Scottish Parliament Region: Glasgow

Case 200500816: Greater Glasgow and Clyde NHS Board

Summary of Investigation

Category

Health: Hospital; Nursing Care; Treatment

Overview

The complainant (Mrs C) raised a number of concerns regarding the care and treatment of her husband (Mr C) during admissions to Glasgow Royal Infirmary (Hospital 1) in October 2004 and March 2005.

Specific complaints and conclusions

The complaints which have been investigated are that Greater Glasgow and Clyde NHS Board (the Board):

(a) failed to store medication appropriately and supervise drug-taking (*upheld*);

(b) told Mrs C that failure to administer Warfarin was the cause of Mr C's stroke and Mrs C believed that the alleged failures relating to the storage of Mr C's drugs and supervision of his drug-taking between 4 and 6 October 2004 might have contributed to the stroke (*partially upheld to the extent that there were failures in monitoring Mr C's INR during the admission*);

(c) inappropriately discharged Mr C too soon (*not upheld*);

(d) failed to notice that Mr C was suffering from constipation while in hospital (*upheld*);

(e) failed to provide any home help to Mrs C after her husband was discharged from hospital (*no finding*); and

(f) failed to investigate Mrs C's complaint in a timely fashion or respond to all the points raised and adhere to NHS complaints guidelines and failed to clarify why the complaint was responded to from the complaints team at Stobhill Hospital (Hospital 2) rather than at Hospital 1 (*partially upheld to the extent that the Board failed to respond to the complaint within the timescale required in NHS complaints guidelines and did not respond to all the points raised*).

As the investigation progressed, I identified issues concerning Mr C's clinical records and his post-operative management. I, therefore, informed the Board and Mrs C that the investigation would additionally consider the following points:

(g) Mr C's discharge summary dated 26 October 2004 included details about another patient (*upheld*); and

(h) the Board failed to carry out Mr C's post-operative management appropriately from 2 March 2005 onwards (*upheld*).

Redress and recommendations

The Ombudsman recommends that the Board:

(i) apologise to Mr C and Mrs C for their failure to monitor Mr C's bowel movements and for any discomfort or pain he would have suffered as a result;

(ii) write to Mrs C repeating the apologies they have provided to me regarding their failure to handle her complaint properly;

(iii) put measures in place to ensure that meaningful medical records are made on a daily basis;

(iv) put measures in place to ensure that when investigations are carried out they are recorded and the results documented and where there are abnormalities, entries in the medical records should acknowledge them and record medical staff's intentions regarding them;

(v) monitor and audit the effectiveness of the measures taken as a result of recommendations (iii) and (iv);

(vi) consider Adviser 2's comments about the management of anaemia and review their practice with advice from, for example, a physician in charge of elderly patients. This review should lead to an agreed policy being formulated, which should particularly be directed towards post-operative care; and

(vii) regularly review patients' medications so that inappropriate treatments are noted and, if necessary, stopped.

The Board have accepted the recommendations and will act on them accordingly.

Main Investigation Report

Introduction

1. On 17 June 2005, the Ombudsman received a complaint from a woman, referred to in this report as Mrs C, about the care and treatment of her husband, Mr C, during two admissions to Glasgow Royal Infirmary (Hospital 1) between 4 and 6 October 2004 and between 1 and 23 March 2005. At that time, the complaint had yet to exhaust NHS Greater Glasgow and Clyde Board (the Board)'s complaints procedure and I advised Mrs C to await the outcome of that procedure before writing to the Ombudsman's office again. Mrs C received a final response from the Board on 11 July 2005. Mrs C then underwent two admissions to hospital, which prevented her from pursuing her complaint. On 24 May 2006, Mrs C was well enough to pursue her complaint and she wrote to the Ombudsman, at which time our formal consideration of the complaint began.

2. The complaints from Mrs C which I have investigated are that the Board:

(a) failed to store medication appropriately and supervise drug-taking;

(b) told Mrs C that failure to administer Warfarin was the cause of Mr C's stroke and Mrs C believed that the alleged failures relating to the storage of Mr C's drugs and supervision of his drug-taking between 4 and 6 October 2004 might have contributed to the stroke;

(c) inappropriately discharged Mr C too soon;

(d) failed to notice that Mr C was suffering from constipation while in hospital;

(e) failed to provide any home help to Mrs C after her husband was discharged from hospital; and

(f) failed to investigate Mrs C's complaint in a timely fashion or respond to all the points raised and adhere to NHS complaints guidelines and failed to clarify why the complaint was responded to from the complaints team at Stobhill Hospital (Hospital 2) rather than at Hospital 1.

