

# EMERGENCY AND ELECTIVE SURGERY IN THE ELDERLY STUDY

National Confidential Enquiry into Patient Outcome and Death (NCEPOD)  
Data collection tool - SURGERY

Hospital number

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## A. PATIENT DETAILS

1. Age at time of procedure 

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 years
2. Gender ☐ Male ☐ Female
3. Date of death 

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d d m m y y
4. Date of operation 

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d d m m y y
5. Time of operation 

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h h m m
6. Operation undertaken:

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## B. ADMISSION DETAILS

7. Admission details\*: Time: 

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 Date: 

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 Day: 

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\*Includes via Admission Unit h h m m d d m m y y
8. Please specify an admission category
- ☐ Elective A time agreed between the patient and surgical service
- ☐ Planned Within 48 hours of referral/consultation
- ☐ Emergency Immediately following referral/consultation, where admission is unpredictable and at short notice because of clinical need
9. To what specialty was the patient first admitted? 

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- 10a. Was the clinical area of admission appropriate? ☐ Yes ☐ No ☐ Unable to answer
- 10b. If NO, please specify;

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## C. INITIAL ASSESSMENT

11a. Was the time, grade and specialty of the initial assessment appropriate to the severity and complexity of the illness or surgical condition? ☐ Yes ☐ No ☐ Unable to answer

11b. If NO, please give details;

12. Is there documented evidence in the casenotes which permits you to determine the date, time and location of first consultant review? ☐ Yes ☐ No ☐ Unable to answer

13. How many hours after admission was the patient seen by a consultant?   Hours

14a. Is there evidence of a clear management plan? (i.e. a management plan multiple clinical teams can follow, including a differential diagnosis, plan of investigations, plan of treatment, initial treatment options and point of review). ☐ Yes ☐ No ☐ Unable to answer  
☐ Incomplete

14b. If YES, was this appropriate? ☐ Yes ☐ No ☐ Unable to answer

14c. If NO, please give details;

15. If not admitted under Medicine for the Care of Older People, was the patient reviewed by a Medicine for the Care of Older People consultant? ☐ Yes ☐ No ☐ Unknown  
☐ Not applicable (admitted under MCOP)

16a. Is there evidence in the case notes of involvement of physicians with responsibility for Medicine for the Care of Older People?

a) Pre-operatively ☐ Yes ☐ No ☐ Unable to answer

b) Post operatively ☐ Yes ☐ No ☐ Unable to answer

16b. If YES, is there evidence of a delay in the patient being assessed by a Medicine for the Care of Older People clinician? ☐ Yes ☐ No ☐ Unable to answer

17. If the patient was on a surgical care pathway for older people, is there evidence of Medicine for the Care of Older People input? ☐ Yes ☐ No ☐ Unable to answer

18. Is there evidence of Medicine for the Care of Older People input into ward guidelines for the care of the older surgical patient? ☐ Yes ☐ No ☐ Unable to answer

19. How often was the patient reviewed by Medicine for the Care of Older People? ☐ Daily ☐ Less often  
☐ Once only ☐ Never

D. COMORBIDITY

20a. Were there any comorbidities at the time of this admission?

☐ Yes

☐ No

☐ Unknown

20b. If YES, please specify

- ☐ Diabetes

☐ Renal disease

☐ Hypertension
- ☐ Respiratory disease

☐ Dementia

☐ Memory impairment
- ☐ Parkinson's disease

☐ Osteoporosis or previous bone fracture
- ☐ Delirium

Cerebrovascular disease

- ☐ Previous TIA

☐ Previous stroke

Ischaemic heart disease

- ☐ Atrial fibrillation

☐ Angina

☐ Previous myocardial infarction
- ☐ Previous stent insertion

☐ Congestive cardiac failure

21a. Was the patients weight recorded in the casenotes?

☐ Yes

☐ No

☐ Unable to answer

21b. If YES, please state

kg

22a. Was the patients BMI recorded in the casenotes?

☐ Yes

☐ No

☐ Unable to answer

22b. If YES, please state

23a. Was there evidence of malnutrition on admission?

☐ Yes

☐ No

☐ Unable to answer

23b. If YES, was nutritional support given?

