

**Lower Limb Amputation Study**  
**National Confidential Enquiry into Patient Outcome and Death (NCEPOD)**  
**ADVISOR ASSESSMENT FORM**

NCEPOD Number:

**A. PATIENT DETAILS**

1. Age at time of admission:
2. Gender  Male  Female
3. Weight  kg  Not documented
4. Height  cm  Not documented
5. BMI   Not documented

**B. ADMISSION DETAILS**

6. Date and time of arrival at hospital:  /  /   :   Not documented
7. Date and time of first medical review:  /  /   :   Not documented
8. What grade of doctor admitted the patient? (Please use grade codes)   Not documented
9. What was the specialty of the admitting doctor?  
(Please use specialty codes)   Not documented
10. Date and time of first consultant review:  /  /   :   Not documented
11. Reason for admission (answers may be multiple)
- Ischaemic rest pain  Ischaemic rest pain with ulceration and/or gangrene
- Neuropathy  Neuropathy with ulceration and/or gangrene
- Other (please specify)
12. Reason for amputation (answers may be multiple)
- Ischaemic rest pain  Ischaemic rest pain with ulceration and/or gangrene
- Neuropathy  Neuropathy with ulceration and/or gangrene
- Other (please specify)
13. To what specialty was the patient first admitted?  
(Please use specialty codes)   Not documented

14. In your opinion was the timing of the first consultant review appropriate?  Yes  No  Unable to answer

15a. Was a clear initial management/monitoring plan documented?  Yes  No  Unable to answer

15b. If YES, In your opinion was this management/monitoring plan appropriate?  Yes  No  Unable to answer

16. Was the admission:  Elective  Non-elective

17. Mode of admission:  Via emergency department  Direct from GP  
 From vascular clinic  From outpatient clinic  
 Via diabetic foot clinic  Hospital transfer

Other (please specify)

18. If the initial admission was not under a vascular surgical team, would review at this stage have had the potential to change the outcome?  Yes  No  Unable to answer  
 Not applicable

### C. INTERNAL HOSPITAL TRANSFERS

19a. Was the patient subsequently transferred to another specialty within the hospital?  Yes  No  Unable to answer

19b. Was this an appropriate specialty for the patient to be transferred to?  Yes  No  Unable to answer

19c. To which specialty was the patient transferred? (Please use grade codes)   Unable to answer

20a. In your opinion, was the transfer appropriate? Yes No  Unknown

20b. If NO, please give details:

**D. INITIAL MANAGEMENT AND PRE-OPERATIVE CARE**

21a. Were there any comorbidities present at the time of admission?

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Type 1 Diabetes   | <input type="checkbox"/> Type 2 Diabetes     | <input type="checkbox"/> Respiratory disease        |
| <input type="checkbox"/> Chronic Kidney Disease ( $\geq$ stage 3; GFR $<$ 60)        |  | <input type="checkbox"/> Kidney Dialysis            |
| <input type="checkbox"/> Hypertension (requiring medication)                         |  | <input type="checkbox"/> Previous TIA               |
| <input type="checkbox"/> Previous stroke   | <input type="checkbox"/> Atrial fibrillation | <input type="checkbox"/> Angina                     |
| <input type="checkbox"/> Previous myocardial infarction                              |  | <input type="checkbox"/> Congestive cardiac failure |
| <input type="checkbox"/> Previous coronary stent insertion or CABG                   |  | Obesity   |
| <input type="checkbox"/> Previous peripheral vascular stent insertion/reconstruction |  |   |
| <input type="checkbox"/> Concurrent sepsis   | <input type="checkbox"/> Current smoker      | <input type="checkbox"/> Dyslipidaemia              |
| <input type="checkbox"/> Other (please specify)                                      | <input type="text"/>                         |   |

21b. If YES to 21a, was there potential to improve or control any of the comorbidities present?

- Yes  No  Unable to answer

21c. If YES to 21b, in your opinion, was an adequate attempt made to control the co-morbidities present?

- Yes  No  Unable to answer

21d. If NO to 21c, please give details:

21e. If YES to 21c, were the comorbidities adequately controlled?