3. As the investigation progressed, I identified issues concerning Mr C's clinical records and his post-operative management. I, therefore, informed the Board and Mrs C that the investigation would additionally consider the following points:

(g) Mr C's discharge summary dated 26 October 2004 included details about another patient; and

(h) the Board failed to carry out Mr C's post-operative management appropriately from 2 March 2005 onwards.

Investigation

4. The investigation of this complaint involved obtaining and reading copies of all the correspondence between Mrs C and the Board and Mr C's clinical records. I made two formal enquiries of the Board. In addition, I sought the advice of two of the Ombudsman's clinical advisers regarding the complaint. One adviser commented on the nursing aspects of the case (Adviser 1), while the other adviser commented on general clinical issues (Adviser 2).

5. I have not included in this report every detail investigated but I am satisfied that no matter of significance has been overlooked. Mrs C and the Board were given an opportunity to comment on a draft of this report.

Background

6. Mr C is a 79-year-old man who suffers from Alzheimer's disease, which is a form of degenerative brain disease resulting in progressive mental deterioration with disorientation, memory disturbance and confusion. Between 4 and 6 October 2004, Mr C was admitted to Hospital 1 to have his hip re-set. On 12 October 2004, Mr C was admitted to Hospital 2 following a stroke. Between 1 March and 23 March 2005, Mr C was admitted to Hospital 1 in order to have a hip operation. On 24, 25 and 28 March 2005, Mr C was seen at home by district nurses.

(a) The Board failed to store medication appropriately and supervise drug-taking

7. Mrs C said that when her husband was admitted to Hospital 1 on 4 October 2004, she handed a plastic box containing his medication to staff. Mrs C complained she subsequently saw the plastic box on a chair next to Mr C's bed, which meant that the medication was not properly stored.

8. Mrs C also complained that during both the admission between 4 and 6 October 2004 and the one between 1 and 23 March 2005, Mr C was not supervised while taking his drugs. Mrs C said that, during the March 2005 admission, she told staff on several occasions that Mr C required to be supervised when being given his medication, but this did not happen. Mrs C referred to having found tablets in Mr C's bed sheets, in a plastic beaker and in the pockets of his dressing gown when she took it home to wash it. Mrs C said that, despite her mentioning supervision on a number of occasions, nothing was done until 14 March 2005, 14 days after his admission to Hospital 1, when a

nurse put notes on Mr C's chart stating that he had to be seen swallowing medication.

9. The Board, in a letter to Mrs C dated 11 July 2005, accepted that the plastic box containing Mr C's medication should not have been left at his bedside. The Board said that staff would be reminded of the Board's safe storage of drugs policy.

10. The Board acknowledged that Mrs C was right to tell staff that Mr C should be observed taking his medication and they apologised this was not adequately flagged up, as they considered it was a very important issue. The Board also apologised that Mrs C found tablets left in a beaker, as staff should have ensured that Mr C had taken his medication. The Board agreed with Mrs C that Mr C should have been supervised from the time he was admitted and that notes should have been put on his chart at that time.

11. I asked Adviser 1 to comment on the Board's actions in relation to the storage of medication. Adviser 1 told me that any failures associated with medication were serious in terms of professional practice. She noted that the Board had admitted that their policy was not followed adequately.

12. I asked Adviser 1 to comment on the Board's actions in relation to the supervision of Mr C's drug-taking. Adviser 1 noted that Mr C was recorded as being confused, occasionally agitated and suffering memory problems and, therefore, he was not capable of self-medicating. Given that, Adviser 1 told me she considered that the Board's staff would have failed in this respect even if Mrs C had not pointed out the need for Mr C's close supervision while swallowing medication.

13. I asked the Board, given that they acknowledged they had failed to appropriately store Mr C's medication and that they had failed to supervise his drug-taking, what remedial action they had taken to ensure this did not happen again.

14. The Board said that ward managers discussed the issue of the safe storage of drugs with individuals who had been involved with Mr C's care. They said that Mrs C's complaint was also discussed with all nursing staff on the ward. These discussions took place either individually or during team meetings. The Board said they also had a nurse educator who ran drug awareness

sessions, which all staff were able to attend in order to reinforce issues highlighted in the complaint.

15. The Board said they had put a new system in place for the prescription and administration of medicines called 'My Medicines'. This involved patients using their own drugs when admitted to hospital. The process was led by a clinical pharmacist who was based on the ward. On arrival on the ward a patient's drugs were immediately placed in a secure locker beside the patient's bed, which could only be accessed by the nurse who held the key for it. The Board said this ensured that drugs were not left unattended or accessible by a patient. The process was under constant audit by the pharmacy team who attended to patients on a daily basis to check prescribed drugs for appropriateness, compatibility and compliance.

