) (please use the national specialty codes listed on the back page)

Other (please state)

## H. END OF LIFE CARE

Please answer this section for all patients

52a. Was treatment withdrawn at any time during this admission?  Yes  No  Unknown

52b. If YES was this because of:  Irreversible brain injury?

Other (please state)

53a. If active treatment was withdrawn please indicate the seniority of the clinician who made this decision: (please use the grade codes listed on the back page)   Unknown

53b. If clinician not a consultant, please state the reason why not?

54. Was the patient on a standard end of life care pathway (e.g. LCP)  Yes  No  Unknown

55. Was the patient for DNA-CPR?  Yes  No  Unknown

## I. DISCHARGE

56. From this admission to hospital, what was the discharge destination of the patient:

Discharged to a rehabilitation unit  Discharged to previous place of residence

Discharged to a neurosurgical centre for further treatment (not rehabilitation)

Discharged to another non-specialist hospital for further treatment (not rehabilitation)

Other (please state)

Not applicable, patient died during this admission (please go straight to question 60)  Unknown





**If the patient was discharged alive, please complete questions 57-59**

57. What was the patient's functional status at discharge/transfer?
- No symptoms at all
  - No significant disability despite symptoms: Able to carry out all usual activities.
  - Slight disability
  - Moderate disability: Requiring some help but able to walk without assistance
  - Moderate to severe disability: Unable to walk without assistance and unable to attend to own bodily needs without assistance
  - Severe disability: Bedridden, incontinent and requiring constant nursing care and attention
  - Unknown

58a. Did this patient attend specialist neurological rehabilitation services:  Yes  No  Unknown

58b. If NO, please explain why not:

58b. If YES, were there any delays?  Yes  No  Unknown

58b. If YES, please give details?

59a. From the case notes, is there evidence that the patient was followed up within 3 months after discharge?  Yes  No  Unknown

59b. If YES what was their functional status at review?

- No symptoms at all
- No significant disability despite symptoms: Able to carry out all usual activities.
- Slight disability
- Moderate disability: Requiring some help but able to walk without assistance
- Moderate to severe disability: Unable to walk without assistance and unable to attend to own bodily needs without assistance
- Severe disability: Bedridden, incontinent and requiring constant nursing care and attention
- Unknown

## J. DEATH

**If the patient died during this admission, please complete questions 60-63**

60. Was a post-mortem performed?  Yes  No  Unknown

61. What was the cause of death entered on the death certificate?

62a. Was this death discussed at a morbidity and mortality meeting?  Yes  No  Unknown





62b. If NO, why not?

63a. In your opinion was this patient's death inevitable?  Yes  No  Unknown

63b. Please give details:

64a. Was this patient potentially suitable for organ donation?  Yes  No  Unknown

64b. If YES to 64a, was this discussed with the next of kin?  Yes  No  Unknown

64c. If YES to 64a did organ donation occur?  Yes  No  Unknown

64d. If NO, why not?

## K. SUMMARY & COMMENTS

65. Please use this section to provide a brief summary of this case, adding any comments or information you feel relevant. You may also type on a separate sheet. NCEPOD attaches great importance to this summary. Please give as much information as possible about the care of this patient.

**Thank you for taking the time to complete this questionnaire, your contribution to our study is greatly appreciated**

Funding for this study was provided by The Healthcare Quality Improvement Partnership (HQIP) as part of The Clinical Outcome Review Program into medical and surgical care.



## CODES FOR GRADE

<b>01 - Consultant</b>	<b>05 - Junior Specialist Trainee (ST1 &amp; ST2 or CT or equivalent)</b>
<b>02 - Staff grade / Associate specialist</b>	<b>06 - Basic grade (HO/ FY1 or SHO/FY2 or equivalent)</b>
<b>03 - Trainee with CCT</b>	<b>07 - Other</b>
<b>04 - Senior Specialist Trainee (ST3+ or equivalent)</b>	

## CODES FOR SPECIALTY

### SURGICAL SPECIALTIES

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

### MEDICAL SPECIALTIES

300 = General Medicine	326 = Acute internal medicine	410 = Rheumatology
301 = Gastroenterology	330 = Dermatology	430 = Geriatric Medicine
302 = Endocrinology	340 = Respiratory Medicine	500 = Obstetrics & Gynaecology
303 = Clinical Haematology	350 = Infectious Diseases	501 = Obstetrics
306 = Hepatology	352 = Tropical Medicine	502 = Gynaecology
307 = Diabetic Medicine	360 = Genito-Urinary Medicine	800 = Clinical Oncology
314 = Rehabilitation	361 = Nephrology	810 = Radiology
315 = Palliative Medicine	370 = Medical Oncology	820 = General Pathology
320 = Cardiology	400 = Neurology	823 = Haematology

## DEFINITIONS

**CTA:** Computerized tomographic angiography, also called CT angiography (CTA), combines the technology of a conventional CT scan with that of traditional angiography to create detailed images of the blood vessels

**DSA:** Digital subtraction angiography (DSA) intra-arterial catheter angiography

**Fisher Grade:** The Fisher Grade classifies the appearance of subarachnoid hemorrhage on CT scan.

Grade 1: None evident; Grade 2: Less than 1 mm thick; Grade 3: More than 1 mm thick; Grade 4: Diffuse or none with intraventricular hemorrhage or parenchymal extension

**Level of ward care:** LEVEL 0: Patients whose needs can be met through normal ward care in an acute hospital. 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. 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). 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).

**Primary Care:** Defined by the World Health Organisation as "essential health care; based on practical, scientifically sound, and socially acceptable method and technology; universally accessible to all in the community through their full participation; at an affordable cost; and geared toward self-reliance and self-determination." In the UK this typically refers to care provided by General Practitioners.

**Secondary Care:** Medical care provided by specialists (consultants) in a particular field of medicine, whether in a hospital or community setting. Patients are referred to these specialists by another doctor, commonly a General Practitioner (GP).

**Tertiary Care:** More specialised medical centres offering specialist care in a particular field, in a centre with special facilities for investigation and treatment and often covering a much wider area than primary or secondary care services.

**WFNS grade**The World Federation of Neurosurgeons (WFNS) classification uses Glasgow coma score (GCS) and focal neurological deficit to gauge severity of symptoms : Grade 1: GCS 15 FND= Absent; Grade 2: GCS 13–14, FND= Absent; Grade 3: GCS 13–14, FND=Present; Grade 4: GCS 7–12, FND=Present or absent; Grade 5: GCS <7 , FND=Present or absent