- Yes  No  Unable to answer

22. What was the patient's smoking history?

- Current smoker  Ex-smoker  Never smoked  Unable to answer

23. Which of the following medications was the patient already prescribed prior to admission? (Answers may be multiple)

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Statins / Lipid modifying drugs | <input type="checkbox"/> Antiplatelet drugs | <input type="checkbox"/> ACE Inhibitor    |
| <input type="checkbox"/> Anticoagulants                  | <input type="checkbox"/> Antibiotics        | <input type="checkbox"/> Unable to answer |

24. Was the patient's nutritional state assessed within 48 hours of admission to hospital?

- Yes  No  Unable to answer

25. Was a nutritional plan documented?

- Yes  No  Unable to answer

26. Which of the following specialists (consultants) other than the admitting consultant and vascular surgeon saw or discussed the patient pre-operatively during this episode of care? (please answer for all specialties)

- |                     |  |   |                                  |                                  |
|---------------------|--|---|----------------------------------|----------------------------------|
| Diabetology         | <input type="checkbox"/> Yes - appropriately | <input type="checkbox"/> No - should have been reviewed | <input type="checkbox"/> No - NA | <input type="checkbox"/> Unknown |
| Renal medicine      | <input type="checkbox"/> Yes - appropriately | <input type="checkbox"/> No - should have been reviewed | <input type="checkbox"/> No - NA | <input type="checkbox"/> Unknown |
| Care of the Elderly | <input type="checkbox"/> Yes - appropriately | <input type="checkbox"/> No - should have been reviewed | <input type="checkbox"/> No - NA | <input type="checkbox"/> Unknown |
| Cardiology          | <input type="checkbox"/> Yes - appropriately | <input type="checkbox"/> No - should have been reviewed | <input type="checkbox"/> No - NA | <input type="checkbox"/> Unknown |
| Anaesthesia         | <input type="checkbox"/> Yes - appropriately | <input type="checkbox"/> No - should have been reviewed | <input type="checkbox"/> No - NA | <input type="checkbox"/> Unknown |
| Respiratory         | <input type="checkbox"/> Yes - appropriately | <input type="checkbox"/> No - should have been reviewed | <input type="checkbox"/> No - NA | <input type="checkbox"/> Unknown |
| Other (specify)     | <input type="checkbox"/> Yes - appropriately | <input type="checkbox"/> No - should have been reviewed | <input type="checkbox"/> No - NA | <input type="checkbox"/> Unknown |

27a. How was the viability of the IPSILATERAL limb/foot assessed prior to surgery (in this admission or treatment episode)?

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> No assessment                                       | <input type="checkbox"/> Clinical assessment                  |   |
| <input type="checkbox"/> Ankle-brachial pressure index                       | <input type="checkbox"/> Duplex ultrasound                    | <input type="checkbox"/> Unable to answer |
| <input type="checkbox"/> NA – bilateral amputation                           | <input type="checkbox"/> Angiography (conventional, MRA, CTA) |   |
| <input type="checkbox"/> Previous major amputation (Hindquarter, AK, TK, BK) |   |   |

27b. What was the interval between assessment and the operation appropriate?

27c. If no, why not?

27d. In your opinion, was this assessment adequate?  Yes  No  Unable to answer

27e. If assessment was not adequate please specify why not

28a. How was the viability of the CONTRALATERAL limb/foot assessed prior to surgery (in this admission or treatment episode)?

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> No assessment                 | <input type="checkbox"/> Clinical assessment                  |   |
| <input type="checkbox"/> Ankle-brachial pressure index | <input type="checkbox"/> Duplex ultrasound                    | <input type="checkbox"/> Unable to answer |
| <input type="checkbox"/> NA – bilateral amputation     | <input type="checkbox"/> Angiography (conventional, MRA, CTA) |   |

Previous major amputation (Hindquarter, AK, TK, BK)

28b. In your opinion, was this assessment adequate?  Yes  No  Unable to answer

28c. If assessment was not adequate please specify why not

29. Was this patient discussed at a vascular MDT prior to surgery?  Yes  No  Unable to answer

30a. Did the patient require pain relief in the pre-operative period?  Yes  No  Unable to answer

30b. If YES, was a specialist pain team involved in pre-operative pain management?  Yes  No  Unable to answer

30c. If NO, would specialist pain management have been appropriate?  Yes  No  Unable to answer

31a. How would you rate the management of pain in this patient?