16. The Board said they had put a new policy in place to ensure that, if a patient required supervised drug-taking, that would be recorded in the nursing notes and a note would also be put on the drug kardex. The issue was discussed with staff in the same way as described at paragraph 14 above in relation to the storage of medication. The Board said that in order to highlight the needs of confused patients the clinical standards documents 'Older People in Acute Care' had been placed in each ward for staff to read.

17. The Board provided me with a copy of their new policy on supervision of drug-taking, which clearly stated that patients who could not safely take medicines on their own should be supervised. The Board also provided me with copies of slides they had used in staff training sessions which highlighted the issue of storage and administration of drugs with specific reference to this complaint.

(a) Conclusion

18. The Board have acknowledged that they failed to appropriately store Mr C's medication and failed to supervise his drug-taking. Adviser 1 has confirmed there were failings and that these were serious. I, therefore, uphold this complaint.

19. Although I am upholding the complaint, I have no recommendation to make. That is because I am satisfied that the remedial action taken by the Board (described at paragraphs 14 to 17 above) adequately remedies the failings identified. Indeed, the Board's actions are a good example of learning

from complaints and, while not taking away from the seriousness of the failings, I commend the Board for responding positively to the complaint.

(b) The Board told Mrs C that failure to administer Warfarin was the cause of Mr C's stroke and Mrs C believed that the alleged failures relating to the storage of Mr C's drugs and supervision of his drug-taking between 4 and 6 October 2004 might have contributed to the stroke

20. Mrs C said she was told the cause of Mr C's stroke on 12 October 2004 was a failure to administer Warfarin (this is a drug which prevents blood from clotting). There is some confusion over who told Mrs C this: initially she believed it was a doctor, but then she remembered that it had been a chemist. Either way, she raised the point because she believed the failure to store medication properly during the admission between 4 and 6 October might have had an impact on Mr C suffering a stroke.

21. The Board, in a letter dated 11 July 2005, responded that there was no evidence to support the view that Mr C had suffered his stroke as a result of a failure to administer Warfarin.

22. In a letter to me dated 12 March 2007, the Board said Mr C had been seen by the anticoagulant clinic pharmacist during his admission to Hospital 2 with a stroke on 12 October 2004. The Board said they assumed this was who Mrs C referred to as having told her that Mr C's stroke was caused by a failure to administer Warfarin. The Board said they had spoken to the anticoagulant clinic pharmacist, who said that while he could not recall the conversation with Mrs C he would not have provided information to a patient or his family as to why a stroke had occurred, as he was not medically qualified.

23. I asked Adviser 2 to comment on this point of complaint and let me know whether there was any evidence that a failure to administer Warfarin was responsible for Mr C's stroke. Adviser 2 stated that, while failure to observe Mr C taking his medication during the admission to Hospital 1 between 4 and 6 October 2004 raised some doubt regarding whether he ingested his prescribed Warfarin, it could not be said that Mr C's stroke was due to possible non-ingestion of Warfarin when he was an in-patient between 4 and 6 October 2004.

24. However, Adviser 2 did criticise the fact that, after an initial measurement taken on 4 October 2004, Mr C's International Normalised Ratio (INR – a test

used to monitor the level of anticoagulation of the blood by drugs such as Warfarin) was not measured again during his admission between 4 and 6 October 2004.

25. The Board, in a letter to me dated 11 September 2007, accepted that they failed to act appropriately on Mr C's INR reading during the admission between 4 and 6 October 2004, although they did not accept liability for the stroke.

26. The Board said they had now appointed eight nurse practitioners to work alongside their medical team to ensure that routine blood sampling was more robust and INR sampling was done daily where applicable. The Board said that all doctors were given advice on medicines and prescribing in a booklet which included information about Warfarin. They stated that INR monitoring had improved since 2004 as a direct result of the issues identified in Mrs C's complaint.

(b) Conclusion

27. It has not been possible to establish whether Mrs C was told by the anticoagulant clinic pharmacist that failure to administer Warfarin was the cause of Mr C's stroke. There is no record that the anticoagulant clinic pharmacist said this and, not surprisingly given the amount of time that has passed since the incident, he cannot recall the conversation with Mrs C.

28. Notwithstanding, the key point here is that Mrs C believed that failures for which the Board were responsible might have caused Mr C's stroke. On that key issue, Adviser 2's advice is very clear: Mr C's stroke cannot be attributed to a failure by Hospital 1 to appropriately store medication and supervise drug taking.

29. However, Adviser 2 is critical that Mr C's INR was not monitored after an initial sample was taken on 4 October 2004 and I note that the Board have accepted this criticism.