☐ Yes

☐ No

☐ Unable to answer

23c. If YES, was this:

☐ Oral supplementation

☐ Enteric feeding

☐ Nasogastric tube

☐ Nasojejunal tube

☐ PEG/RIG

☐ Parenteral feeding

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## E. MEDICATIONS

- 24a. How many medications was the patient prescribed pre-operatively (including inhalers)? (To include regular medications and additional on admission) ☐ 1-5 ☐ >5 ☐ >10  
☐ Unable to answer
- 24b. How many medications was the patient prescribed in the first 48 hours post operatively (including inhalers)? (To include regular medications and additional on admission) ☐ 1-5 ☐ >5 ☐ >10  
☐ Unable to answer
25. Did Medicine for the Care of Older People clinicians have any input into the patient's medicine reviews? ☐ Yes ☐ No ☐ Unable to answer
26. Did an experienced ward pharmacist have any input into the patient's medicine reviews? ☐ Yes ☐ No ☐ Unable to answer

## F. CONSENT

27. Would you expect a consent form to be present for this patient, based on the urgency of their admission? ☐ Yes ☐ No ☐ Unable to answer
- 28a. If YES, was the correct signed form in the notes? ☐ Yes ☐ No ☐ Unable to answer
- 28b. If YES, was this the appropriate one? ☐ Yes ☐ No ☐ Unable to answer
- 29a. Was the consent form completed adequately? ☐ Yes ☐ No ☐ Unable to answer
- 29b. If NO, please expand on your answer
- 30a. Was the cognitive function of the patient assessed and recorded prior to consent being taken? ☐ Yes ☐ No ☐ Unable to answer
- 30b. If YES, how was this assessed? (Answers may be multiple)  
☐ Mini mental score ☐ Clinical assessment  
☐ Other (please specify)
- 31a. Was the patient judged to be competent to consent to surgery? ☐ Yes ☐ No ☐ Unable to answer
- 31b. If NO, what "consenting" process was employed?
32. If the patient lacked capacity, who gave signed consent? (Answers may be multiple)  
☐ Next of kin ☐ Surgeon in the best interest of the patient  
☐ Patient advocate ☐ Family or carers  
☐ Mental capacity advocate ☐ Another medical colleague  
☐ Welfare attorney ☐ Independent capacity advocate  
☐ Other (please specify)

G. FIRST OPERATION

33. What was the grade of the most senior doctor proposing the operation?
- |  |   |
|--|---|
| <input type="checkbox"/> Consultant                          | <input type="checkbox"/> Senior specialist trainee (SpR 3+ or ST3+)   |
| <input type="checkbox"/> Staff grade or Associate specialist | <input type="checkbox"/> Junior specialist trainee (SpR 1&2 or ST1&2) |
| <input type="checkbox"/> Trainee with CCT                    | <input type="checkbox"/> Basic grade (FY or CT)                       |
| <input type="checkbox"/> Other (please specify)              | <div></div>   |
34. Please classify the procedure
- ☐ **Immediate** Immediate life or limb saving surgery. Resuscitation simultaneous with surgical treatment
- ☐ **Urgent** Acute onset or deterioration of conditions that threaten life, limb or organ survival; fixation of fractures; relief of distressing symptoms including acute surgical admissions not requiring an operation
- ☐ **Expedited** Stable patient requiring early intervention for a condition that is not an immediate threat to life, limb or organ survival
- ☐ **Elective** Surgical procedure planned or booked in advance of routine admission to hospital
- 35a. Were there any delays between admission and operation? ☐ Yes ☐ No ☐ Unable to answer
- 35b. If YES, were these delays incurred as a result of wait times for special investigations? ☐ Yes ☐ No ☐ Unable to answer
- 35c. If YES, how many days was surgery delayed by?
36. In your opinion, was the operation performed in a timely manner, i.e. without significant delay? ☐ Yes ☐ No ☐ Unable to answer
- 37a. In your opinion, was the grade and experience of the most senior surgeon in theatre at the time of the operation appropriate? ☐ Yes ☐ No ☐ Unable to answer
- 37b. If NO, please expand on your answer;
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- 38a. In your opinion, was the specialty of the most senior surgeon in theatre at the time of the operation appropriate? ☐ Yes ☐ No ☐ Unable to answer
- 38b. If NO, please expand on your answer;
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- 38c. In your opinion, was the grade and experience of the most senior anaesthetist appropriate to the anaesthetic care of this patient? ☐ Yes ☐ No ☐ Unable to answer

39. Please grade the quality of the documentation of the surgical note;
- ☐ Not available
- ☐ Good (all aspects of the documentation were well presented and easy to read)
- ☐ Satisfactory (most aspects of the documentation were well presented and easy to read)
- ☐ Poor (many aspects of the documentation were presented unclearly and difficult to read)

## H. PRE-OPERATIVE PREPARATION

- 40a. Was the patients clinical condition adequately optimised pre-operatively? ☐ Yes ☐ No ☐ Unable to answer
- 40b. If NO, what, in your opinion would have improved their readiness? (answers may be multiple)
- ☐ Involvement of Medicine for the Care of Older People
- ☐ Specific drug therapy, e.g. correction of fast AF ☐ Fluid resuscitation
- ☐ Correction of blood sugar or electrolyte imbalance ☐ Correction of anaemia
41. For urgent and emergency admissions, what was the interval from being declared ready for surgery and the induction of anaesthesia?
- ☐ < 36 hours ☐ > 48 hours ☐ Not applicable
- ☐ > or = 36 hours and < 48 hours ☐ Not recorded