Good  Adequate  Poor  Unsatisfactory  Unable to answer

31b. If POOR or UNSATISFACTORY please give reasons for your answer:

32. Is there evidence in the case notes that discharge planning and rehabilitation were discussed in the pre-operative period?  Yes  No  Unable to answer

33. Is there evidence in the case notes that a named individual was allocated to co-ordinate care, rehabilitation and discharge planning?  Yes  No  Unable to answer

34. Was antithrombotic prophylaxis contraindicated on admission?  Yes  No  Unable to answer

35. What prophylaxis against VTE was prescribed and used?

Low molecular weight heparin  Compression stockings  
 Pneumatic compression  Other (please specify)   
 Unknown  None

36. Was antithrombotic prophylaxis continued appropriately?  Yes  No  Unable to answer

37a. Was an attempt made to re-vascularise the limb in the pre-operative period?  Yes  No  Unable to answer

37b. If NO, would an attempt at revascularisation have been appropriate?

Yes  No  Unable to answer

37c. Please give reasons for your answer:

38a. Overall how would you rate the initial management and pre-operative care?

Good  Adequate  Poor  Unacceptable  Unable to answer

38b. Please give reasons for your answer:

#### E. PRE-ASSESSMENT

39. Did the patient attend a pre-assessment clinic?

Yes  No  Unable to answer

Not Applicable (urgent admission)

**If NO or Not applicable please go to question 44**

40. What was the grade of the clinician responsible for the assessment? (Please use grade codes)

Unable to answer

41. What was the specialty of the clinician responsible for the assessment? (Please use specialty codes)

Unable to answer

42a. Were any medical issues identified at this pre-assessment that required specialist review to optimise the patient for surgery?

Yes  No  Unable to answer

42b. If YES, please specify:

42c. If YES, were appropriate measures put in place to optimise the patient's medical condition?

Yes  No  Unable to answer

43a. Were there any discrepancies identified on admission compared with this clinic's assessment?

Yes  No  Unable to answer

43b. If YES, please specify:

**F. CONSENT**

44. What was the grade of the person taking consent?    Unable to answer  
(Please use grade codes)

45a. Was the seniority of the person taking consent appropriate?

45b. If no, please explain your answer

46. Were the risks and benefits of surgery fully recorded on the consent form?  Yes  No  Unable to answer

47. Was the risk of death included on the consent form?  Yes  No  Unable to answer

48a. How would you rate the quality of information on the consent form?

Good  Adequate  Poor  Unacceptable  Unable to answer

48b. If POOR or UNSATISFACTORY, what was omitted? Please give reasons for your answer:

**G. PERI-OPERATIVE CARE**

49a. Were any important investigations not included in this patient's pre-operative assessment?

49b. If YES, please specify?

50a. In your opinion, was the patient's pre-operative risk assessed adequately?  Yes  No  Unable to answer

50b. If NO, what should have been done differently?

51a. Were factors that increased the patient's operative risk managed appropriately?  Yes  No  Unable to answer

51b. If NO, what should have been done differently?

52. If the operation was undertaken as a palliative procedure, was this appropriate?

**H. THE SURGICAL PROCEDURE**

53a. Is the date and time of the decision to operate recorded in the notes?

Yes  No  Unable to answer

53b. If YES, at what date and time was this decision made?

/ /  :   Unable to answer

54. What was the date and time of the operation?

/ /  :   Unable to answer

55a. If the operation was undertaken out of hours (6pm-8am Mon-Fri or weekends) was this appropriate?

Yes  No  Unable to answer

55b. If NO, why not?

56a. Was there evidence in the case notes to suggest the operation was not given adequate priority?

Yes  No  Unable to answer

56b. If yes, please explain your answer:

57. What was the grade of the most senior surgeon present in theatre? (Please use specialty codes)

Unable to answer

58a. Were there any immediate complications of surgery?

Yes  No  Unable to answer

58b. If YES, what were they?

59a. In your opinion was the most appropriate procedure undertaken?

Yes  No  Unable to answer

59b. If NO, please give reasons for your answer:



60a. In your opinion was there unnecessary delay between the decision to operate and the time of the operation?