30. In light of Adviser 2's comments I partially uphold the complaint, because although it cannot be said that any failures on the Board's part led to Mr C having a stroke, there were failures in terms of monitoring Mr C's INR during the admission between 4 and 6 October 2004.

31. The action the Board have taken in employing eight nurse practitioners and in providing doctors with written information regarding medicines and prescribing, constitutes an appropriate remedy to the failing identified in this complaint. Consequently, although I partially uphold the complaint, I have no recommendations to make.

(c) The Board inappropriately discharged Mr C too soon

32. Mrs C complained that, when Mr C was discharged from Hospital 1 on 23 March 2005, he was in a lot of pain and his wound was not dry. Mrs C considered that he should not have been discharged in such a state.

33. In their letter dated 11 July 2005, the Board responded that Mr C's wound was dry on discharge. They did not comment on the point that Mr C was in pain. In their letter to me dated 12 March 2007, the Board said that Mr C was on pain medication during his admission, which was appropriate for mild to moderate pain relief. The Board said there was no record in the clinical records of Mr C requiring a stronger pain-relieving drug. They said that the pain score section on the patient observation chart did not record a score showing that Mr C was in pain.

34. I asked Adviser 1 and Adviser 2 for comments regarding this point of complaint. Adviser 1 stated that the district nursing records (Mrs C asked for district nurses to visit Mr C, as she was concerned about his wound and the fact he was in pain) described Mr C's wound as having a 'very small raw area at the centre'. Adviser 1 stated that the records did not indicate that the wound was exuding a discharge. She stated that the wound was treated, covered with a dressing and when reviewed on 28 March 2005 was judged to be satisfactory and the dressing removed. Adviser 1 considered that this was all compatible with the entry in Mr C's records from Hospital 1 that the wound was dry on discharge.

35. Adviser 2, commenting on the point about Mr C being in pain, told me that there was no evidence that Mr C was in pain while in hospital. Adviser 2 stated that the pain score of the observation chart, taken on several days, showed that only on one day, the day of the operation, was a pain score of 2 recorded (other scores were 0). In the pain scoring system, 0 meant 'no pain at rest, no pain on movement', 1 meant 'no pain at rest, slight pain on movement', 2 meant 'intermittent pain at rest, moderate pain on movement' and 3, the maximum, meant 'continuous pain at rest, severe pain on movement'.

(c) Conclusion

36. The evidence of Hospital 1's clinical records and of the district nursing records do not support Mrs C's complaint that Mr C was discharged in pain and with his wound not being dry. Consequently, I do not uphold this complaint.

(d) The Board failed to notice that Mr C was suffering from constipation while in hospital

37. Mrs C said that when a district nurse visited Mr C on 24 March 2005, she found that he was exceedingly constipated and estimated that he had not had a bowel movement for three weeks. Mrs C said that Hospital 1 should have been aware of this.

38. The Board did not comment on this part of the complaint when responding to Mrs C. In their letter to me dated 12 March 2007, the Board said there was no record of constipation in the records, except an entry on 8 March 2005 which stated that Mr C was agitated in the night because he was unsure when he had last had a bowel movement. The Board said that, unfortunately, they did not appear to have followed up on this. The Board said they had now established a bowel protocol in the orthopaedic department as an audit had found there was a lack of clarity around what staff should do, and when, for a patient suffering from constipation.

39. I asked Adviser 1 and Adviser 2 to comment on this complaint. Adviser 1 said the examination carried out by the district nurse, recorded in the district nursing records, showed that Mr C was constipated. Adviser 1 said there were two factors that should have alerted the Board to the need to monitor bowel function:

- Dihydrocodeine was administered four times a day from 1 March 2005 until the date of discharge. A common side-effect of this medication is constipation.
- Ferrous Sulphate (oral iron) was administered four times a day from 14 March 2005 until discharge. Iron preparations taken orally may have a constipating effect particularly in older patients, occasionally leading to faecal impaction.

40. Adviser 1 stated that the district nurse recognised the implication of both of these medications and telephoned Mr C's GP who advised that both the oral iron and Dihydrocodeine should be withheld until normal bowel function

resumed. Adviser 1 considered that Hospital 1's nursing staff should have been monitoring and recording Mr Cs bowel function and failed to do so.

41. Adviser 2 criticised the fact that Mr C was discharged after three weeks in hospital with faecal impaction. He stated that it was an absolute requirement that a patient who suffered from dementia who has just had a significant operation should have his bowel function monitored.

42. In response to the Advisers' criticisms, the Board accepted that nursing and medical staff should have recognised that the medication Mr C was on made it highly likely that he would be constipated and this should have been noted and acted upon. The Board said that the presence of a clinical pharmacist on the ward (see paragraph 15 above) would help ensure this situation did not occur again in future.