## I. FLUID BALANCE

42. Is there recorded evidence of pre-operative dehydration, i.e. decreased urine output, skin turgor, decreased blood pressure. ☐ Yes ☐ No ☐ Unable to answer
43. Were fluids clearly prescribed e.g. within the drug administration record? ☐ Yes ☐ No ☐ Unable to answer
44. If this was an acute admission, in your opinion how do you categorise the pre-operative fluid resuscitation?
- ☐ Adequate/Appropriate ☐ Inadequate ☐ Excessive ☐ Unable to answer
45. In your opinion, how would you categorise the peri-operative fluid administration?
- ☐ Adequate/Appropriate ☐ Inadequate ☐ Excessive ☐ Unable to answer
46. In your opinion, how would you categorise the post operative fluid administration?
- ☐ Adequate/Appropriate ☐ Inadequate ☐ Excessive ☐ Unable to answer
47. What was the quality of the fluid balance charts?
- ☐ Good ☐ Satisfactory ☐ Poor ☐ Unacceptable ☐ Unable to answer
48. Were urea and electrolytes measured at appropriate intervals post operatively? ☐ Yes ☐ No ☐ Unable to answer

## J. RENAL IMPAIRMENT

49. Is there evidence that Acute Kidney Injury (AKI) was noted on admission? ☐ Yes ☐ No ☐ Unable to answer
50. In your opinion was there adequate assessment of risk factors for AKI? ☐ Yes ☐ No ☐ Unable to answer
51. Did the patient develop AKI post admission? ☐ Yes ☐ No ☐ Unable to answer
52. When was renal impairment first noted?  
☐ Pre-operatively ☐ Post operatively ☐ Unable to answer
53. If POST OPERATIVELY, how long following the procedure?
54. In your opinion, could this be attributed to; (answers may be multiple)  
☐ Unsatisfactory pre-operative resuscitation ☐ Poor surgical technique  
☐ Poor intraoperative management of fluids/cardiovascular status  
☐ Poor post operative management ☐ Timeliness of surgery  
☐ Complications of surgery ☐ Unable to answer  
☐ Other (please specify)
55. What stage of AKI was the patient in when it was first recognised?  
☐ 1 SERUM CREATININE CRITERIA - increase in serum creatinine of  $\geq 0.3\text{mg/dl}$  ( $\geq 26.4\mu\text{mol/l}$ ) or increase to  $\geq 150\%$ - $200\%$  (1.5- to 2-fold) from baseline  
 URINE OUTPUT CRITERIA - less than  $0.5\text{ml/kg}$  per hour for more than 6 hours  
☐ 2 SERUM CREATININE CRITERIA - increase in serum creatinine to more than  $200\%$ - $300\%$  (2- to 3-fold) from baseline  
 URINE OUTPUT CRITERIA - less than  $0.5\text{ml/kg}$  per hour for more than 12 hours  
☐ 3 SERUM CREATININE CRITERIA - increase in serum creatinine to  $>300\%$  (3- fold) from baseline (or serum creatinine of  $\geq 4.0\text{mg/dl}$  [ $>354\mu\text{mol/l}$ ] with an acute increase of at least  $0.5\text{mg/dl}$  [ $44\mu\text{mol/l}$ ])  
 URINE OUTPUT CRITERIA - less than  $0.3\text{ml/kg}$  per hour for 24 hours or anuria for 12 hours  
☐ Unable to answer
- 56a. Was there an unacceptable delay in recognising AKI? ☐ Yes ☐ No ☐ Unable to answer
- 56b. If YES, how long was the delay? Days:  Hours:
- 56c. Was the delay due to;  
☐ Poor recognition of risk factors ☐ Long periods of time between blood tests  
☐ Poor recording of fluid balance ☐ Lack of senior input  
☐ Other (please specify)

K. TEAM WORKING

57.

If the patient was on a surgical care pathway for older people, is there evidence of Medicine for the Care of Older People input?

☐ Yes

☐ No

☐ Unable to answer
58.

Is there evidence of Medicine for the Care of Older People input into ward guidelines for the care of the older surgical patient?

☐ Yes

☐ No

☐ Unable to answer

L. DEATH

59a. What was the final diagnosis of this patient?

59b. In your opinion, was this correct?

☐ Yes

☐ No

☐ Unable to answer

59c. If NO, please expand on your answer

END