Yes  No  Unable to answer

60b. If YES, please give details:

61a. In your opinion, did the time spent waiting for the operation affect the outcome?

Yes  No  Unable to answer

61b. If YES, please give details:

62a. In your opinion, was this an appropriate amputation?

Yes  No  Unable to answer

62b If NO, why not?

63. Did the patient require an escalation of care to Level 2 or 3 in the post operative period?

Yes  No  Unable to answer

64. Did the patient receive the appropriate escalation in care?

Yes at the appropriate time  Yes but delay in escalation  No  Not applicable

65. For patients who required organ support, what organ support was required?

Ventilation  Cardiovascular  Renal  Unable to answer

Other (please specify)

66. Was the patient already receiving antibiotics prior to surgery?

Yes  No  Unable to answer

67a. Were prophylactic antibiotics indicated in this case?

Yes  No  Unable to answer

67b. If YES, were they administered?

Yes  No  Unable to answer

68c. If YES, what time were the prophylactic antibiotics administered? (24hr clock)

Unable to answer

It is recommended that prophylactic antibiotics are administered between 1 and 60 minutes prior to the first incision.

69a. Was this standard met?

Yes  No  Unable to answer

69b. If UNABLE TO ANSWER was this due to (answers may be multiple)

Time antibiotics given not documented

Time of knife to skin not documented

Other (please explain)

### I. ANAESTHESIA

70. What was the grade of the most senior anaesthetist present in theatre?   Unable to answer

71. Was the patient assessed on the ward prior to surgery by the anaesthetist? Yes No Unable to answer

72a. In your view, were there aspects of the anaesthetic assessment that could have been improved? Yes No Unable to answer

72b. If YES, please give details?

73a. Were there any immediate complications of anaesthesia?  Yes  No  Unable to answer

73b. If yes, what were they?

### J. POST OPERATIVE CARE

74. Did an anaesthetist review the patient post operatively (within 24 hours of surgery)? Yes No Unable to answer

75a. Did any of the following post operative complications occur:

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Post operative bleeding (return to theatre)              | <input type="checkbox"/> Wound infection                 |   |
| <input type="checkbox"/> Chest infection  | <input type="checkbox"/> Retention of urine              | <input type="checkbox"/> Urinary tract infection  |
| <input type="checkbox"/> Respiratory failure                                      | <input type="checkbox"/> Cardiac failure                 | <input type="checkbox"/> Cardiac arrhythmia (New) |
| <input type="checkbox"/> Myocardial infarction                                    | <input type="checkbox"/> Stroke/TIA                      | <input type="checkbox"/> Post operative delirium  |
| <input type="checkbox"/> Bloodstream infection (bacteraemia)                      | <input type="checkbox"/> Clostridium difficile infection |   |
| <input type="checkbox"/> Significant deterioration in renal function              | <input type="checkbox"/> Deep vein thrombosis            |   |
| <input type="checkbox"/> Acute renal failure requiring renal replacement therapy  | <input type="checkbox"/> Pulmonary embolus               |   |
| <input type="checkbox"/> Pressure ulcers (If yes state site) <input type="text"/> |  |   |
| <input type="checkbox"/> Cardiac failure/pulmonary oedema                         | Death  |   |

Healthcare associated infection (please specify)

75b. If YES, were they well managed?  Yes  No  Unable to answer

75c. If they were not well managed please explain your answer?

76. Was fluid management satisfactory in the post-operative period?  Yes  No  Unable to answer

77. Was monitoring of post operative fluid balance adequate?  Yes  No  Unable to answer

78. Was the patient reviewed by an acute pain team in the post-operative period?  Yes  No  Unable to answer

79. How was pain relief provided in the immediate post operative period?

**Simple analgesics** i.e. paracetamol, NSAIDs

**Weak opioids** i.e. tramadol, codeine

**Strong opioids** i.e. morphine, fentanyl, oxycodone, pethidine

**Adjuvants** – e.g. antidepressants, anticonvulsants

Patient controlled analgesia system

Epidural catheter

Nerve sheath catheter

Other (please specify)