43. The Board provided me with copies of their new Bowel Protocol and slides that had been used for staff training in which the new Protocol was explained.

(d) Conclusion

44. The Board failed to monitor Mr C's bowel movements while he was a patient in Hospital 1 and this led to him becoming seriously constipated. Consequently, I uphold the complaint.

(d) Recommendation

45. While I commend the Board for putting in place a new bowel protocol, which should help to ensure that what happened to Mr C does not happen again, I recommend that the Board apologise to Mr C and Mrs C for their failure to monitor Mr C's bowel movements and for any discomfort or pain he would have suffered as a result.

(e) The Board failed to provide any home help to Mrs C after her husband was discharged from hospital

46. Mrs C said that nursing staff at Hospital 1 told her nurses and home care would be provided to see Mr C at home when he was discharged. Mrs C said this did not happen and she had to contact Mr C's GP in order to arrange for nurses to visit him at home.

47. In their letter dated 11 July 2005, the Board said that, prior to Mr C's discharge, a nurse had telephoned Mrs C at home to discuss the discharge plan

and to see if she could be of any more assistance to Mrs C. The nurse confirmed that Mrs C had cancelled the home care the day before Mr C's discharge.

48. In their letter to me dated 12 March 2007, the Board said that, in addition to the record of the telephone discussion mentioned in their letter to Mrs C, a review of the clinical records had found that a note by another member of staff had stated that Mrs C did not want home help but did want day care facilities for one or two days a week.

49. I asked Adviser 1 and Adviser 2 whether the clinical records could shed any light on this point of complaint. Adviser 2 commented that there appeared to have been a misunderstanding between Mrs C and the nurses prior to Mr C's discharge but that the clinical records did not clarify exactly what happened. Adviser 1 agreed and added that the sort of respite care that Mrs C wanted was the responsibility of social services and it would have been appropriate for this to be arranged via Mr C's GP.

(e) Conclusion

50. There appears to have been a misunderstanding between the Board and Mrs C regarding what home care she wanted for Mr C. The available evidence I have seen cannot resolve this misunderstanding. Consequently, I make no finding on this complaint.

(f) The Board failed to investigate Mrs C's complaint in a timely fashion or respond to all the points raised and adhere to NHS complaints guidelines and failed to clarify why the complaint was responded to from the complaints team at Hospital 2 rather than at Hospital 1

51. Mrs C complained that it took three and a half months for the Board to respond to her complaint, which breached the NHS Complaints Procedure. She also stated that the updates she was given while the investigation was underway did not explain why there was a delay. She was also concerned that responses she had received were from the Patient Liaison Office at Hospital 2 rather than Hospital 1 and that the Board did not respond to her complaint about their failure to diagnose constipation.

52. In their letter to me dated 12 March 2007, the Board apologised unreservedly for the amount of time it took for Mrs C to receive a response to her complaint. The Board said they were unable to recall whether there was a

specific reason why they had not responded in a timelier manner. The Board explained that the reason the response to Mrs C's complaint was sent from Hospital 2 rather than Hospital 1 was because the Patient Liaison Office at Hospital 2 was at that time responsible for handling complaints about all orthopaedic departments in North Glasgow. The Board accepted that they did not address the issue of Mr C's constipation when initially responding to the complaint.

(f) Conclusion

53. The Board have accepted that they failed to respond to the complaint in a timely manner and failed to respond to the point about Mr C being constipated.

54. I, therefore, partially uphold the complaint, but only to the extent that the Board failed to respond to the complaint in a timely manner and failed to respond to Mrs C's whole complaint.

55. I do not uphold the part of the complaint relating to Mrs C having received a response from Hospital 2 rather than Hospital 1. That is because, in my view, the fact that Mrs C received a response from the Patient Liaison Office at Hospital 2 does not amount to maladministration. Receiving a letter from a different hospital did not cause Mrs C any injustice or hardship and, in this case, was clearly in line with the Board's normal practice.

(f) Recommendation

56. I recommend that the Board write to Mrs C repeating the apologies they have provided to me regarding their failure to handle her complaint properly.

(g) Mr C's discharge summary dated 26 October 2004 included details about another patient

57. Adviser 2 raised this concern following his review of the case and, after careful consideration, I decided it should be added to my investigation. He said that the middle paragraph of a discharge summary in Mr C's clinical records clearly referred to another patient as it described an elbow injury associated with a bone fracture and nerve damage, which clearly did not apply to Mr C. Adviser 2 told me this indicated poor administrative practice both by secretarial and medical staff.

58. The Board told me, in response to Adviser 2's criticisms, that the letter had been removed from Mr C's clinical records and a new one dictated and filed.

The Board said that at this distance from the event, they were unable to say with any accuracy how the letter came to contain wrong information. They accepted that it should not have done.

(g) Conclusion

59. There was clearly an error in the discharge letter and, therefore, I uphold this complaint.

60. I am pleased to note that the incorrect information has been removed from Mr C's clinical records, which I consider is an appropriate remedy.

(h) The Board failed to carry out Mr C's post-operative management appropriately from 2 March 2005 onwards

61. Adviser 2 raised this point following his review of the case and, as with complaint (g) above, I decided that it should be added to my investigation. I outline Adviser 2's comments and concerns at paragraphs 62 to 74 below. I appreciate that much of the information below will be new and distressing to Mrs C.

Adviser 2's Comments

62. At the pre-admission clinic, two weeks before he was admitted for an operation to improve the stability of his hip, Mr C's blood tests showed, amongst other things, that his kidney function was near normal. Blood tests showed: blood creatinine (creatinine is a waste product filtered from the blood by the kidneys and measuring the level of creatinine in the blood helps to measure kidney function) was 120umol/l, C - reactive protein (CRP – a protein in the blood that can become elevated when infection is present) was normal at less than 6mgs/l, haemoglobin (a protein found in red blood cells) was at 15.4g/dl and White Blood Cell count (WBC – this is where the number of white blood cells in a blood sample is measured in order to diagnose infections) was 7.7x10 per litre and was normal, and INR was 3.8.

63. Surgery was performed on 2 March 2005. The operation note recorded 200 mls of blood loss. After the operation, Mr C's blood pressure was very low and this persisted certainly until 5 March 2005. There was evidence of further blood loss after the operation in that the wound drainage bottles contained blood and had to be emptied twice in the first post-operative night. The haemoglobin which had been 15.4g/dl at the pre-admission clinic had fallen dramatically to 6.8g/dl on the day after surgery. Three units of blood were

transfused on that day and the next day haemoglobin was 8.1g/dl. On 5 March 2005 the haemoglobin had fallen to 6.6g/dl and four units of blood were given.

64. Urine output was poor after the operation despite intravenous fluids and blood being provided. Kidney function had deteriorated on 3 March 2005 (the creatinine level was 190umol/l) and continued to deteriorate until 5 March 2005 (when the creatinine level was 430umol/l), before starting to recover on 6 March 2005. The CRP was raised on the first post-operative day to 46mgs/l (a normal CRP should be less than 10mgs/l) and continued to rise until 6 March 2005 when it was 332mgs/l, after which it fell. The WBC rose to 12.0x10 per litre on 3 March 2005 and 31.5x10 per litre the next day. It fell to 16.1x10 per litre by 9 March 2005 but, thereafter, rose again to 25.0x10 per litre on 15 March 2005 subsequently falling to normal on 22 March 2005 when it was 8.6x10 per litre.

65. The findings outlined at paragraphs 62 to 64 above indicated a combination of blood loss, infection and acute renal failure. The medical records and the discharge summary did not reflect the seriousness of this situation. There were records of bleeding from the wound including that blood was 'spurting from the wound'. Patient falls were recorded on 3 March 2005, 8 March 2005 and 9 March 2005.

66. Despite this serious situation, Adviser 2 noted that the Modified Early Warning Score (MEWS – a system used to identify patients at risk of deterioration) system was not completed on 3 March 2005. This was despite a situation where the patient's blood pressure was less than 100mm/mercury systolic for more than 24 hours.

67. The clinical records in the first week or more after the operation make no mention of the possibility of infection despite the very high CRP and WBC levels. Adviser 2 stated that he could see only one record of microbiological investigations and that was a swab taken from the operation site on 14 March 2005. There was no mention of antibiotic treatment other than the fact that the antibiotic oxytetracycline was given in a dose of 500 mgs every night. Adviser 2 stated that this was not an appropriate antibiotic regime for a probable but un-investigated infection. In addition, Adviser 2 said this antibiotic was contraindicated (inadvisable) in the presence of renal impairment.

68. Despite severe anaemia and evidence of bleeding, Heparin, which had been stopped briefly in the early hours of 3 March 2005, was restarted and given until 5 March 2005. Warfarin was administered on 2, 3 and 4 March 2005. These medications could well have exacerbated any bleeding.

69. On 11 March 2005 blood tests for liver function (not previously measured) showed significant abnormalities. The results were recorded in the clinical records and on a pathology form but no comment was made on their significance. At this time the WBC started to rise again from 16.1x10 per litre on 10 March 2005 to 22.0x10 per litre on 11 March 2005. No comment was made regarding this. The same situation applied on 14 March 2005 – abnormal Liver Function Tests (LFTs – a blood test to measure levels of substances released by the liver) and WBC of 25.0x10 per litre was recorded in handwritten notes but no action taken.