80. How would you rate the management of the patient's post operative pain?

Good      Adequate      Poor      Unacceptable      Unable to answer

81. Did any of the following occur?

Stump cellulitis (infection) without breakdown  Yes  No  Unable to answer

Stump breakdown  Yes  No  Unable to answer

Stump contracture  Yes  No  Unable to answer

82. Was a falls assessment undertaken? (answers may be multiple)

Pre-operatively     Post operatively     Not undertaken     Unable to answer

83a. Did the patient experience a fall post operatively?  Yes  No  Unable to answer

83b. Please give further details:

--

83c. If YES to 83a, was there any adverse consequence to the fall?  Yes  No  Unknown

84. Was a nutritional assessment performed post operatively?  Yes  No  Unknown

85. Were nutritional supplements provided?  Yes  No  Unknown

86. Post operatively was the patient referred to any of the following services and if so, please specify the date of referral and the date of review:

	Yes / No / Unknown / NA	Date referred	Date seen
a) Physiotherapy	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> NA	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
b) Occupational therapy	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> NA	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
c) Social services	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> NA	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <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) Foot care team	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> NA	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
e) Specialist amputation rehabilitation service	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> NA	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
f) Clinical psychology	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> NA	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
g) Palliative care	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> NA	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

87. For patients who were seen, was there inappropriate delay in review by any of the above?  Yes  No  Unable to answer

88. If the patient was not seen, in your view, which of the following should have seen them?

a) Physiotherapy	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to answer
b) Occupational therapy	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to answer
c) Social services	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to answer
d) Foot care team	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to answer
e) Specialist amputation rehabilitation service	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to answer
f) Clinical psychology	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to answer
g) Palliative care	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="checkbox"/> Unable to answer

89a. Would any specialist review that was not obtained have been  Yes  No  Unable to answer appropriate?

Not applicable

89b. If YES, please specify giving reasons

89. In addition to vascular surgery which of the following specialists were involved in the post operative care of the patient?

- |                              |  |                |
|------------------------------|--|----------------|
| Diabetology                  | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unable to answer | Not applicable |
| Renal medicine               | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unable to answer | Not applicable |
| Care of the elderly          | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unable to answer | Not applicable |
| Cardiology                   | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unable to answer | Not applicable |
| Microbiology                 | Yes No Unable to answer  | Not applicable |
| Other (please specify below) | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unable to answer | Not applicable |

91a. Were there any delays in the patients discharge?  Yes  No  Unable to answer

91b. If YES what was the cause of this? (Please tick all that apply)

- |   |  |
|---|--|
| <input type="checkbox"/> Delays in recovery                               | <input type="checkbox"/> Delay in Social Service assessment? |
| <input type="checkbox"/> Delay in access to a secondary/tertiary care bed | <input type="checkbox"/> Delay in wheelchair provision       |
| <input type="checkbox"/> Delays in Occupational Therapy assessment        | <input type="checkbox"/> Waiting for home alterations        |
| <input type="checkbox"/> Delay in Physiotherapy assessment                | <input type="checkbox"/> Waiting for re-housing              |
| <input type="checkbox"/> Other (please specify)                           | <input type="text"/>   |

## K. DISCHARGE

92. Was the patient discharged:  Alive  
 Died within 30 days of surgery  
 Died >30 days post-surgery while still an in-patient

**For all patients transferred to a secondary care facility (i.e. back to another hospital):**

93a. In your opinion was this an appropriate transfer?

Yes  No  Unable to answer

93b. If NO, please give details:

## L. DIABETES MANAGEMENT

94. What type of diabetes did the patient have?

Type 1  Type 2  Other (e.g. post pancreatitis)

95. What treatment was the patient on for diabetes at the time of admission?

Diet controlled  Insulin  Thiazolidinediones ("Glitazones")

Metformin  Sulphonylureas (e.g. gliclazide, glipizide)

GLP-1 agonists (Exenatide/liraglutide)

Dipeptidyl peptidase-4 inhibitors ("gliptins")

Other (Please specify)

96. In your opinion was preoperative glycaemic control

Good  Adequate  Poor  Unacceptable  Unable to answer

97. If the glucose was >12mmol/l were either urinary or blood ketones measured?

Yes  No  Unable to answer

98. If the preoperative diabetes control was poor was there evidence that an effort made to address this prior to surgery?