70. On 15 March 2005 a doctor noted the abnormal LFTs for the first time and requested an ultrasound scan. This was not done until 22 March 2005. On the scan, the gall bladder was noted to be distended and contained sludge. No further comment was made about this finding or its possible relevance to the abnormal LFTs and the raised WBC count.

71. Abnormal liver function could have had significant implications regarding Warfarin therapy. Excess anticoagulation could easily have occurred. As it happened it did not occur because Warfarin had been stopped from 5 to 10 March 2005 and when restarted on 11 March 2005 was given in a much lower dose than previously.

72. Therefore, it is clear from the clinical records that after the operation on 2 March 2005 Mr C developed a number of serious complications: persistent hypotension, bleeding which was inadequately corrected by transfusion, infection which was not investigated or treated adequately, and renal failure. The clinical records were very inadequate. Some matters were referred to, such as the renal impairment and need for transfusion, but other problems received no mention.

73. In particular, the likelihood of significant infection was not referred to. Later in the same admission it was likely that further infection occurred, possibly in the gall bladder/liver. The evidence of this was apparent some days before it

was commented on in the clinical records and a scan of the liver and gall bladder was not done until a further week had passed.

74. Adviser 2 concluded that Mr C's post-operative management was below standard and not adequately supervised.

The Board's Response to Adviser 2's Criticism

75. The Board, responding to Adviser 2's comments, said they acknowledged the records were sparse, but that did not mean that medical staff were not on top of the situation. The Board said that Mr C's INR was 1.2 on admission, which was sub-therapeutic (below the level required for good anticoagulation) and as a result the Warfarin dose was increased so that Mr C's INR reached its therapeutic range and so that he was fit for surgery.

76. The Board said that the bleeding/hypotensive episode after the operation was treated with a transfusion of three units of blood and subsequently four units of blood bringing Mr C's haemoglobin up to 10 g/dl although it eventually settled around 8.5 g/dl. They said the transient renal failure was not unusual or unexpected in the situation. The Board said the situation was monitored and spontaneous recovery was recorded.

77. The Board said they agreed that the anticoagulation regime (Warfarin) was over enthusiastic. They said Mr C was admitted from home with an INR of 1.2 which was clearly dangerous and that his INR was monitored and when it reached 5 Warfarin was stopped. The Board said they had no record of Heparin being continued until 5 March 2005. They said the chart they had in their possession indicated there were two pre-operative doses of Heparin on 1 and 2 March 2005 and much later Clexane was given on 16, 17 and 20 March 2007.

78. The Board noted that Adviser 2 was critical of the absence of investigations or indeed any referral to the possibility of infection. They said that an infection responsible for the high CRP and WBC would almost always have been accompanied by a raised temperature; however, Mr C's temperature remained normal throughout. The Board said that, had Mr C's gallbladder been the source of infection this would have been gram-negative sepsis (an infection in the blood) and he would almost certainly have had a raised temperature and rigors. They said that the abnormal CRP and WBC normalised without antibiotic treatment. They said it was well known that CRP could rise

significantly after operations on bone. The Board pointed out that Mr C also had a transient episode of renal failure and the Board believed an explanation of the abnormal results lay in that territory rather than in infection.

79. The Board noted that Adviser 2 was also critical of the delay in getting the ultrasound ordered and the result being inspected. The Board said, however, that there was no indication that Mr C's situation was acute. They said the clinical abdominal examination prior to ordering the investigation was normal. They said the abnormal LFTs directed attention to the gallbladder and an appropriate investigation was undertaken in a reasonably timely manner.

80. The Board said, in response to the point about the prescription of 500 mg oxytetracycline which Mr C was receiving in the evening, that it appeared that Mr C had already been prescribed this prior to his admission in relation to a face rash and given the small dose, it was likely that it was not stopped as it would not have been thought to have had significant impact on his health.

81. In commenting on a draft of this report, the Board said that, when investigating the complaint, they had asked a physician who had not been involved in Mr C's care to conduct a review of his post-operative care. They said the review found that Mr C's post-operative care was appropriate.

Adviser 2's Further Comments

82. Adviser 2 considered the Board's comments; however, he remained critical of Mr C's post-operative management. Paragraphs 83 to 86 below summarise his comments.

83. Adviser 2 stated that Mr C had an entirely normal haemoglobin level of 15.4g/dl at the pre-admission clinic. He said that the Board, by commenting that after a blood transfusion Mr C's haemoglobin 'settled at around 8.5g/dl', showed they believed that a haemoglobin level 8.5g/dl was appropriate. Adviser 2 stated that such a level in a 76-year-old man (the age he was at the time) suffering from dementia was not appropriate.

84. Adviser 2 disagreed with the Board's comment that the absence of fever supported the view that there was no significant infection in the post-operative period. He stated that it was well recognised that elderly patients did not always exhibit fever in response to infection. He said, however, that elevated CRP and WBC levels and the features of increased confusion (which were described in

the clinical records in various places as acute-on-chronic) were all indications of possible infection. Adviser 2 said his criticism on this point was particularly that the clinical records, which the Board accepted were sparse, did not indicate that medical staff were actively considering the possibility of infection. Adviser 2 did not accept the Board's comment that a lack of documentation did not mean that medical staff were not on top of the situation. He stated that the Board should understand the paramount importance of written recording of clinical observations in patient management.

85. Adviser 2 said he disagreed with the Board's comments at paragraph 79 above. He said his criticism related particularly to the lack of evidence that abnormalities, this time in relation to blood tests for liver function, were recognised by medical staff and acted on. Abnormal liver function tests were recorded in the notes on 11 March 2005 and 13 March 2005. However, only on 15 March 2005 were these commented on and some action taken. This included ordering an ultrasound. Adviser 2 stated that, in view of the possibility of infection, abnormal LFTs and treatment with Warfarin, an earlier ultrasound should have been sought. Adviser 2 commented that even when the scan was done on 22 March 2005 there were still no comments in the clinical records about the findings.

86. Adviser 2 considered that the Board's comments regarding oxytetracycline were not relevant. He said that when renal failure was diagnosed, oxytetracycline, irrespective of dose, should have been stopped. Adviser 2 said that on reviewing the case again following the Board's comments he was led to an even stronger conclusion that various aspects of Mr C's clinical condition post-operatively were not taken note of and certainly not documented by the medical team.

(h) Conclusion

87. Adviser 2's criticisms of the Board, which I agree with, show a serious failure to manage Mr C's care appropriately following his operation. There were serious failings in both medical management and in record-keeping. Consequently, I uphold this complaint.

(h) Recommendation

88. I recommend that the Board:

(i) put measures in place to ensure that meaningful medical records are made on a daily basis;

(ii) put measures in place to ensure that when investigations are carried out they are recorded and the results documented and where there are abnormalities, entries in the medical records should acknowledge them and record medical staff's intentions regarding them;

(iii) monitor and audit the effectiveness of the measures taken as a result of recommendations (i) and (ii);

(iv) consider Adviser 2's comments about the management of anaemia and review their practice with advice from, for example, a physician in charge of elderly patients. This review should lead to an agreed policy being formulated, which should particularly be directed towards post-operative care; and

(v) regularly review patients' medications so that inappropriate treatments are noted and, if necessary, stopped.

89. The Board have accepted the recommendations and will act on them accordingly. The Ombudsman asks that the Board notify her when the recommendations have been implemented.

Annex 1

Explanation of abbreviations used

Mrs C	The complainant, the wife of the aggrieved
Mr C	The aggrieved, the husband of the complainant
Hospital 1	Glasgow Royal Infirmary
The Board	Greater Glasgow and Clyde NHS Board
Hospital 2	Stobhill Hospital
Adviser 1	One of the Ombudsman's clinical advisers who commented on the nursing aspects of the complaint
Adviser 2	Another of the Ombudsman's clinical advisers who commented on general clinical aspects of the complaint
INR	International Normalised Ratio
CRP	C-reactive Protein
WBC	White Blood Cell Count
MEWS	Modified Early Warning Score
LFT	Liver Function Test

Annex 2

Glossary of terms

Alzheimer's disease	A form of degenerative brain disease resulting in progressive mental deterioration with disorientation, memory disturbance and confusion
C-reactive protein (CRP)	A protein in the blood that can become elevated when infection is present
Creatinine	A waste product filtered from the blood by the kidneys; testing creatinine levels in the blood helps to measure kidney function
Dihydrocodeine	A painkiller
Ferrous Sulphate	Iron, which is taken orally
Haemoglobin	A protein found in red blood cells
International Normalised Ration (INR)	A test used to monitor the level of anticoagulation of the blood by drugs such as Warfarin
Liver Function Test (LFT)	A test to check the function of the liver
Modified Early Warning Score (MEWS)	A system used to identify patients at risk of deterioration
Oxytetracycline	An antibiotic
Warfarin	A drug which prevents blood from clotting
White Blood Cell Count (WBC)	A test where the number of white blood cells in a blood sample is measured in order to diagnose infections