Yes  No  Unable to answer

99a. Was a member of the diabetes team involved in advising on improving preoperative glycaemic control?

Yes  No  Unable to answer

99b. If YES, was the frequency of monitoring appropriate?

Yes  No  Unable to answer

100. With good control defined as no more than one reading > 11 mmol/L and none < 4 mmol/L in a 24hr period, in your opinion, was:

a) The immediate post-operative glycaemic control (up to the 4<sup>th</sup> post op day)

Good  Adequate  Poor  Unacceptable  Unable to answer

b) The glycaemic control during the recovery period (beyond the 4<sup>th</sup> day)

Good     Adequate     Poor     Unacceptable     Unable to answer

101a. Did the patient receive an intravenous insulin infusion at any time during this admission?     Yes     No     Unable to answer

**If NO, please go to question 106**

101b. How many days was the intravenous insulin given for?         Unable to answer

101c. Were glucose measurements made at least two hourly while on the infusion?     Yes     No     Unable to answer

102. On which post-operative day was an oral diet re-established?         Unable to answer

103. Was the usual diabetes treatment re-started before the intravenous insulin was stopped?     Yes     No     Unable to answer

104. In your opinion was hyperglycaemia adequately managed/avoided during the insulin infusion?     Yes     No     Unable to answer

105. Did hypoglycaemia occur while on the insulin infusion (glucose <4mmol/L)?     Yes     No     Unable to answer

**M. DIABETES PRESCRIBING & DRUG MANAGEMENT**

106a. Was the drug chart available for review?     Yes     No

106b. If YES, which of the following occurred?

	Did occur	Did not occur	Unable to answer	Not applicable
<b>Oral Hypoglycaemic Agent (OHA) prescription / management errors:</b>				
OHA was written up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prescription was signed by prescriber	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
OHA was signed as given	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dose was reduced following hypoglycaemia (BG<4mmol/l)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dose was changed when persistent BG>11mmol/l	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inappropriate omission of dose after hypoglycaemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Insulin prescription / management errors:</b>				
Insulin was written up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name of insulin correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Number (dose) clear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit abbreviated to 'u' or written unclearly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulin prescription was signed by prescriber	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulin was signed as given	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulin was increased when persistent BG >11 mmol/L	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulin was reduced if unexplained BG <4mmol/L	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inappropriate omission of insulin after episode of hypoglycaemia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

107. Overall how would you rate the care of diabetes in this patient?

- Good     
 Adequate     
 Poor     
 Unacceptable     
 Unable to answer

**N. OVERALL ASSESSMENT OF CARE**

108. Overall assessment of care for this patient **(please select one category only)**

- Good practice:** a standard of care you would expect from yourself, your trainees and your institution  
 **Room for improvement:** aspects of clinical care that could have been better  
 **Room for improvement:** aspects of organisational care that could have been better  
 **Room for improvement:** aspects of clinical and organisational care that could have been better  
 **Less than satisfactory:** several aspects of clinical and/or organisational care that were well below a standard you would expect from yourself, your trainees and institution  
 Insufficient data

Cause for concern cases – occasionally NCEPOD will refer cases that have been identified as “5” – 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 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 ten 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:

109a. Are there any issues that you feel should be highlighted in the report?  Yes  No

109b. If YES, please give details:



110a. Would this case form the basis of a good case study to highlight a specific theme in the report?

Yes  No

110b. If YES, please give a brief case history below:

### 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	140 = Oral Surgery	180 = Accident & Emergency
106 = Upper Gastrointestinal Surgery	145 = Maxillo-Facial Surgery	190 = Anaesthetics
	150 = Neurosurgery	192 = Critical/Intensive Care Medicine
	160 = Plastic Surgery	

#### **MEDICAL SPECIALTIES**

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

### CODES FOR GRADE

01 – Consultant	02 – Staff Grade/Associate Specialist
03 – Trainee with CCT	04 - Senior specialist trainee (ST3+ or equivalent)
05 – Junior specialist trainee (ST1 & ST2 or CT equivalent)	06 – Basic Grade (HO/FY1 or SHO/FY2 or equivalent)
07 - Other	